

Memorandum to Fairfax Town Council

Re: PG&E's Smart Meter Program in Fairfax

Background and Introduction PG&E is in the process of installing existing electrical meters with so-called "Smart Meters". The Town Council authorized Mayor Tremaine to send a letter to the California Public Utilities Commission asking it to suspend installation until a pending independent consultant's study was completed. To my knowledge, the CPUC has not yet replied to that letter.

The Smart Meter program is intended to provide a residential energy management tool. It is intended to reduce energy consumption by providing computerized information to customers about what their energy usage is and how they might reduce it by running appliances during 'off-time' or 'lower load' conditions.

In Southern California, that is about 5 million smart meters in three years for a cost of around \$1.6 billion dollars, which ratepayers will be asked to pay. Pacific Gas & Electric in northern California is installing them for all customers at a cost of \$2.2 billion dollars. If consumers decide to join the program (so that appliances can report energy usage to the utility), they can be informed about using energy during off-use or low-use periods, but they will be required to have a Household Area Network (HAN) inside the home to do so.

PG&E's efforts to transition from traditional to advanced meters have been plagued with problems from the outset and those problems continue. PG&E has admitted to, among other problems, having to replace almost 45,000 meters. PG&E acknowledges that there are presently 12,826 installed Smart Meters that are either not properly transmitting or not storing billing information. PG&E received hundreds of complaints after it began installing these devices in Bakersfield and other parts of Kern County.

On December 11, 2007, PG&E filed an Application with the CPUC to increase its revenue by \$572 million in ratepayer dollars in order to upgrade its Smart Meter program. In a seeming acknowledgment of the problems it was having with its roll-out of this product, in decision No. 09-03-026, the CPUC granted PG&E's application to increase revenue requirements and recover the costs to upgrade its Smart Meter Program. In addition to extinguishing thousands of meter reading jobs during the most severe economic downturn in the last seventy years, the program raises a host of broad issues:

Economics: The economic justification for these billion dollar programs is that the costs will be offset by energy savings. The system is supposed to allow variable-pricing of electricity to discourage heavy usage during peak periods like hot summer days. The benefit to variable pricing is supposed to be that it will give people an incentive to decrease energy usage when wholesale energy prices are highest. However, the costs to build up the new infrastructure are very high, with little

information about whether or when consumers might decide to participate. In its opposing petition The Utility Reform Network claims that there is switching equipment technology that could accomplish greater savings at less cost.

Privacy Concerns: The use of wireless networks to relay energy information leaves open the potential for misuse of personal data, billing and usage information, and other private information. Privacy breaches have already been documented (illegal access of 179,000 accounts at Hydro Toronto, for example). It also may increase burglary risk, since home electrical usage is made electronically visible. When unoccupied, the home uses less electricity. It's like advertising to criminals with wireless detection equipment that you are not home. Finally, these meters capture a surprising amount of information that may be quite valuable to other commercial users and there is currently no legal oversight of the data gathered by Smart Meters.

Vulnerability to Hacking and Intentional Sabotage: Smart meters are alleged to open up the potential for hacking into personal wireless networks used for banking, bill paying, and private communications. Concerns over the security of the US electrical grid have received widespread media coverage (Wall Street Journal April 27, 2009). Smart meters provide a new vulnerability to intentional sabotage as well as to inadvertent access to private information, since the network is wireless and it adds direct linkage to home computers and personal data.

Accuracy in Billing – Meter Overcharges: As set forth above, there have been widespread reports of excessive charges, due to malfunctioning smart meters. On March 30, 2010, the California Public Utilities Commission announced the selection of The Structure Group to conduct an independent evaluation of Pacific Gas and Electric Company (PG&E) Smart Meters. That evaluation is expected by the end of the year. In the meantime, in spite of the documented concerns, PG&E has continued deployment.

Health and Environmental Concerns: Some utilities have provided technical reports on radio-frequency/microwave emissions. They all say the smart meters are *"in compliance with FCC public safety limits"*. However, the radio frequency (RF) reports indicate that the smart meter will produce over 300 micro watts/centimeter squared near the meter, and this will produce elevated RF both inside and outside the home.

Chronic exposure to radio-frequency and microwave radiation is still considered a potential health risk, and studies continue to determine actual health risks. FCC compliance does not ensure safety, since the existing FCC limits are based upon thermal reaction and have already been called 'insufficient to protect public health' by some federal agencies.

To date, none of the technical RF reports is able to predict the cumulative RF from the smart meter plus the power transmitters inside the home, the intervals of RF transmission, and the additional RF transmissions from neighboring homes that can 'piggyback' on your smart meter system. This 'piggybacking' part of the system means that other homes can put additional RF signals through your meter, if they don't have a

good signal to the utility's reporting cell antenna network. Fairfax's hilly topography would likely cause the system to rely on these alternative hubs to convey signals around terrestrial blockages.

On April 6, 2010, the EMF Safety Network filed a Petition with the CPUC to (1) re-open Commission review of PG&E's Smart Meter program; (2) require PG&E to submit an independently prepared RF Emissions Study; (3) schedule evidentiary hearings on RF health, environmental, and safety impacts; (4) review actual Smart Meter program performance; (5) allow customers to opt out; and (6) impose an immediate moratorium on PG&E installation of new Smart Meters pending completion of the requested study, evidentiary hearings, and the proposed Commission review. The CPUC has not ruled on that petition.

Fires and Explosions: There are reports in Bakersfield and from some Alabama communities that the installation of smart meters caused fires (15 reported in Bakersfield, one explosion of a smart meter). These reports are in various stages of confirmation, and cannot be fully substantiated at present. This matter needs urgent attention, and an independent investigation by the State Fire Marshall is needed. Of greater concern to Fairfax is that deployment of the system may also increase the risk of wildfire in heavily wooded areas and rural/urban interface areas of the state.

Current Status and Possible Remedies: The Town has received information that PG&E has begun to install Smart Meters in Fairfax. The Town Council has several options that it needs to consider.

Enforce Existing Ordinances: On June 17th, Town Manager Michael Rock notified PG&E of such an installation at the corner of Cascade and Frustuck. The letter notified the company that Fairfax has long had a Wireless Telecommunications Ordinance (Fairfax Municipal Code Chapter 19.04) and that under that code, PG&E must first apply for and receive a Use Permit from the Planning Commission before it installs these devices. Since that time, I have received a report of another Smart Meter installation on Inyo.

To date, PG&E has neither confirmed nor denied Smart Meter installation in Fairfax. Certainly it would be wise for Fairfax to ensure that PG&E complies with this longstanding ordinance before further deploying these devices within its boundaries.

Support the San Francisco's Petition to Suspend Deployment: On June 17th, the City and County of San Francisco filed a Petition with the CPUC in which it requested that the Commission suspend further deployment of the Smart Meter program pending completion of an independent audit of the program. I have spoken with attorney Bill Sanders of the San Francisco City Attorney's Office who believes that the case would be strengthened if other jurisdictions filed Motions to Intervene in Support of the Petition.

The filing of such a motion will not require filing fees, can be served

electronically, and does not obligate our town to actively participate in the case. It will, however, communicate to the CPUC that other jurisdictions support the measure and believe that the program should be suspended. I have attached a copy of a draft motion for the council's consideration.

Pass a Town Ordinance Suspending Deployment: While it is generally acknowledged that the CPUC has direct authority over most activities conducted by PG&E, there are areas left to local authorities. For example, in 1954, Fairfax entered into a Franchise Agreement with PG&E which provides it with access to our public rights of ways to construct poles, wires, conduits, meters and related items used in distributing electricity. The agreement provides for payment of two percent of PG&E's gross revenues to Fairfax. The franchise was granted under the Franchise Act of 1937.

The Franchise Act of 1937 is encoded in Public Utilities Code section 6201 et. seq.. Under section 6203,

"The legislative body may in such a franchise impose such other and additional terms and conditions not in conflict with this chapter, whether governmental or contractual in character, as in the judgment of the legislative body are to the public interest."

Section 6203, may provide authority to act to place a moratorium on SMART meters pending the completion of a study which verifies the accuracy and safety of these devices. A more recent statute, Public Utilities Code section 7101.1 provides that: "... nothing in this section shall add or subtract from any existing authority with respect to the imposition of fees by municipalities" This brings us back to the Franchise Act of 1937 which may provide authority for us to act in the public interest.

As set forth above, Chapter 19.04 of the Fairfax Municipal Code grants us authority to review the deployment of wireless communications devices. There is also authority under that chapter to require a building permit.

I have attached a copy of a draft ordinance for the Council's review and consideration. Until and unless, the CPUC regulates these devices, the health, safety and economy of our community will be in our hands.

Respectfully submitted,

Dated: June 30, 2010

Larry Bragman

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Application of PACIFIC GAS AND
ELECTRIC COMPANY (U-39-E) for
Authority to Increase Revenue
Requirements to Recover the Costs to
Upgrade its SmartMeter™ Program

Application No. 07-12-009

**MOTION OF THE TOWN OF FAIRFAX TO INTERVENE IN THIS
PROCEEDING IN SUPPORT OF CITY AND COUNTY OF SAN FRANCISCO'S
PETITION TO MODIFY DECISION 09-03-026**

The Town of Fairfax, California ("Town") files this motion for leave to intervene in this proceeding as a party pursuant to California Public Utilities Commission Rules of Practice and Procedure 1.4(a)(4). The Town is filing this motion in order to support the Petition to Modify Decision 09-03-026 filed by the City and County of San Francisco ("City") on June 17, 2010 seeking to temporarily suspend Pacific Gas and Electric Company's ("PG&E") deployment of SmartMeters and the City's motion to expedite the time for PG&E to respond to the City's petition to modify Decision 09-03-026 issued in this proceeding.

In Decision 09-03-026, the California Public Utilities Commission ("Commission") granted PG&E's application to increase revenue requirements and recover the costs to upgrade its SmartMeter Program. In its petition to modify, the City has asked the Commission to modify Decision 09-03-26 by temporarily suspending PG&E's deployment of its SmartMeter program until the Commission's investigation is complete.

As fully discussed in the City's petition to modify, PG&E's efforts to transition from traditional to advanced meters have been plagued with problems from the outset and those problems continue. PG&E has admitted to, among other problems, having to replace almost 45,000 meters. PG&E acknowledges that there are presently 12,826 installed SmartMeters that are not properly either transmitting or storing billing information.

In response to public outcry, the Commission has hired an independent consultant to investigate PG&E's SmartMeter deployment. The Commission's expert is expected to issue a report sometime in August. The City submitted its petition to modify now because PG&E has indicated it will begin installing SmartMeters in San Francisco in July.

PG&E has already begun deploying SmartMeters and the related antennae within the boundaries of the Town of Fairfax. Hence the Town has a clear and present need to obtain expedited consideration of City's petition as its residents will face the same problems that have plagued the program since its inception including but not limited to inaccurate billing; inaccurate data transmission; loss of privacy; security risks caused inadequate encryption of confidential data relating to household activities; and, potential human health risks related to Electromagnetic Radiation Fields.

For these reasons, the Town asks the Commission to exercise prudence and act before Fairfax's residents are forced to deal with the same types of problems faced by customers in other communities where PG&E has deployed SmartMeters. In light of PG&E's ongoing deployment of SmartMeters in Fairfax, the normal deadlines for hearing a petition to modify will not give the Commission adequate time to hear and decide the City's petition. Fairfax joins the City in urging the Commission to hear the City's petition to modify on an expedited schedule.

Granting the Town's motion to intervene will not delay this proceeding. The Town is not asking the Commission to continue any of the dates set forth in the City's petition. For this reason, there will be no prejudice to any of the parties to this proceeding if the City's motion is granted. Conversely, there will be substantial prejudice to the Town if this motion is denied because of its interest in ensuring that its ratepayers not be subjected to the documented concerns about the accuracy and safety of the SmartMeter program.

The Town of Fairfax respectfully requests that the Commission grant its motion.

Dated:

By: _____

FAIRFAX TOWN ATTORNEY
Attorney for Intervener
TOWN OF FAIRFAX
142 Bolinas Road
Fairfax, California 94930
Telephone: (415) 453-1584
Facsimile: (415) 453-1618

E-Mail:

ORDINANCE NO.

AN ORDINANCE OF THE TOWN COUNCIL OF THE TOWN OF FAIRFAX GRANTING TO PACIFIC GAS AND ELECTRIC COMPANY, ITS SUCCESSORS AND ASSIGNS, THE FRANCHISE TO CONSTRUCT, MAINTAIN AND USE POLES, WIRES, CONDUITS AND APPURTENANCES, INCLUDING COMMUNICATION CIRCUITS, NECESSARY OR PROPER FOR TRANSMITTING AND DISTRIBUTING ELECTRICITY TO THE PUBLIC FOR ANY AND ALL PURPOSES IN, ALONG, ACROSS, UPON, UNDER AND OVER THE PUBLIC STREETS AND PLACES WITHIN THE TOWN OF FAIRFAX

The Town Council of the Town of Fairfax, California does ordain as follows:

Findings:

1. The original Ordinance # 64, granting to Pacific Gas & Electric Company (PG&E) a non-exclusive life-time franchise under the Franchise Act of 1937, was adopted in 1938 and amended in 1954 by the then Fairfax City Council and included Section 1., (d) The phrase "poles, wires, conduits and appurtenances" shall mean "...meters, cut-outs, switches, communication circuits,..."
2. California Public Utilities Code section 6203 states: The legislative body may in such a franchise impose such other and additional terms and conditions not in conflict with this chapter, whether governmental or contractual in character, as in the judgment of the legislative body are to the public interest. The Town Council finds that it is in the public interest to impose the conditions set forth herein.
3. PG&E is now installing SmartMeters in Central and Northern California and will be installing these meters in Fairfax in the very near future; and, major problems and issues have been brought to the attention of the Fairfax Town Council, including PG&E's confirmation that Smart Meters have provided incorrect readings costing ratepayers untold thousands of dollars in overcharges and PG&E's records outlined "risks" and "issues" including an ongoing inability to recover real-time data because of faulty hardware originating with PG&E vendors.
4. Increased electromagnetic frequency radiation (EMF) emitted by these meters from every house, apartment & business will add a massive additional layer of man-made EMF to our environment that will pulse radiation every minute throughout the day and night; utility poles, individual meters and telephone poles will also be transmitting EMF as repeaters for the "smart meters".
5. The ebb and flow of gas and electricity into homes discloses detailed information about private details of daily life. Energy usage data, measured moment by moment, allows the reconstruction of a household's activities: when people wake up, when they come home, when they go on vacation, and even when they take a hot bath. Smart Meters relay detailed hitherto confidential information reflecting the times and amounts of the use of electrical power without adequately protecting that data from being accessed by unauthorized persons or entities and as

such pose an unreasonable intrusion of utility customers' privacy rights and security interests.

6. No FCC safety standards exist for chronic long-term exposure to EMF or from multiple sources; and, whereas, reported adverse health effects from electromagnetic pollution include sleep disorders, irritability, short term memory loss, headaches, anxiety, nausea, DNA breaks, abnormal cell growth, cancer, premature aging, etc.; and, whereas, because of untested technology, international scientists, environmental agencies, advocacy groups and doctors are calling for the use of the precautionary principle for wireless technologies.

7. Chapter 19.04, section 19.04.050 of the Fairfax Town Code, Wireless Communications Facilities, requires Fairfax Planning Commission approval for the antenna facilities proposed by PG&E to transmit data from SmartMeters.

8. PG&E has not secured Planning Commission approval for its antenna system which it intends to locate within Fairfax Town Limits. Any antennas installed without Planning Commission approval are in violation of Town code Section 19.04.010, the Purpose and Intent. B.(2), Section 19.04.050 and Section 19.08.

9. Because the potential risks to the health, safety and welfare of Fairfax residents are so great, the Fairfax Town Council adopts the following Moratorium on the installation of SmartMeters in the Fairfax Town Limits:

No SmartMeter may be installed on any home, apartment, condominium or business in Fairfax until such time that the Fairfax Town Council, having held public hearings on all aspects of SmartMeters, makes the following findings: SmartMeters are safe, pose no adverse health impacts, are correctly reading gas and electricity usage 100% of the time and PG&E has secured all necessary permits required under Town Code, Chapter 19.04, Wireless Communications Facilities.

Enforcement:

This Ordinance shall remain in effect until modified or rescinded.

Should PG&E install a SmartMeter, after June 14th, 2010 but before this ordinance takes effect, they shall be subject to abatement. The Fairfax Town Manager is hereby authorized to direct all Town Departments, including the Town Attorney, to facilitate compliance with the purpose and intent of this Ordinance using the police powers granted to the Town.

Copies of the foregoing ordinance shall within fifteen (15) days after its final passage and adoption be posted in three public places in the Town of Fairfax, to wit: (a) Bulletin Board, Fairfax Town Offices, Town Hall; (b) Bulletin Board, Fairfax Post Office; and (c) Bulletin Board, Fairfax Women's Club Building, which said places are hereby designated for that purpose, and shall be in full force and effect thirty (30) days from and after its final passage and adoption.

The foregoing ordinance was duly and regularly introduced at a regular meeting of the Town Council of the Town of the Town of Fairfax held in said Town on the 7th day of July, 2010, and thereafter adopted on the ____ day of _____, 2010, by the following vote, to wit:

AYES:
NOES:
ABSENT:

LEW TREMAINE, MAYOR

Attest:

Town Clerk