

Docket: A.12-11-009
Exhibit Number: CEP-1
Commissioner: Florio
Admin. Law Judge: Pulsifer
Witness: Martin Homec

**Center for Electromog Prevention Testimony on  
Pacific Gas and Electric Company  
General Rate Case  
Test Year 2014**

Davis, California

May 17, 2013

**DIRECT TESTIMONY OF MARTIN HOMECEC FOR CENTER FOR  
ELECTROSMOG PREVENTION (CEP).**

Attached is the CEP report responding to Pacific Gas and Electric Company's (PG&E) Application (A.) 12-11- 009 for a Test Year (TY) 2014 General Rate Case (GRC).

Respectfully submitted

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May 17, 2013

## Direct Testimony of Martin Homec

### INTRODUCTION

The Center for Electrosmog Prevention<sup>1</sup> (CEP) is a corporation formed for the purpose of protecting public health.

CEP proposes the following issues be resolved during this proceeding:

- 1) The ratepayers choosing to opt out of the use of smart meters should not be charged separate fees.
- 2) The records management program described in exhibit PG&E-4 should address PG&E's past safety recordkeeping practices for its electric distribution system. It should be the subject of a CPUC investigation to determine whether PG&E's past recordkeeping practices met all state and federal laws and an order instituting rulemaking should be issued. The records management system for the smart grid should have been changed from PG&E's past methodology when the smart grid was first ordered to be installed. PG&E's records management should be investigated to determine whether it complies with the accepted industry practices and statutory mandates.
- 3) PG&E's past records management methodology for the electric distribution system should be independently reviewed to determine whether it complied with existing standards and industry practices.
- 4) Updating of safety requirements concerning use of new technologies based on available customer data and independent expert recommendations, such as the Bioinitiative Report, 2012<sup>2</sup>.

CEP believes that it is in the best interest of the citizens of the state of California for these issues to be promptly resolved so that the electric grid may be developed safely, accessed safely and fairly for all, placing the priority on public health, without adding electrosmog pollution to

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<sup>1</sup> <http://www.electrosmogprevention.org/>

<sup>2</sup> <http://www.bioinitiative.org>

the environment nor charging those who do not wish to be exposed to Radio Frequency<sup>3</sup> (RF) radiation an extra fee. CEP recommends a ban on wireless infrastructure and smart meters and removal of all of these, but in the interim period, to provide a “no-fees” opt out, with no punitive fees or rates, for anyone who wishes to have an electromechanical analog meter. Those who wish to avoid RF radiation also need to know the location of wireless infrastructure, including collector meters, in close proximity to where the customer may occupy a building, with the ability to have removal of same as needed by the customer(s). Lastly, CEP believes that a zone of safety, as specified by the American Academy of Environmental Medicine (AAEM)<sup>4</sup>, is necessary to protect customers who need to avoid RF radiation from wireless exposures, and should be made available at no cost.

## DISCUSSION

**The ratepayers choosing to opt out of the use of smart meters should not be charged separate fees.**

These issues are being considered in the Application 11-03-014 *et al.* proceedings. The resolution of the issues applicable to PG&E should be incorporated into the order issued in this proceeding.

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### <sup>3</sup> WHAT ARE "RADIOFREQUENCY" AND MICROWAVE RADIATION?

Electromagnetic radiation consists of waves of electric and magnetic energy moving together (*i.e.*, radiating) through space at the speed of light. Taken together, all forms of electromagnetic energy are referred to as the electromagnetic "spectrum." Radio waves and microwaves emitted by transmitting antennas are one form of electromagnetic energy. They are collectively referred to as "radiofrequency" or "RF" energy or radiation. Note that the term "radiation" does not mean "radioactive." Often, the terms "electromagnetic field" or "radiofrequency field" may be used to indicate the presence of electromagnetic or RF energy.

The RF waves emanating from an antenna are generated by the movement of electrical charges in the antenna. Electromagnetic waves can be characterized by a wavelength and a frequency. The wavelength is the distance covered by one complete cycle of the electromagnetic wave, while the frequency is the number of electromagnetic waves passing a given point in one second. The frequency of an RF signal is usually expressed in terms of a unit called the "hertz" (abbreviated "Hz"). One Hz equals one cycle per second. One megahertz ("MHz") equals one million cycles per second.

Different forms of electromagnetic energy are categorized by their wavelengths and frequencies. The RF part of the electromagnetic spectrum is generally defined as that part of the spectrum where electromagnetic waves have frequencies in the range of about 3 kilohertz (3 kHz) to 300 gigahertz (300 GHz). Microwaves are a specific category of radio waves that can be loosely defined as radiofrequency energy at frequencies ranging from about 1 GHz upward.

<http://transition.fcc.gov/oet/rfsafety/rf-faqs.html#Q1>

<sup>4</sup> <http://aaemonline.org/AAEMEMFmedicalconditions.pdf>

While banning of all smart meters and wireless infrastructure, as well as any future powerline communications is our strongest recommendation, due to cumulative risk and public health impacts demonstrated throughout communities receiving smart meters, supported by thousands of studies on RF radiation, in the interim, CEP agrees with PG&E's requests pertaining to incorporation of smart meter opt-out fees into general rates as reflected in Exhibit PG&E-5, pp. 10-1 through 10-2, in order to allow any and all rate payers to opt-out without separate fees:

“PG&E therefore proposes to close the electric and gas SmartMeter™ Balancing Accounts (SBAs) at the end of 2013 to reflect completion of the Program as authorized and funded by the CPUC in the AMI and SMU Decisions. The Program's ongoing benefits are reflected in savings in the Company's respective operational units' 2014 forecasts in this General Rate Case (GRC). Ongoing operations and maintenance (O&M) expenses and new business installations associated with SmartMeter™ business-as-usual activities will continue to be recovered in base rates as previously approved in PG&E's 2011 GRC Decision. In addition, ongoing costs relating to the SmartMeter™ Opt-Out Program approved by the Commission in Decision 12-02-014 are proposed to be recovered in base rates in this GRC, net of fees received from participating customers.”

The opt-out program should be included in the general rate case procedures. Any complaints or modifications should be presented according to regular CPUC complaint or general rate case modification procedures.

#### **Exhibit PG&E-4, Chapter 4, Electric Mapping and Records Management**

The CPUC has a statutory obligation to oversee the utilities' operations for consumer protection and safety. California Public Utilities Code section 330 (f) and (g), and section 364. Section 364 requires the CPUC to adopt inspection, maintenance, repair, and replacement standards for the distribution systems of investor-owned electric utilities.

PG&E records expenses for its Electric Mapping and Records Management in MWC GE. PG&E is asking for large increases in record keeping expenses. The CPUC's Division of Ratepayer Advocates (DRA) report in exhibit DRA-6, Table 6 – 7, shows that PG&E is asking for approximately an 825% increase over the amount recorded in 2011 in electric mapping and electric record keeping expenses for 2014. CEP is concerned that PG&E's past Electric Mapping and Records Management practices were inadequate according to the criteria being

used in Order Instituting Investigation (I.)11-02-016 investigating PG&E's past records management practices for natural gas transmission lines.

PG&E is charged in I.11-02-016 that its record keeping deficiencies constitute serious and repeated violations of law, both federal and state, over numerous decades. The laws violated require PG&E to promote safety generally, require records to be kept explicitly to promote safety, and include engineering standards such as the American Society of Mechanical Engineers (ASME), and PG&E's own record keeping rules and standards. Yet, no one has investigated PG&E's record keeping practices in its electric distribution system to know what standards are required and what PG&E's record keeping practices have been.

CEP asked PG&E a data request<sup>5</sup> about exhibit PG&E-4, Chapter 9: "Does the information technology and meter management issues discussed meet the standards for record keeping requested by the CPSD in the I.11-02-016 proceeding? Please describe the process and the funding requested." PG&E answered:

"PG&E objects to this request as lacking a foundation and beyond the scope of issues being addressed in its 2014 General Rate Case. I.11-02-016 is an ongoing Order Instituting Investigation reviewing PG&E's past safety recordkeeping practices for its gas transmission system. (See I.11-02-016, pp.1, 13-14). The scope of PG&E's 2014 GRC does not include gas transmission issues. Further, Question 2.1. erroneously assumes that the Commission has adopted "standards" for record keeping in I.11-02-016. The Commission has not yet issued a Decision, or otherwise adopted compliance standards, in I.11-02-016."

CEP believes that PG&E's past safety recordkeeping practices for its electric distribution system should be the subject of a CPUC investigation to determine whether PG&E's past recordkeeping practices met all state and federal laws. PG&E's past records management methodology for the electric distribution system should be reviewed to determine whether it complies with existing standards and industry practices, exercising prudent and preventative safety measures to protect the public from harm and risk associated with forced exposures to pulsed microwave radiation from smart meters and wireless infrastructure, for which safety standards do not exist. If it does not, the ratepayers should not have to pay again for a new records management system as proposed in exhibit PG&E-4.

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<sup>5</sup> GRC2014-Ph-I\_DR\_CEP\_001-Q02

The records management system for the smart grid should have been changed from PG&E's past methodology when the smart grid was first ordered to be installed. PG&E's records management should be investigated to determine whether it complies with the accepted industry practices and statutory mandates, including those associated with safety.

CEP believes that this means that the CPUC must adopt inspection, maintenance, repair, and replacement standards to maintain safety for the electric distribution systems of investor-owned electric utilities. This could be done by adopting a new general order or by amending an existing general order. General Orders 165, 166, and 167 appear to be the current regulations addressing these issues, but they have not been updated to address the operation of the Smart Customer/Utility/Market or the smart grid.

### **Electric Mapping**

Exhibit PG&E-4, Chapter 4, Electric Mapping and Records Management, requests that the Commission adopt its 2014 expense forecast of \$31.1 million for the Electric Distribution Mapping and Records Management Program. It goes on to state that the 2014 forecast for Electric Distribution Mapping and Records Management Program is approximately \$27.8 million higher than 2011 recorded expenses. And that the main drivers for the increase are initiatives PG&E plans to pursue that will improve the accuracy, completeness, uniformity, and accessibility of its electric distribution system records. Some of these initiatives are in response to the Commission-appointed Independent Review Panel (IRP) report issued in June 2011 and ongoing Companywide records improvement efforts. CEP believes that those ratepayers who wish to avoid RF radiation need to readily know the location of wireless infrastructure, including collector meters, in close proximity to where the customer may occupy a building, with the ability to have removal of same as needed by the customer(s).

### **CONCLUSION**

CEP believes that the CPUC must adopt inspection, maintenance, repair, and replacement standards to maintain safety for the electric distribution systems of investor-owned electric utilities. The CPUC should not give PG&E an increase in Electric Mapping and Records Management in MWC GE until after appropriate standards are adopted, based on precautionary

protections of the public health, medical<sup>6</sup> and independent expert recommendations<sup>7</sup> and available customer data<sup>8</sup>.

CEP proposes transparent, publicly available mapping of all wireless infrastructure labeled so the public can clearly access information regarding location, signal strength and full duty cycles [not limited to data transmission], actual [not averaged] radiofrequency radiation emissions from 6 inches - 500 foot intervals, including maximum peak levels and intervals for pulsed radiofrequency radiation, and identifying exact frequencies being utilized. These maps and data shall be updated in real time, at least weekly. This information is necessary for public health and safety.

CEP proposes that all wireless infrastructure be located away from occupied areas and be replaced with fiberoptic, shielded cable for transmissions of data to protect the public safety.

CEP proposes that opt-out programs be expanded as a step to full elimination of wireless infrastructure, as quickly as possible, due to known health and safety risks of radiofrequency radiation transmitted in the air and along wiring<sup>9</sup>.

CEP agrees with PG&E's requests pertaining to incorporation of smart meter opt-out fees into general rates as reflected in Exhibit PG&E-5, pp. 10-1 through 10-2. CEP also agrees with DRA's recommendation<sup>10</sup> for the opt-out program: "DRA recommends the Commission adopt a one-way balancing account for all Opt-Out costs and revenues as the actual costs in 2014 are dependent on the results of A. 11-03-014."

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<sup>6</sup> American Academy of Environmental Medicine

<sup>7</sup> such as BioInitiative Report 2012 [www.bioinitiative.org](http://www.bioinitiative.org)

<sup>8</sup> such as smart meter complaints gathered by the CPUC and utilities in writing, in person, and by phone

<sup>9</sup> such as BioInitiative Report 2012 [www.bioinitiative.org](http://www.bioinitiative.org)

<sup>10</sup> Exh. DRA-13, p. 56, lines 21 – 23.

## Martin Homec Witness Qualifications

### **RESUME OF MARTIN HOMEC**

#### **EDUCATION**

University of San Francisco - LAW 1973 – 1976

University of California – PHYSICS 1967 - 1970

#### **EXPERIENCE**

I am currently working as an Attorney at Law in private practice.

California Public Utilities Commission - June 1983 to October 2007

San Francisco, California

My regular assignments included reviewing energy utilities' applications for rate changes, conducting discovery, conferring with colleagues and utility staff, and participating in adjudicatory hearings held by administrative law judges. I was assigned to a subcommittee working with the California Air Resources Board to implement a legislative bill requiring adoption of air quality regulations concerning distributive generation.

I reviewed and testified on applications for reasonableness reviews of gas and electric operations by Pacific Gas and Electric Company, the San Diego Gas & Electric Company, and the Southern California Edison Company. These reviews require the utility companies to provide their records for review to demonstrate that their expenditures were reasonable and prudent. For example, when explaining their power plant operation costs the utility companies must explain periods of unavailability of power plants and present documentation of the explanations. Any periods of unavailability without acceptable rationale can result in the utility being disallowed the costs of acquiring necessary electrical power elsewhere.

#### **Electrical Industry Review**

I was the project coordinator for two of California's seven regulated electric utility companies: Mountain Utilities in Kirkwood, California and Bear Valley Electric in San Bernardino County. Mountain Utilities is unique since it is the one regulated utility not included in the California transmission grid. After Mountain Utilities became a regulated utility in 1992, it never applied for a rate setting proceeding but continued operating as an industrial utility not subject to regulation. I was responsible for identifying the issues that had to be resolved, to assign staff to review the issues, and to ensure that the schedule was met. I did not have to determine whether the project was being conducted within any budget constraints. My goal was to produce an accurate report stating the impact upon the ratepayers and issuing recommended solutions to the issues.

#### **Natural Gas Pipeline Review**

I was the project manager for the 1996 application by a Canadian company, Wild Goose Natural Gas Inc., to become the first natural gas storage provider to compete with a regulated California

utility. I was responsible for meeting with the applicant and writing the report presenting the CPUC staff's analysis and recommendations for this application. Then I presented the report in an adjudicatory proceeding in which I was subject to cross-examination. My most important contribution was recommending that all future natural gas system upgrades required by this project should be evaluated at the time that the upgrades were constructed. The applicant had asked that this issue be resolved during this first proceeding. This proceeding was complete when the California Public Utilities Commission issued an order granting the applicant's request and issuing a Certificate for Public Convenience and Necessity.

### **Legal Proceedings**

My review of hazardous waste cleanup cost claims by the three major regulated California utilities led to a collaborative solution to the problem instead of the traditional method of requiring the company to submit an application and conducting adjudicatory hearings about the issues thus identified. The California regulated utility companies were ordered to investigate and take remedial action at several sites. Therefore, they applied for cost reimbursement to the California Public Utilities Commission. I was assigned to be the project manager and I began my investigation by reviewing the cases that allowed the utility operations in the early 1900s. I found that at that time, the utility companies had general liability policies covering the cleanup costs. Therefore, a collaborative meeting was arranged with the affected utility companies, the regulatory agencies, and the Public Utilities Commission. The result was a settlement that met the parties' needs; however the actual terms of the settlement are confidential.

### California Energy Commission 1976 to 1983

I worked in the energy facility siting division evaluating environmental siting constraints for utility applications to build new power plants in California. This work involved writing and testifying about portions of Environmental Impact Reports in the subject areas of waste disposal, water quality, and air quality. Some of my projects included coal fired projects proposed by Edison and Pacific Gas and Electric Company and combined cycle natural gas projects proposed by Edison and San Diego Gas and Electric Company.

I also wrote EIR sections for experimental power generation technologies including the Photovoltaic Power plant operated by SMUD at Rancho Seco, the Texaco Coal Gasification Facility located at Edison's Coolwater site, and geothermal power plants installed at the Geysers geothermal site in northern California.

### Bar Association of San Francisco 1987 to 2000

I worked as a volunteer lawyer for the Bar Association taking cases that judges have found to need representation but that practicing members of the California Bar have determined would not pay the litigation costs. I accepted employment law cases the United States District Court judges have identified as cases that need discovery and preliminary motions to determine the merits of the cases. I have accepted cases involving many aspects of civil rights litigation. My role is as plaintiff's attorney and I perform all the work requirements including drafting document, conducting depositions, and arguing motions. There was an article about my work in *The Recorder* on April 20, 1999.

## **CERTIFICATE OF SERVICE**

I certify that I have by electronic mail this day served a true copy of the original attached "Direct Testimony of Martin Homec" on all parties of record in this proceeding or their attorneys of record. I will mail paper copies of the testimony to Assigned Commissioner Michael Florio and Administrative Law Judge Thomas J. Pulsifer.

Dated May 17, 2013, at Davis, California.

/s/

Martin Homec