

To: [Redacted]  
From: [Redacted]  
Date: September 16, 2010

Re: *Questions obtained at September 15, 2010 Fairfax Town Council- Community Meeting on PG&E SmartMeter™*

---

## **Questions grouped by Policy Implication**

### **Electromagnetic and Radio Frequency (EMF/RF)**

#### Health Related Issues

1. Is it true that people with pacemakers are being advised to stay a distance away from the SmartMeter? Are warnings also being given to people with other medical implants or other vulnerable populations (those with immune deficiencies, etc.)?
2. Some of these EMF/RF fields are used in medical settings by prescription:
  - a. Does PGE have a license to practice medicine? If not, how can PGE be sure it is not harming people by adding these fields to the environment?
3. When someone goes to a doctor, they give their informed consent for treatment:
  - a. Does PGE have informed consent for ever person living where you install meters?
  - b. Did PGE go before the Western Institutional Review Board (WIRB)?
4. Documentation exists that some EMF sensitive people are having adverse reactions to the SmartMeters. Given that electromagnetic sensitivity is recognized as a disability:
  - a. How does PGE plan to protect people who are already EMF sensitive?
  - b. Will PGE let them opt out if they have a letter from their medical provider?
  - c. What advice or recommendations is PG&E giving to people who suffer from EMF sensitivities?
5. Nothing in the Telecommunications Act of 1996, including section 604, prohibits health complaints pertaining to SmartMeter, because it is not defined as a “wireless facility” (thus exempted from environmental (defined as “health” concerns). How can PGE stand behind this excuse?
6. Numerous studies have linked RF exposure to childhood leukemia and every year California has 1,100 new cases.
  - a. When this event occurs in a home equipped with a SmartMeter and the parents or hematologists request removal, does PGE have a legal obligation to remove? Does PGE have a moral obligation to remove?
7. If detrimental health effects are proven to be caused by the RF of SmartMeter at a future time, does PGE have adequate liability to cover such damages for the approximately 7,000 Fairfax residents? The 250,000 of Marin County? The 37 mil in California?
8. What health risks exist to a person whose SmartMeter is installed right outside their bedroom wall where they will be exposed to EMF/RF while sleeping?
9. If a meter is installed inside the “living space” of a home, as opposed to outside, would PGE consider removing in that circumstance?
10. Why was an in-depth Health Impact Study not done first?
11. Will PGE conduct medical experiments on humans, given all the known and unknown harms from RF/EMF exposure?
  - a. Where does the Western Institutional Review Board (WIRB) stand on this issue?
  - b. If you have not worked with WIRB, why not?

12. Can PGE prove SmartMeters are medically inconsequential?

General EMF/RF Emission-Related Questions

1. There are different reports of the strength of the pulsed signals between meters, poles, and the station. Why does PGE compute the force of the pulse OVER the time between them, rather than the full force AT the time?
2. Will the gas and electric meters outside the home also act as repeaters, so that if surrounding meters can't for some reason reach the access point, they could transmit through your meter, causing your meter to have additional pulses?
3. What is the intensity of a peak pulse? Is it true that the "average pulse" PG&E describes is calculated by including periods of time when the meter is not transmitting, and that at the point at which the meter is transmitting data, it is almost 1,000 times more powerful than a cell phone?
4. If fiber optics had been used, EMF exposure would be much less: Why did PGE not use fiber optics?
5. There are different estimates on the frequency of the radio transmissions from the meters *i.e.* once every 4 hours, once an hour, once every 45 seconds, once every 6 seconds.
  - a. Is the difference for these estimates due to the fact that a meter could be acting as a repeater for adjacent meters and therefore transmit every few seconds?
  - b. Will PGE provide an independent RF emissions study, reflecting actual operating conditions for the SmartMeter program?
6. The meters put frequencies on electrical lines, which get re-radiated throughout buildings thereby raising electromagnetic fields. PGE has admitted installation of the SmartMeter has caused personal and household electrical appliances to malfunction:
  - a. How can PGE say SmartMeters are safe when they caused these actions?
  - b. Will PGE provide filters to all customers to mitigate this "dirty electricity"?
7. Given that PGE currently performs (free) energy audits that reveal EMF emitting from the home, would PGE offer free audits whereupon employees enter the house with an RF measuring device and measure pulses? And then match the retrieved data with research of known safety requirements and see if the emanations are within those safe ranges?
8. Given PGE's explanation of SmartMeter pulses and the time per each emanation, what are the pulse circumstances of the multiple ports that will exist in an apartment, duplex, condominium, etc. and won't that level of exposure vary?
9. Can PG&E provide a map of all the access points and repeater locations in Fairfax and the surrounding communities?

FCC Regulation

1. Discussion of PGE claim that the RF transmitted by the Smart Meters is safe because "the devices comply with applicable FCC regulations by a very wide margin."
  - a. As stated in the EPA letter written in 2002 by Norbert Hankin of the Radiation Protection Division letter, "Federal health and safety agencies have not yet developed policies concerning possible risk from long-term, nonthermal exposures."
    - i. The letter acknowledges reports suggesting that potentially adverse health effects, such as cancer, may occur from chronic/prolonged, low-level non-thermal exposures, and the uncertainty about possible risk from nonthermal, intermittent exposures that may continue for years.

2. Related Question: How does PGE support the claim that the SmartMeter devices comply with FCC regulations when these FCC regulations do not apply to chronic, nonthermal exposure

## **Invasion of Privacy**

### Cyber Security

1. Less of a question and more of a discussion as to the inherent risk of hackers on anything wireless, the concern that PGE will sell the data collected to a third party, and the unprecedented amount of data being collected and corresponding potential of maintenance incapability.

### Property Rights

1. Can homes be targeted so that it can be determined when someone is home and also when occupants are not home?
2. A discussion of the importance of individual property rights and the corresponding right to refuse entrance, *i.e.* SmartMeter's EMF/RF pulses and PGE's forcible installation and usage.
3. Will the police or other governmental body use/or have the potential to use PGE's collected data for their own purposes?
4. Is there a legal or regulatory precedent to protect these property rights?

## **SmartMeter Program**

### In General

1. Given the SmartMeter implementation throughout the nation, where exactly did SmartMeter originate and where can one access historical data surrounding the program be found?
2. Why must PGE use individual meters per home rather than a device that monitors energy usage at the entrance of a town or community?
3. Would PGE be willing to consider another option for Fairfax, given they represent a "different animal" of shared services between PGE and MEA?
4. What is the rollout plan for Fairfax and what is the critical mass/point of no return?
5. Is the smart grid system's "vision" to transmit smart meters for both gas and electric meters outside the home, and ultimately transmit meters on all appliances throughout one's home? Will the latter, the transmitting meters on appliances, be optional?

### Component Parts and Usage

1. Can PGE make the SmartMeters hardwired as opposed to wireless?
2. Will PGE consider the possibility that the digital meters be read manually by meter readers?
3. What other upgrade options did PGE consider instead of the SmartMeter and why was SmartMeter eventually chosen, *i.e.*, instead of nontransmitting meters that can calculate variable rates and meter power?

### Financial Aspects of Program

1. Who is responsible for paying the PGE employees for their time spent at Council meetings and Open Houses essentially fighting the program's opponents, rate payers or shareholders?

2. How many consultants were hired to market/advise the SmartMeter program?
3. Why does it cost 2.2 billion to rollout SmartMeter when the technology used in the meter is relatively inexpensive and can be purchased in SkyMall Magazine.

#### Undemocratic/Forcible Deployment

1. Given that other devices in the EMF/RF fields are optional and the buyer *chooses* to purchase them:
  - a. Why does PGE not allow for an opt-out choice?
  - b. If not, will PGE allow people to read their own analog meter, send in a monthly postcard, and have the meter verified annually? (There are some cases of this now)
2. Why must a person without a cell phone, wireless access, and purposefully living in a safe-haven for EMF/RF exposure, be forced to use a SmartMeter?
3. If a large “No SmartMeter” sign is attached to a home’s meter, will PGE respect the home occupier’s wishes or will a lock on a gate be necessary to ensure no SmartMeter is installed?
4. Why were some people not informed of their SmartMeter installation?
5. Why are SmartMeters being installed in Fairfax, despite the moratorium?

#### **Bees**

1. Bees are essential to human survival and are becoming extinct due to “Colony Collapse Disorder”. Given the speculation that EMF is the source of their demise, why didn’t PGE take this into consideration or figure out the cause of the bee demise first before the SmartMeter deployment?

#### **Meter Readers**

1. Are not meter readers a great asset to PGE for visualization purposes, *i.e.* present to detect theft, fire, leak, etc?

#### **Alleged False/Misleading Claims**

##### Bandwidth

1. PGE has stated that they will not be selling space on its bandwidth, but there is a rumor that Marin Municipal Water District is planning to piggyback the system. What is the truth?

##### Myth of Energy Conservation

1. Shift of Time Energy Consumed, not Amount Used - Explain the amount of energy that will be conserved through the program.
2. Won’t the eradication of existing gas meters become hazardous waste?

##### SmartMeter Rollout in US and Internationally

1. Discussion of the SmartMeter deployment in Europe and other locations that were under different circumstances. Many places needed an entire infrastructure upgrade as to their gas./electric and wireless capabilities (Italy) and many of these programs were pilot. Certain Dutch countries halted their SmartMeter rollout for cyber security reasons and SmartMeters caused fires in New Zealand. Most in Europe are fiber-optic.