



**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

**FILED**

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Application of EMF Safety Network for Modification  
of D.06-07-027 and D.09-03-026.

Application 10-04-018  
(Filed April 6, 2010)

**REPLY COMMENTS OF EMF SAFETY NETWORK  
ON PROPOSED DECISION OF ALJ SULLIVAN**

Pursuant to Rule 14.3(d) of the Commission's Rules of Practice and Procedure, EMF Safety Network (Network) submits these reply comments on the proposed decision of Administrative Law Judge Timothy Sullivan in Network's application for modification of Decision (D.) 06-07-027 and D.09-03-026. (Agenda ID #9707.) Pacific Gas and Electric Company (PG&E) filed opening comments on November 15, 2010. The due date for reply comments is Monday, November 22. Network will file this pleading electronically on the due date.

**1. INTRODUCTION**

PG&E states that its Smart Meter devices are licensed by the Federal Communications Commission (FCC) and comply with all FCC requirements (PG&E Opening Comments, p. 1) and that Network did not dispute these facts (PG&E Opening Comments, p. 2). At the time Network filed its application, Network was unaware of the details of the FCC licensing process and compliance requirements, and therefore Network could not dispute PG&E's claims. However, Network has since begun to research the factors that govern FCC compliance and the "Grants of Equipment Authorization" upon which FCC compliance is based. Network has discovered that PG&E is deploying Smart Meters that appear to be in violation of one or more FCC conditions that determine radio frequency radiation (RF) exposure compliance.

## 2. DISCUSSION

Despite several attempts, Network has been unable to obtain consistent information from PG&E about Smart Meter make and model numbers, and corresponding FCC identification (ID) numbers, for the meters that PG&E is deploying. Network instead relied on photographs of installed meters to obtain the FCC ID numbers needed to research FCC compliance documents.

The FCC Grants of Equipment Authorization for Smart Meters warn that RF exposure compliance depends on specific conditions.<sup>1</sup> The FCC requirements, according to Grant of Equipment Authorization notes, include one or more of the following conditions, depending on the specific make and model of Smart Meter. As Network reads FCC compliance conditions, it appears that PG&E is in violation of one or more of the following conditions:

- limited single module approval requires professional installation;
- antenna(s) must provide a separation distance of at least 20 cm from all persons;
- antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter;
- end-users and installers must be provided with antenna installation and transmitter operating conditions for satisfying RF exposure compliance.

Network is also aware that manufacturers of meters used by other utilities require that grantees ensure that the end-user has no manual instructions to remove or install the device, and certain meters come with duty cycle limitations.

Network believes that completion of a few weeks of training does not qualify PG&E's Smart Meter installers as "professionals." Based on informal observations, Network has doubts about installer training and, more generally, PG&E's compliance with FCC conditions.

Network believes that most residential Smart Meters are installed within 20 cm of public access. In some cases Smart Meters are installed inside homes and businesses.

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<sup>1</sup> Authorizations can be found at the FCC website:  
<https://fjallfoss.fcc.gov/oetcf/eas/reports/GenericSearch.cfm>

Smart Meters are openly accessible to families and their children. While PG&E might argue that most people do not routinely touch their utility meters, allowing easy access to Smart Meters is a public safety hazard and violates FCC RF operating conditions.

Smart Meters are widely co-located in banks of multiple meters, especially in apartment buildings. Network has observed groups of up to 25 meters on one wall. Co-location also occurs within Smart Meters because electric Smart Meters include at least two internal RF antennas. One antenna is used for the mesh network system and the other is meant to serve Home Area Network (HAN) systems. HAN systems operate in conjunction with both the mesh network system and with RF antennas on appliances inside the home. Certain meters (used by other utilities) have three antennas co-located within the meter, are designed to report RF data from thousands of other Smart Meters, and operate in conjunction with each other and with other Smart Meter antennas. Antennas have separate Grants of Equipment Authorization, which suggests that manufacturers test antenna models individually, and not in the Smart Grid system in which the antennas were designed to operate.

Network believes “end users,” as that term is found in FCC Grants of Equipment Authorization, are homeowners or residents, not PG&E and other utilities. Clearly PG&E has not provided end users with antenna installation and transmitter operating conditions for satisfying RF exposure compliance. FCC conditions that specify that end users are to have no manual instructions to remove or install the device confirm Network’s belief that the end user is the home owner or resident.

### **3. CONCLUSION**

PG&E wrongly asserts that the factual record in this proceeding is undisputed. Network has shown that information provided by PG&E is unreliable and untrustworthy.

The Commission did not have adequate information when it granted approval for PG&E to deploy RF Smart Meters. The Commission still does not have adequate information about the Smart Meters PG&E is deploying, and it should not accept PG&E’s unsubstantiated claims as findings of fact. The Commission should order PG&E to make all FCC compliance information readily available to the Commission and to the public.

The Commission should grant Network's application, including its request to convene an evidentiary hearing.

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Dated November 22, 2010, at Sebastopol, California.

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**CERTIFICATE OF SERVICE**

I certify that I have by electronic mail this day served a true copy of the original attached "Reply Comments of EMF Safety Network on Proposed Decision of ALJ Sullivan" on all parties of record in A.10-04-018 or their attorneys of record. I will mail paper copies of the pleading to Assigned Commissioner Michael Peevey and Administrative Law Judge Timothy Sullivan.

Dated November 22, 2010, at Sebastopol, California.

/s/  
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Sandra Maurer