Decision 10-12-001 December 2, 2010

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

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)

DECISION GRANTING MOTION OF PACIFIC GAS AND ELECTRIC COMPANY TO DISMISS APPLICATION

1. Summary

This decision grants the motion of Pacific Gas and Electric Company to dismiss the application of the EMF Safety Network for modification of Decision (D.) 06-07-027 and D.09-03-026. The radio frequency (RF) emissions from Smart Meters that the EMF Safety Network wishes the Commission to investigate are one/six thousandth of the Federal health standard at a distance of 10 feet from the Smart Meter and far below the RF emissions of many commonly used devices. It is therefore not reasonable to reopen our prior Smart Meter decisions to address the alleged health impacts produced by RF emissions from Smart Meters. This proceeding is therefore closed.

2. Factual Background

The EMF Safety Network (Network) is "a coalition of business and property owners, concerned citizens and PG&E [Pacific Gas and Electric Company] ratepayers in northern California who address health, environmental and safety impacts associated with electromagnetic fields (EMF) and radiofrequency (RF) emissions technologies."¹ Network charges that "[t]he Commission and other interested parties did not adequately address health, environmental, and safety impacts related to widespread deployment of RF Smart Meter technologies, either in the scoping memo or the decision in either proceeding."²

Network asks that the Commission "reopen its review of Smart Meters, and require PG&E to demonstrate that the Smart Meter program is consistent with delivery of safe, reliable gas and electric service at reasonable rates."³

PG&E opposes the request of Network.

PG&E's Advanced Metering Infrastructure (AMI) Project is approximately four years old. On July 20, 2006, D.06-07-027 approved PG&E's AMI Project. On March 13, 2009, D.09-03-026 approved PG&E's Smart Meter Upgrade Program. PG&E states that since then "more than 5.5 million meters have been installed" and "[d]eployment is scheduled to be completed in 2012."⁴

3. Procedural History

On April 6, 2010, Network tendered to the Commission's docket office a petition to modify D.06-07-027 and D.09-03-026. The Commission's docket office rejected the petition as untimely, but advised resubmission as an application, without revising any dates on the filing.

¹ Application of EMF Safety Network for Modification of Decision (D.) 06-07-027 and D.09-03-026 (Application), April 6, 2010 at 1.

² *Id.* at 2.

³ *Id.* at 3.

⁴ Declaration of Daniel M. Partridge in Support of Pacific Gas and Electric Company's Motion for Immediate Dismissal of Application 10-04-018 (PG&E Declaration), May 17, 2010 at 1.

On April 10, 2010, Network resubmitted the filing as Application (A.) 10-04-018.

On May 17, 2010, PG&E filed a protest to the application⁵ and a separate motion to dismiss the application.⁶ The PG&E Motion argues that "the field of RF emissions is pre-empted by federal law."⁷

On May 27, 2010, the Network filed a single response to both the PG&E Protest and PG&E Motion.⁸

On June 11, 2010, with the authorization of the Administrative Law Judge (ALJ), PG&E filed a reply.⁹

On July 23, 2010, the City of Capitola late-filed a response adopting all the arguments and positions of Network.¹⁰

4. Issues before the Commission in this Application

The application of Network requests that the Commission adopt orders to "modify D.06-07-027 and D.09-03-026 to (1) re-open Commission review of PG&E's Smart Meter program; (2) require PG&E to submit an independently

⁷ Id. at 1.

⁵ Pacific Gas and Electric Company's Protest of the Above Captioned Application of EMF Safety Network (PG&E Protest), May 17, 2010.

⁶ Pacific Gas and Electric Company's Motion for Immediate Dismissal of Application 10-04-018 and Declaration of Daniel M. Partridge in Support of Pacific Gas and Electric Company's Motion for Immediate Dismissal of Application 10-04-018 (PG&E Motion), May 17, 2010.

⁸ Response of EMF Safety Network to Motion of Pacific Gas and Electric Company to Dismiss Application (Network Response), May 27, 2010.

⁹ Pacific Gas and Electric Company's Reply to the Response of EMF Safety Network to Motion of Pacific Gas and Electric Company to Dismiss Application (PG&E Reply), June 11, 2010.

¹⁰ Response to Application of EMF Safety Network for Modification of D.06-07-027 and D.09-03-026.

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."¹¹

4.1. Position of Network

Network argues that PG&E's Smart Meter Program was not developed in accordance with Commission-adopted policies. Specifically, Network noted that the Commission has "authorized the state's investor-owned utilities to carry out 'no cost and low cost EMF avoidance measures' in construction of new and upgraded utility projects."¹² Network argues that despite this Commission policy:

The Commission did not consider [in approving the AMI and Smart Meter programs] important issues about RF emissions from individual meters, including peak RF signals, duty cycles, and the cumulative impacts of multiple meters, repeaters and other equipment associated with the Smart Meter program. Such omissions warrant further review.¹³

In support of this position, Network argues that the information on Smart Meter RF emissions provided by PG&E is "paltry, inconsistent and contradictory."¹⁴ Network argues further that Federal Communications Commission (FCC) safety standards "are inadequate to protect public health

¹⁴ Id.

¹¹ Application at 2.

¹² *Id.* at 8.

¹³ *Id.* at 9.

from long-term chronic RF exposures to Smart Meters."¹⁵ Network argues that "[t]here are a substantial number of scientific studies in support of the conclusion that RF exposure is harmful to human and environmental health."¹⁶ Network then proceeds to cite several studies.

In addition, Network argues that a Smart Meter "is similar to a cell phone" and that cell phones "can interfere with medical implants and instruments."¹⁷

Network also calls attention to a European Parliament "EMF Resolution calling for caution on the use and expansion of EMF, particularly RF from wireless technologies."¹⁸ Network also cites "[r]ecent expressions of community concern ... that request[] local authorities to investigate the potential health risks of Smart Meters."¹⁹

Network states that "[m]edia reviews and customers report numerous complaints prior to or following installation of Smart Meters for a variety of reasons, including (1) health and environmental impacts, (2) reliability, (3) interference, (4) privacy, (5) security risks, and (6) fire hazards."²⁰

In response to the PG&E Motion, which claims that the Commission lacks jurisdiction to regulate RF emissions, Network argues that it "does not ask for regulation of RF by the Commission but for the Commission to ensure the safe

¹⁶ Id.

- ¹⁸ *Id.* at 15.
- ¹⁹ *Id.* at 16.
- ²⁰ Id.

¹⁵ *Id.* at 10.

¹⁷ *Id.* at 14.

delivery of electric and gas service."²¹ Network observes that "[n]othing in Federal law requires utilities to use ... RF communications technologies."²²

Network argues that "PG&E is not a commercial provider of personal wireless services"²³ and therefore need not use meter technology that relies on RF. Network also points out that the Commission has an "interest in health effects" and cites Commission discussion of EMF in the Jefferson-Martin transmission line proceeding.²⁴ Finally, Network disputes PG&E's factual assertions regarding RF emissions and their safety.

4.2. Position of PG&E

In response to Network, PG&E argues that:

The field of RF regulation is pre-empted by federal law. The FCC is the body that is responsible for RF regulation. All meters with SmartMeter[™] technology have been licensed or certified by the FCC. Under the Supremacy Clause of the United States Constitution, the CPUC is precluded from regulating RF emissions. Any proceeding on this subject would be a waste of the CPUC's time and resources. The CPUC has recognized this point in a prior proceeding.²⁵

In addition, PG&E argues that "[u]nder normal conditions at a distance of 10 feet, the momentary exposure to RF energy during a transmission burst from a meter with SmartMeter[™] technology is less than one/six thousandth of the safety limits set by the FCC."²⁶ PG&E cites a series of common wireless devices

²¹ Network Response at 1.

²² *Id.* at 2.

²³ Id.

²⁴ *Id.* at 3.

²⁵ PG&E Motion at 1.

²⁶ *Id.* at 2.

now in use and states that "[t]hese devices often involve more frequent radio transmission, emit radio frequency energy for longer periods of time and operate in closer proximity to humans, than PG&E SmartMeterTM devices."²⁷

PG&E includes the Declaration of Daniel M. Partridge In Support of Pacific Gas and Electric Company's Motion for Immediate Dismissal of Application 10-04-018 in the PG&E Motion. In the PG&E Declaration, Daniel M. Partridge, the manager of SmartMeter[™] Engineering at PG&E declares, under penalty of perjury, that the Smart Meters are "regulated by the FCC and certified under CFR Title 47." In addition, the PG&E Declaration states that "[e]xposure to radio frequency energy from SmartMeters[™] is considerably less than the exposure from other radio devices in widespread use."²⁸ The PG&E Declaration further states that "exposure at 10 feet is 1/six thousandth of safety limits set by the FCC."²⁹

In its Reply, Network did not dispute these facts in the PG&E Declaration. On the issue of FCC jurisdiction, PG&E states that:

All SmartMeter[™] technology radios are regulated by the FCC and certified under CFR Title 47. Part 15 of this regulation applies to electric meters and Part 90 applies to gas meters. Certification is an authorization issued by the FCC for equipment, based on representations and test data from a sample unit submitted by the applicant.³⁰

PG&E argues that it is settled federal case law that the FCC has preempted state regulation of RF emitted by radio devices licensed by the FCC:

²⁷ *Id.* at 5.

²⁸ PG&E Declaration at 2.

²⁹ *Id.* at 4.

³⁰ PG&E Motion at 8, footnote omitted.

... in Freeman v. Burlington Broadcasters, Inc., 204 F.3d, 311, 320 (2000), the court stated: "Of the various forms of federal preemption, the most pertinent to the pending inquiry is so-called 'field preemption': state law is preempted when the 'scheme of federal regulation [is] so pervasive as to make reasonable the inference that Congress left no room for the State to Supplement it'." The court went on to review various statutes related to the FCC's jurisdiction and then concluded because of the statutory examples that the FCC possessed exclusive authority over all technical matters related to radio broadcasting. Clearly, the FCC's jurisdiction is not limited to "just personal wireless service facilities."³¹

PG&E also argues that this Commission has already concluded that it does not have jurisdiction over RF electromagnetic fields. PG&E cites D.06-04-070, which states:

We note that the FCC, as the agency that authorizes and licenses transmitters and facilities that generate radio frequency radiation, has addressed the potential biological effects of radiofrequency electromagnetic fields through technical bulletins. Accordingly, we do not address the issue here, and we do not reach the substantive issue of whether there are potential health effects from the deployment and use of BPL [broadband over power lines] because it clearly lies outside our jurisdiction.³²

The PG&E Reply argues that, despite the claims in Network's Response that it is not asking the Commission to regulate RF emissions, "Network is seeking specific relief related to RF" and that "the CPUC doe not have the power to grant the relief Network is requesting."³³ The PG&E Response also argues that "PG&E is not relying on the one code section Network is referring to [pertaining to personal wireless service facilities]. Rather, it is making the point

³¹ PG&E Reply at 3.

³² PG&E Motion at 13, citing D.06-04-070 at 50-51, footnote omitted.

³³ PG&E Response at 2.

that the entire field of RF emissions is preempted because it falls within the purview of the FCC." 34

4.3. Discussion

We find that it is reasonable to grant PG&E's motion to dismiss concerning all matters relating to the use of RF transmission by Smart Meters.

Although Network has raised concerns about RF emissions from Smart Meters, it is undisputed that the contribution of these smart meters to RFs is exceedingly small relative to the levels the FCC allows and small in comparison to that of many commonly used devices.

The FCC's standards are developed and updated from time to time with input from independent professional sources, such as the United States Environmental Protection Agency and World Health Organization. We defer to the FCC, which possesses extensive expertise on its staff for evaluating and licensing or certifying Smart Meter devices, which operate via the use of wireless technology. The Commission generally does not delve into technical matters which fall within the expertise of another agency, in this case, the FCC.

Furthermore, Smart Meters will play an important role in implementing key energy policies adopted by California law, including those directed at using renewable technologies, promoting conservation, and reducing greenhouse gases.

In light of these facts and policies, this Commission sees no reason to reopen our prior Smart Meter decisions to address these alleged health concerns at this time given the relatively tiny contribution Smart Meters will make to RF exposure relative to other sources in our modern environment.

³⁴ *Id.* at 3.

Parties who believe the limits the FCC has set for RF emissions from Smart Meters are too high relative to the alleged health threat should direct their arguments to the FCC, not to this Commission in the context of the Smart Meter program.

Finally, although Network notes "[m]edia reviews and customers report numerous complaints prior to or following installation of Smart Meters for a variety of reasons, including (1) health and environmental impacts, (2) reliability, (3) interference, (4) privacy, (5) security risks, and (6) fire hazards,"³⁵ Network does not propose to provide information supporting an investigation of reliability, interference, privacy, security risks or fire hazards. Its entire proposed showing focuses on RF emissions and their health effects.

Since Network has provided no basis for investigating these other topics, it is reasonable to close this proceeding. Should Network, however, wish to pursue topics related to the reliability and general performance of Smart Meters (and unrelated to RF emissions), Network can pursue participation in proceedings where such issues are considered, e.g., A.07-12-009, in which a petition to modify D.09-03-026 was recently filed by the City and County of San Francisco.³⁶

5. Conclusion

In summary, the RF emissions produced by Smart Meters is extremely small in comparison to the RF emissions from many other commonly used devices and far below emission standards set by the FCC, which licenses or

³⁵ Application at 16.

³⁶ The City and County of San Francisco's Petition to Modify Decision 09-03-026 to Temporarily Suspend Pacific Gas and Electric Company's Installation of Smart Meters (A.07-12-009), June 17, 2010.

certifies the Smart Meters used by PG&E. Since the Commission generally does not delve into technical matters which fall within the expertise of another agency, in this case we defer to the FCC, which possesses extensive expertise on its staff for evaluating and licensing or certifying Smart Meter devices that operate via the use of wireless technology. We therefore grant the motion of PG&E to dismiss this application. This proceeding is closed.

6. Comments on Proposed Decision

The proposed decision (PD) of ALJ Sullivan in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed on November 15, 2010, and reply comments were filed on November 22, 2010, by DRA, PG&E and Network.

DRA opposes granting the motion to dismiss and recommends an "open, public proceeding to address public concerns about RF emissions."³⁷ DRA argues that "Federal preemption principles do not preclude the Commission from an open, public inquiry into RF emissions from Smart Meters."³⁸ DRA argues further that "the record in this proceeding does not provide a comprehensive quantification of RF emissions from PG&E's AMI system"³⁹ and argues further that "calculating source emissions is only the first step."⁴⁰ DRA also argues that "the PD errs in making broad findings about RF emissions from

⁴⁰ *Id.* at 8.

³⁷ DRA Comments on Proposed Decision at 2.

³⁸ Id.

³⁹ *Id.* at 6.

PG&E's AMI system based on incomplete and insufficient evidence"⁴¹ and that "the potential benefits of AMI benefits may not be fully realized if some customers remain concerned about health impacts of Smart Meters."⁴²

DRA's arguments are primarily policy arguments and therefore do not demonstrate any legal or factual errors. We find nothing in DRA's arguments that would cause us to reverse our decision to grant PG&E's motion. DRA misconstrues our argument: we do not find that the Commission is precluded from investigating RF emissions from Smart Meters. Instead, we have noted that the Commission generally does not delve into technical matters which fall with the purview of another agency, in this case, the FCC. DRA's argument is simply a policy argument that the Commission <u>should</u> engage in a more detailed investigation of the potential customer health impacts of Smart Meters, and that with respect to such impacts, the Commission should go through a process analogous to the process used for evaluating air quality impacts. On this matter, we disagree with DRA for the many reasons stated above.

Concerning DRA's assessment of the evidentiary record in this proceeding, we have revised our factual findings in light of DRA's analysis. The Smart Meters meet standards adopted to control EMF emissions, not health standards. The emissions standards, however, are adopted by the FCC based on a consideration of many factors, including health concerns.⁴³ Despite this minor revision, the basic findings remain incontrovertible – PG&E's Smart Meters comply with relevant FCC standards and that emissions are far below those from

⁴¹ *Id.* at 11.

⁴² *Id.* at 12.

⁴³ See PG&E Motion at 6-7.

other devices in common use, such as baby monitors, cell phones, garage door openers, wi-fi access points, and laptop computers with wi-fi transmitters.⁴⁴

Network also opposes granting PG&E's Motion. Network argues that PG&E's RF emission figures are "technically incompetent and grossly underestimated."⁴⁵ Like DRA, Network also argues that "there is no RF Federal health standard."⁴⁶ Network also mounts several ad hominem arguments, stating that "the PD shows bias toward PG&E's claims over Network's claims"⁴⁷ and that "the Commission cannot trust PG&E's behavior in this application."⁴⁸ Finally, in reply comments, Network has argued that it "has discovered that PG&E is deploying Smart Meters that appear in violation of one or more FCC conditions that determine radio frequency (RF) exposure compliance."⁴⁹

In response to Network, we note that in a petition to modify a decision:

Any factual allegations must be supported with specific citations to the record in the proceeding or to matters that may be officially noticed. Allegations of new or changed facts must be supported by an appropriate declaration or affidavit.⁵⁰

Although the passage of time the Commission required Network to file its petition to modify as an application rather than a petition, it is still reasonable to expect that Network as the moving party provide support for reversing the

⁴⁸ Id.

⁴⁴ *Id.* at 3-4.

⁴⁵ Network Comments on PD at 2.

⁴⁶ *Id.* at 3.

⁴⁷ *Id.* at 4.

⁴⁹ Network Reply Comments on PD at 1.

⁵⁰ Rule 16.4 of the Commission's Rules of Practice and Procedure.

Commission's prior decision by either offering new evidentiary testimony or by providing evidence through a declaration or affidavit. Network did neither.

Similarly, Network's belated "discovery" that PG&E's deployment "*may be*" in violation of one or more FCC conditions is an unsubstantiated allegation raised in the reply comments that deserves little weight.

PG&E's comments support the argument of the proposed decision and argue that the PD's findings are well supported.

7. Assignment of Proceeding

Michael R. Peevey is the assigned Commissioner and Timothy J. Sullivan is the assigned ALJ in this proceeding.

Findings of Fact

1. The Application of EMF Safety Network for Modification of D.06-07-027 and D.09-03-026 alleges that RF emissions from Smart Meters produce adverse health and safety consequences.

2. All radio devices in PG&E's Smart Meters are licensed or certified by the FCC and comply with all FCC requirements.

3. Smart Meters produce RF emissions far below the levels of many commonly used devices.

4. Neither DRA or EMF Safety Network have provided allegations of new or changed facts supported by an appropriate declaration, affidavit, or the proposed testimony of an expert witness that would warrant either modifying D.06-07-027 and D.09-03-026 or reopening this proceeding to investigate the health impacts of emissions from Smart Meters.

Conclusions of Law

1. It is not reasonable to re-open the Commission's review of Smart Meters for the purpose of considering the alleged health impacts of RF emissions from Smart Meters at this time.

2. It is reasonable to grant PG&E's Motion for Immediate Dismissal of Application 10-04-018,

ORDER

IT IS ORDERED that:

1. Pacific Gas and Electric Company's Motion for Immediate Dismissal of Application 10-04-018, May 17, 2010, is granted.

2. Application 10-04-018 is closed.

This order is effective today.

Dated December 2, 2010, at San Francisco, California.

MICHAEL R. PEEVEY President DIAN M. GRUENEICH JOHN A. BOHN TIMOTHY ALAN SIMON Commissioners

I dissent.

/s/ NANCY E. RYAN Commissioner