

**PUBLIC UTILITIES COMMISSION**505 VAN NESS AVENUE  
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**Ratesetting**

TO PARTIES OF RECORD IN APPLICATION 11-03-014

This is the proposed decision of Commissioner Michael Peevey. It will not appear on the Commission's agenda sooner than January 12, 2012. The Commission may act then, or it may postpone action until later.

When the Commission acts on the proposed decision, it may adopt all or part of it as written, amend or modify it, or set it aside and prepare its own decision. Only when the Commission acts does the decision become binding on the parties.

Parties to the proceeding may file comments on the proposed decision as provided in Article 14 of the Commission's Rules of Practice and Procedure (Rules), accessible on the Commission's website at [www.cpuc.ca.gov](http://www.cpuc.ca.gov). Pursuant to Rule 14.3, opening comments shall not exceed 15 pages.

Comments must be filed pursuant to Rule 1.13 either electronically or in hard copy. Comments should be served on parties to this proceeding in accordance with Rules 1.9 and 1.10. Electronic and hard copies of comments should be sent to ALJ Yip-Kikugawa at [ayk@cpuc.ca.gov](mailto:ayk@cpuc.ca.gov) and the assigned Commissioner. The current service list for this proceeding is available on the Commission's website at [www.cpuc.ca.gov](http://www.cpuc.ca.gov).

/s/ KAREN V. CLOPTONKaren V. Clopton, Chief  
Administrative Law Judge

KVC:avs

Attachment

Decision PROPOSED DECISION OF COMMISSIONER PEEVEY  
(Mailed 11/22/2011)

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

Application of Pacific Gas and Electric Company  
for Approval of Modifications to its  
SmartMeter™ Program and Increased Revenue  
Requirements to Recover the Costs of the  
Modifications. (U39M)

Application 11-03-014  
(Filed March 24, 2011)

**DECISION MODIFYING PACIFIC GAS AND ELECTRIC COMPANY'S  
SMARTMETER PROGRAM TO INCLUDE AN OPT-OUT OPTION**

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## **DECISION MODIFYING PACIFIC GAS AND ELECTRIC COMPANY'S SMARTMETER PROGRAM TO INCLUDE AN OPT-OUT OPTION**

### **1. Summary**

This decision modifies Pacific Gas and Electric Company's (PG&E) SmartMeter Program to include an option for residential customers who do not wish to have a wireless SmartMeter installed at their location. The opt-out option shall be a non-communicating digital electric and/or gas meter (either a SmartMeter with the radio-transmission turned off or a digital meter with no radio installed). The non-communicating digital electric meter offered for the opt-out option must be capable, by no later than January 1, 2014, of collecting interval energy consumption data to allow PG&E to collect this data manually for billing purposes.

A Non-CARE customer electing the opt-out option shall be assessed an initial fee of \$90.00 and a monthly charge of \$15.00. A CARE customer electing the opt-out option shall not be assessed an initial fee but will be assessed a monthly charge of \$5.00.

This decision also authorizes PG&E to establish new two-way electric and gas Modified SmartMeter Memorandum Accounts to track revenues and costs associated with providing the opt-out option. PG&E shall seek recovery of the net costs in its annual Energy Resource Recovery Account application.

This decision further directs PG&E to file a Tier 1 Advice Letter implementing the opt-out option and to establish a SmartMeter Opt-Out Tariff within 15 days of the effective date of this decision. Finally, the September 21, 2011 Assigned Commissioner's Ruling directing PG&E to establish a delay list shall no longer be in effect and all customers currently on the delay

list shall be transitioned to a wireless SmartMeter unless they elect to participate in the opt-out option. This proceeding is closed.

## **2. Background**

On March 24, 2011, Pacific Gas and Electric Company (PG&E) filed Application (A.) 11-03-014 seeking Commission approval of modifications to its SmartMeter Program, and an increase in revenue requirements to recover the costs of implementing the modifications. PG&E's application was filed in response to a directive by Commissioner Peevey to submit a proposal that would allow some form of opt-out for PG&E customers who did not wish to have a SmartMeter with radio frequency (RF) transmission. This is referred to in this proceeding as "opting out."

PG&E proposes that the SmartMeter Program be modified to provide residential customers the choice to request that PG&E "turn-off" / disable the radio inside their gas and/or electric SmartMeters, thus eliminating the RF communications from the SmartMeters. This has been referred to as the "radio off" option. It further proposes that it be allowed to recover the associated costs from customers electing to opt out through an up-front fee, monthly charges, and an "exit" charge when a customer leaves the premises. The revenue requirements to recover these costs are estimated to be \$113.4 million for the two-year period of 2012-2013.

Timely protests were filed by the Ecological Options Network (EON), County of Lake (Lake), County of Mendocino (Mendocino), Aglet Consumer Alliance (Aglet), EMF Safety Network (Network), The Utility Reform Network (TURN), jointly by the Town of Fairfax, the Alliance for Human and Environmental Health and the County of Marin (jointly, Fairfax), Wilner and Associates (Wilner), and Alameda County Residents Concerned About Smart

Meters (Alameda). The Division of Ratepayer Advocates (DRA) filed a timely response to PG&E's application.

A prehearing conference (PHC) was held on May 6, 2011. Shortly thereafter, an Assigned Commissioner Ruling and Scoping Memo (Scoping Memo) was issued on May 25, 2011. As identified in the Scoping Memo, the issues to be considered are:<sup>1</sup>

1. Whether PG&E's proposed radio-off option is reasonable.
2. Whether the proposed costs for PG&E's opt-out proposal are reasonable.
3. Whether PG&E's proposed cost recovery is reasonable.

A second PHC was held on July 27, 2011. Based on discussion at this second PHC, a combined workshop was scheduled to discuss the possible opt-out options for PG&E, Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E) and Southern California Gas Company (SoCalGas).

The combined workshop was held on September 14, 2011. At the workshop, parties discussed the following possible options, in addition to the radio off option, that might be offered to customers wishing to opt out of having a wireless SmartMeter installed:

1. Install a digital meter with no communication capability (referred to as 'radio out' option).
2. Analog meters – retention where a wireless SmartMeter has not been installed or installation of analog meters to replace a wireless SmartMeter.

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<sup>1</sup> *Assigned Commissioner Ruling and Scoping Memo*, issued May 25, 2011, at 3-4.

3. Install a digital meter with wired (e.g., copper wire, fiber optic) transmission capability.

This discussion included the estimated costs and the technological feasibility of offering each of the different options.

In response to comments made at the workshop, the assigned Administrative Law Judge (ALJ) issued rulings directing PG&E to provide additional information concerning costs and RF emissions.<sup>2</sup> Additionally, the Assigned Commissioner issued a ruling on September 21, 2011 specifying the minimum requirements that PG&E, SCE and SDG&E must follow in response to customer requests to delay the installation of a wireless SmartMeter.<sup>3</sup>

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<sup>2</sup> See *Administrative Law Judge's Ruling Directing Pacific Gas and Electric Company to File Additional Cost Information*, issued October 12, 2011; *Administrative Law Judge's Ruling Seeking Clarification*, issued October 18, 2011. This second ruling also applied to SCE, SDG&E and SoCalGas.

<sup>3</sup> See *Assigned Commissioner's Ruling Concerning Customer Requests to Delay Installation of a Smart Meter*, issued September 21, 2011.

### 3. PG&E's Application

PG&E's electric SmartMeters include two low-power radios embedded in the meter that are capable of both transmitting and receiving a signal through the radio. One radio is used to communicate with PG&E over its SmartMeter electric mesh network. This radio communicates to local collectors called Access Points (AP) which communicate that information back to PG&E's system. The second radio is currently off and would be used only if the customer affirmatively decides to implement an integrated Home Area Network (HAN). PG&E's gas SmartMeters have a single radio, which is used to transmit a low power radio frequency signal to a Distribution Collection Unit (DCU) The DCU collects data from local meters and then communicates back to PG&E's systems.

PG&E proposes to offer the following opt-out options to customers:<sup>4</sup>

1. Radio off - Residential electric and gas customers would be eligible to request that the wireless radios embedded in the SmartMeter be "turned off" (deactivated).

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<sup>4</sup> PG&E Testimony at 1-5 - 1-6.



2. Relocation – Electric customers may request that PG&E relocate the electric SmartMeter to a different location on the customer’s property.<sup>5</sup>

PG&E estimates the costs to implement the radio off option to be \$113.4 million for the years 2012 and 2013, assuming 148,500 customers will elect to opt out.<sup>6</sup> It proposes that these costs be recovered from those customers choosing to opt-out of a wireless SmartMeter through the assessment of an up-front fee covering all or a portion of PG&E’s immediate costs of implementing the opt-out option, monthly fees covering ongoing monthly expenses and an “exit fee” upon termination of participation in the opt-out option.

#### **4. Opt-Out Plan**

PG&E states that it had evaluated various opt-out alternatives, and determined that the radio-off alternative was the most feasible and could be offered at a reasonable cost.<sup>7</sup> It further states that other alternatives evaluated were a wired meter and a legacy (analog) meter.

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<sup>5</sup> The relocation option is an existing option and shall continue to be offered pursuant to Electric Rule 16. Under Rule 16, relocation costs could be between \$2,500 and \$11,000 depending on the specific characteristics of the relocation. Relocation costs would be paid by the customer requesting this option.

<sup>6</sup> PG&E Testimony at 3-2.

<sup>7</sup> Application at 5.

A combined workshop to consider opt-out alternatives for all of the investor owned utilities was held on September 14, 2011.<sup>8</sup> The following opt-out alternatives were considered:

1. Analog meter – Under this option, an electromechanical (analog) meter would be used in place of the wireless SmartMeter. This option would require the meter to be read manually every month.
2. Digital meter with no radio installed – Under this option, a digital meter, with no radio communications ability, would be used in place of the wireless SmartMeter. Some of these meters may be able to store interval energy consumption data. This option would require the meter to be read manually every month.
3. SmartMeter with radio transmission turned off – PG&E’s proposed alternative, this option would retain the existing SmartMeter, but have the radio communications ability turned off. Under this option, the meter would need to be read manually every month.
4. Wired smart meter – Under this option, interval energy consumption data would be transmitted to the utility through a traditional telephone line, fiber optic, a power line carrier or other wired technologies. Since this option would allow the meter to communicate with the utility, the meters would not need to be read manually every month. This option is not available for gas meters.

PG&E states that the radio off option will not affect the accuracy of electric usage measurement. However, under this option, certain electric SmartMeter functions would be disabled. These would include:<sup>9</sup>

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<sup>8</sup> In addition to A.11-03-014, the Commission is considering whether SDG&E and SCE should also be required to offer opt-out alternatives in A.11-03-015 and A.11-07-020, respectively.

<sup>9</sup> PG&E Testimony at 2A-4.

1. Hourly interval data of electric energy usage or daily gas usage.
2. Any tariff or demand response program which requires interval data.
3. Customer account internet presentment of interval data.
4. Remote service connect/disconnect capability.
5. Real-time meter diagnostic alarms and health assessment checks.
6. Real-time monitoring for security events on the metering device.
7. The ability for remote installation of meter or communication board firmware which may be required for upgradability.
8. Outage information and power status.
9. Time-of-Use (TOU) profiled energy usage data collection and access to any tariff that requires a device to collect TOU data.
10. Home Area Network (HAN) connectivity inside the home and access to any tariff or program that requires HAN in its application.

#### **4.1. Parties' Positions**

PG&E maintains that the radio off option is the most practical solution available because it optimizes the SmartMeters already deployed and additional SmartMeters already purchased for future deployment. It further states that the radio off option provides greater flexibility when customers choosing the opt-out option move or sell their homes. PG&E contends that the current options for offering a smart meter with wired communications are not technologically feasible as they are not available for gas meters and are limited to approximately

30,000 meters.<sup>10</sup> Additionally, PG&E argues that it makes no sense to offer a non-communicating SmartMeter (i.e, one with no radio unit installed), since that meter would serve the same function as a SmartMeter with the radio off. Finally, PG&E maintains that the analog meter opt-out option is not feasible, as these meters are no longer being manufactured. Moreover, PG&E states that offering an electric analog meter option is inconsistent with California's energy policy to implement mandatory TOU rates for residential customers, as analog meters cannot provide interval energy-consumption data.<sup>11</sup>

Many of the parties oppose PG&E's proposed option. Among other things, parties contend that the radio off option would not address the concerns raised by customers regarding the effect of RF emissions on health.<sup>12</sup> Network, EON and Fairfax all further assert that radio transmission is just a small part of the RF emissions from the SmartMeter. They maintain that even with the radio off, the SmartMeter still emits RF emissions. Consequently, they argue that an analog meter is the only feasible opt-out option.<sup>13</sup>

While DRA is generally supportive of PG&E's proposed opt-out option, it believes that the Commission should also consider whether the SmartMeters comply with the Federal Communication Commission's (FCC) guidelines.<sup>14</sup> It further notes that the Commission should consider the "functional requirements

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<sup>10</sup> The two wired communications possibilities it considered were power line carrier and traditional telephone line.

<sup>11</sup> PG&E Testimony at 1-6 - 1-8.

<sup>12</sup> See, Alameda Protest at 2; Lake Protest at 5-8; Mendocino Protest at 5-8; Network Protest at 4; EON Protest at 13-14; Wilner at 2.

<sup>13</sup> Network Protest at 4 & 6; EON Protest at 13-14; Fairfax Protest at 15.

<sup>14</sup> DRA Response at 7-8.

for alternative metering systems used by customers who opt out” in order to preserve the benefits of the SmartMeter system.<sup>15</sup>

Lake argues that widespread installation of SmartMeters could lead to violations of FCC compliance requirements.<sup>16</sup> It further alleges that the SmartMeters adversely affect the environment and overburden utility easements. Consequently, Lake asserts that installation of SmartMeters should be subject to review under the California Environmental Quality Act (CEQA) (Public Resources Code §§ 21000 and 21001).<sup>17</sup>

TURN believes that while the radio off option may address the concerns expressed by customers regarding RF emissions and privacy, it would not resolve concerns over the accuracy of the meters.<sup>18</sup>

Network, EON and Fairfax further maintain that any opt-out option should also be made available to local governments (town and counties) that have enacted ordinances for community-wide opt-out.<sup>19</sup> Network also asserts that a radio off option is not acceptable because there is no assurance that the SmartMeter is actually turned off.<sup>20</sup>

#### **4.2. Discussion**

PG&E’s proposed radio off option is one of four possibilities that could be offered to residential customers who do not wish to have a wireless

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<sup>15</sup> DRA Response at 5.

<sup>16</sup> Lake Protest at 5.

<sup>17</sup> Lake Protest at 6 – 7.

<sup>18</sup> TURN Protest at 2.

<sup>19</sup> Network Protest at 5; EON Protest at 15; Fairfax Protest at 8-13.

<sup>20</sup> Network Protest at 6.

SmartMeter. While PG&E has argued that this option is the most feasible, we cannot ignore parties' comments questioning whether this option best addresses the concerns raised by customers. As evidenced by the numerous speakers at Commission meetings, letters to Commissioners and the ALJ, and comments made by parties and other individuals at the September 14 workshop, there is a great deal of concern that the radio off option would not reduce the level of RF emissions. In response to those concerns, the ALJ issued a ruling seeking information on the RF emissions under the various options.<sup>21</sup> Among other things, the ALJ's October 18<sup>th</sup> Ruling asked for both the average duration and duration of communications between the electric and gas SmartMeters with the utility and level of RF emissions at those times. The ALJ's Ruling also sought information comparing the level of RF emissions from a SmartMeter with the radio off, from a digital meter with no communications capability, and from an analog meter.

PG&E's responses to the questions in the ALJ's October 18<sup>th</sup> Ruling were filed on November 1, 2011. These responses directly address some of the more controversial questions that the Commission heard at the September 14<sup>th</sup> workshop, during the Public Comment period at Commission meetings, in letters to Commissioners, and/or calls to the ALJ and our Consumer Affairs Branch.

One of the more controversial disputes raised during the September 14<sup>th</sup> workshop was how many times in total (average and maximum) an electric SmartMeter transmits during a 24-hour period. At the workshop, PG&E stated

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<sup>21</sup> See *Administrative Law Judge's Ruling Seeking Clarification*, issued October 18, 2011.

that the cumulative transmission time was 45 seconds per day, while other parties maintained that the transmission was constant. PG&E's response reveals that the total average transmission duration is 45.3 seconds, while the maximum is about 15 minutes during a 24-hour time period.<sup>22</sup> PG&E's vendor, Silver Spring Network, reports that a typical electric SmartMeter will communicate for about 45 seconds per day not 15 minutes. However, in instances in which the network is not complete, then the meter may attempt to communicate with the network more often resulting in a maximum duty cycle of 15 minutes.<sup>23</sup>

PG&E also includes in its November 1<sup>st</sup> response the FCC's response to a request for the FCC to step in and ask for the removal of SmartMeters. The FCC said:

As general background information, the FCC's exposure limits are derived from recommendations from human exposure to RF fields by the Institute of Electrical and Electronics Engineers, Inc. (IEEE) and the National Council on Radiation Protection and Measurements (NCRP), and by the U.S. Environmental Protection Agency (EPA), the Food and Drug Administration (FDA) and other federal health and safety agencies. These recommendations were developed by scientists and engineers with extensive experience and knowledge in the area of RF biological effects and related issues. The exposure limits were developed to ensure that FCC regulated transmitters do not expose the public or workers to levels of RF energy that are considered by expert organizations to be potentially harmful.

In the case of SmartMeters, the FCC has no data or report to suggest that exposure is occurring at levels of RF energy

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<sup>22</sup> PG&E's Response to ALJ's October 18 Ruling, filed November 1, 2011 at 5.

<sup>23</sup> PG&E's Response to ALJ's October 18 Ruling, filed November 1, 2011 at 5.

that exceed our RF exposure guidelines. In contrast, the California Council on Science and Technology recently released a report that found that “[s]cientific studies have not identified or confirmed negative health effects from potential non-thermal impacts of RF emissions such as those produced by existing common household electronic devices and smart meters.” With no indication that the SmartMeters in question might not comply with FCC exposure limits we have no reason or authority to order them removed or their operation discontinued.

RF measurements reported by others indicate that Smart Meters produce exposure of no more than 65% of the FCC limit at the face of the meter when programmed to transmit continuously. The devices normally transmit for less than a one second a few times each day and consumers are normally tens of feet or more from the meter face, so the actual exposures are typically thousands of times less than this “worse case” measurement condition.<sup>24</sup>

Another issue that was the topic of intense discussion during the workshop was whether the SmartMeter was a 1-watt powered meter, as represented by PG&E, or actually two or more watts, as represented by EON. PG&E’s response indicates that its electric SmartMeters are rated to transmit at one watt. However, PG&E also states the meter’s instantaneous peak level in terms of “effective isotropic radiated power” (EIRP) is 2.5 watts based on the SmartMeters’ 4.0 dB $\mu$  antenna gain.<sup>25</sup> This is similar to saying that a flashlight with a 1 watt bulb that focuses the light output in one direction appears as bright as a 2.5 watt bulb *without* the help of the flashlight’s focusing capability.

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<sup>24</sup> PG&E’s Response to ALJ’s October 18 Ruling, filed November 1, 2011 (Attachment B).

<sup>25</sup> PG&E’s Response to ALJ’s October 18 Ruling, filed November 1, 2011 at 10 (Table 6-1).



Therefore, while it is true that the EIRP from the SmartMeter is 2.5 watts, this level of emissions is below the FCC allowable RF emissions.<sup>26</sup>

The Commission has also received a number of questions regarding whether there is RF emission when the meter is not transmitting. PG&E states that “all digital circuitry – from that contained in clocks, in stereo equipment, or in answering machines – emits de minimus RF that is governed by FCC limits for unintentional RF emissions.”<sup>27</sup> PG&E also includes a table in its response comparing the level of RF emissions under the radio-off and a radio out options. PG&E states that these values were calculated as part of the SmartMeter’s certification.<sup>28</sup> This table is reproduced in Table 1 below.

**Table 1**  
**RF Emissions by Meter Type**

<b>Meter Type</b>	<b>RF Measured Value With Radio Out</b>	<b>RF Measured Value With Radio Off</b>	<b>FCC Allowable RF Emissions</b>
Electric: GE	38.3 dB $\mu$ V/m	39.3 dB $\mu$ V/m	49.0 dB $\mu$ V/m
Electric: L+G	31.3 dB $\mu$ V/m	24.7 dB $\mu$ V/m	49.0 dB $\mu$ V/m
Gas: Aclara	No discernable emissions	No discernable emissions	40.0 – 54.0 dB $\mu$ V/m

PG&E acknowledges that the analog meters emit no RF.<sup>29</sup> However, this fact alone does not lead to the conclusion that the analog meter opt-out option should be selected. As noted in Table 1 above, the RF emissions for SmartMeters with

<sup>26</sup> 47 C.F.R. § 15.247(c)(3) & (4).

<sup>27</sup> PG&E’s Response to ALJ’s October 18 Ruling, filed November 1, 2011 at 13 (citing to 47 C.F.R., Part 15, for a Class B digital device).

<sup>28</sup> PG&E’s Response to ALJ’s October 18 Ruling, filed November 1, 2011 at 14 (Table 10-1).

<sup>29</sup> PG&E’s Response to ALJ’s October 18 Ruling, filed November 1, 2011 at 15.

the radio off and a digital meter with no radio installed are below the FCC allowable RF emissions.

In advocating for adoption of an analog meter opt-out option, various parties have asserted that this option is necessary due to the alleged effect of RF emissions on human health. However, the issue of whether RF emissions from SmartMeters have an effect on individuals is outside the scope of this proceeding. Further, we determined in Decision (D.) 10-12-001 that PG&E's SmartMeter technology complies with FCC requirements. The FCC's authority over technical aspects of radio communications is longstanding and clear.<sup>30</sup> The FCC is required to foster the development of efficient wireless networks;<sup>31</sup> which it has interpreted to include nationwide uniformity in technical standards.<sup>32</sup> Pursuant to its responsibilities under the National Environmental Policy Act of 1969,<sup>33</sup> the FCC also regulates human exposure to RF emissions in order to protect public health and safety.<sup>34</sup> Accordingly, the FCC adopted limits on human absorption of RF emissions, and has pledged to monitor the results of ongoing research in order to maintain scientific validity.<sup>35</sup>

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<sup>30</sup> *Farina et. al. v. Nokia et. al. (Farina)* (3<sup>rd</sup> Cir. 2010) 625 F.3d 97 at p. 105-106. See also, *National Broadcasting Company v. United States* (1943) 319 U.S. 190, 210 (noting that federal regulation of wireless communication began with the Wireless Ship Act of July 24, 1910).

<sup>31</sup> 47 U.S.C. § 151.

<sup>32</sup> *In re An Inquiry Into the Use of the Bands 825-845 MHz and 870-980 MHz for Cellular Communications Systems* (1981) 86 F.C.C. 2d 469, 503-505.

<sup>33</sup> 42 U.S.C. §§ 4321 et. seq.

<sup>34</sup> See *In re Responsibility of the F.C.C. to Consider Biological Effects of Radiofrequency Radiation* (1985) 100 F.C.C.2d 543, 544.

<sup>35</sup> *Farina* at 106-107.

More importantly, the alleged effect of RF emissions on health is not material to the resolution of this application. Eligibility to opt out of receiving a wireless SmartMeter is not predicated on whether the meter has affected the customer's health. Rather, as has been stated by the ALJ, a customer shall be allowed to opt out of a wireless SmartMeter for any reason, or for no reason. Therefore, while some parties may argue that one opt-out option would address certain customer concerns better than another option, such an argument is not determinative of the option to be selected.

Fairfax urges that the Americans with Disabilities Act (ADA) bars the Commission from imposing "barriers or conditions"<sup>36</sup> upon disabled persons, citing findings from the Architectural and Transportation Barriers Compliance Board that "electromagnetic sensitivities may be considered disabilities under the ADA if they so severely impair the neurological, respiratory or other functions of an individual that it substantially limits one or more of the individual's major life activities."<sup>37</sup> While we appreciate important policy and practical values protected by the ADA, it is not clear how the referenced findings impact the Commission's activities. The Department of Justice's Final Rule implementing Title II of the ADA<sup>38</sup> is designed to enforce "nondiscrimination on the basis of disability by public accommodations and in commercial facilities."<sup>39</sup>

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<sup>36</sup> Fairfax Protest at 11.

<sup>37</sup> 56352 Federal Register, Vol. 67, No. 170, Tuesday, September 3, 2002.

<sup>38</sup> 42 U.S.C. 12131.

<sup>39</sup> *Nondiscrimination on the Basis of Disability in State and Local Government Services*, 28 C.F.R. Part 35, available at <http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?type=simple;c=ecfr;cc=ecfr;sid=9e160285cf641854933ece7e50d31b97;idno=28;region=DIV1;q1=35;rgn=div5;view=text;node=28%3A1.0.1.1.36>.

Fairfax does not include analysis regarding whether a SmartMeter constitutes a public accommodation or commercial facility as discussed in this regulation,<sup>40</sup> or if the Commission is even an appropriate agency to which a complaint for violation of such regulations may be submitted.<sup>41</sup> Finally, it is not clear that Fairfax includes or represents any individual/s who may submit a complaint based upon these regulations.<sup>42</sup> We therefore lack sufficient legal and factual basis to address Fairfax's somewhat ambiguous ADA complaint.

Finally, we do not find Lake's allegations that the installation of SmartMeters overburdens utility easements and is contrary to existing franchise persuasive. We are also unconvinced by Lake's arguments that the installation of SmartMeters is subject to environmental review under CEQA. These allegations are based on unsupported assertions regarding the impact of RF emissions on the environment. As we have already stated, this Commission is not charged with establishing the standards for RF emissions, nor is it

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<sup>40</sup> Section 35.102 provides, "(a) Except as provided in paragraph (b) of this section, this part applies to all services, programs, and activities provided or made available by public entities. [(¶)] (b) To the extent that public transportation services, programs, and activities of public entities are covered by subtitle B of title II of the ADA (42 U.S.C. 12141), they are not subject to the requirements of this part."

<sup>41</sup> See Sections 35.107 and 35.190, which describes the agencies to which complaints under these regulations may be submitted. Section 35.190, subdivision (b) provides "[t]he Federal agencies listed in paragraph (b) (1) through (8) of this section shall have responsibility for the implementation of subpart F of this part for components of State and local governments that exercise responsibilities, regulate, or administer services, programs, or activities in the following functional areas.

<sup>42</sup> Section 35.170, subdivision (a) provides "An individual who believes that he or she or a specific class of individuals has been subjected to discrimination on the basis of disability by a public entity may, by himself or herself or by an authorized representative, file a complaint under this part.

responsible for determining the level at which RF emissions would be considered to adversely affect the environment.

In determining the best opt-out option to be adopted, we must balance the concerns expressed by customers against California's overall energy policy. The Commission authorized the state's investor owned utilities to replace analog meters with smart meters in order to give consumers greater control over their energy use. Electric SmartMeters enable a utility to provide customers with detailed information about their electric energy usage at different times of the day, which in turn enables customers to manage their energy use more proactively.<sup>43</sup> In our decision authorizing smart meters for PG&E, we set the following minimum functionalities for these meters in order to proceed with California's goal to give customers information and choice about their energy consumption:<sup>44</sup>

- be capable of supporting a wide range of price responsive tariffs;
- collect data at a detail level that supports customer understanding of hourly usage patterns and their relation to energy costs;
- allow access to personal usage data such that customer access frequency does not result in additional AMI system hardware costs;
- be compatible with customer education, energy management, customized billing, and complaint resolution applications;

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<sup>43</sup> D.08-09-039, at 2.

<sup>44</sup> D.05-09-044, at 3 and 4.

- be compatible with utility system applications that promote and enhance system operating efficiency and improve service reliability, such as remote meter reading, outage management, reduction of theft and diversion, improved forecasting, workforce management, etc.; and
- be capable of interfacing with load control communication technology.

Furthermore, in PG&E's most recent rate design decision we stated that "the Commission's dynamic pricing principles seek to increase customer involvement in (a) managing California's energy supply, (b) reducing greenhouse gas emissions, and (c) managing future power plant development costs, by providing real economic incentives to reduce electric demand during peak periods.<sup>45</sup> We remind parties that while we believe that residential customers should be offered an opportunity to opt-out of receiving a wireless SmartMeter, this does not mean that customers electing this option would not be subject to ongoing state energy objectives. As such, it is important that the selected opt-out option has the capability to take advantage of smart grid benefits in the future.

PG&E states that although the SmartMeter with its radio turned off is not currently able to provide interval energy consumption data, there may be future technologies that allow for the manual retrieval of this data.<sup>46</sup> Since the ability to collect interval energy consumption data is critical to our policies to implement a demand response program and TOU rates, we do not find it reasonable to adopt an electric SmartMeter opt-out option that would not be able

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<sup>45</sup> D.10-02-032, at 4.

<sup>46</sup> PG&E Testimony at 1-6.

to collect that information. As noted above the single most important reason to transition from analog meters has been the capability of supporting a wide range of price responsive tariffs that analog meters cannot do.

We do not find the analog meter option reasonable, as it is the only option that is unable to track interval energy consumption data. We also do not find it reasonable to adopt the wired smart meter opt-out option. This option would likely require a significant investment in infrastructure and would not be available to customers within the near future. Additionally, this option is not available for gas SmartMeters. As discussed below the wired smart meter opt-out option is not cost effective; one of the main goals of the Commission is to ensure that the regulated gas and electric service are provided to customers at reasonable rates. The cost of the wired option as compared to the other options is not reasonable.

In light of these considerations, we find the appropriate opt-out option to be a non-communicating meter – that is, a SmartMeter with the radio-off or a digital meter with no communications capability. To ensure that the electric non-communicating meter is able to take advantage of smart grid benefits in the future, it must be capable of capturing interval energy consumption data. While this capability is not needed at this time, it must be available by January 1, 2014.<sup>47</sup> We find PG&E’s proposed radio off opt-out option to be reasonable only if it will allow PG&E to collect interval data and use this data for billing purposes by that date.

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<sup>47</sup> Pursuant to Pub. Util. Code § 745(b)(2) an electrical corporation may employ mandatory or default time-variant pricing, without bill protection, for residential customers after January 1, 2014.

Accordingly, we conditionally grant PG&E's request to modify its SmartMeter Program to offer a radio off opt-out option upon PG&E's confirmation that an electric SmartMeter with the radio off will have the capability to collect interval data by January 1, 2014. If the electric SmartMeter is unable to provide this capability, PG&E shall offer a radio out opt-out option that shall include a digital meter capable of collecting interval energy consumption data and the ability for PG&E to collect this data and use it for billing purposes.

Finally, we decline to allow the opt-out option to be exercised by local entities and communities in addition to individual residential customers. As discussed further below, we have determined that any customer who exercises the opt-out option will be assessed an initial opt-out fee, and monthly charges. As a matter of customer choice, it should be the customer of record who chooses whether to opt out of a wireless SmartMeter and pay for that option.

#### **5. Cost of Opt-Out Plan**

PG&E states that it had considered a radio-off, a wired smart meter and a legacy (analog) meter opt-out options. However, its application provided detailed cost information for only its proposed opt-out option, the radio-off option. PG&E states that its cost estimates represent the incremental costs related to turning off the radio, meter reading while the meters are in radio off mode, an expectation of requiring additional network equipment to compensate for the count of meters in radio off mode and turning the radio back on when the customer moves. This results in an estimated revenue requirement for 2012-2013 of \$113.4 million. This revenue requirement consists of the following:



Incremental Expense Costs (thousand \$)	
Field Deployment	\$56,351
Information Technology	406
Customer Communications and Operations Support	<u>18,379</u>
<b>Total Incremental Expense Costs</b>	<b>\$75,136</b>
Incremental Capital Costs (thousand \$)	
Field Deployment	\$36,385
Information Technology	<u>1,912</u>
<b>Total Incremental Capital Costs</b>	<b><u>38,297</u></b>
<b>Total Incremental Costs</b>	<b>\$113,433</b>

### 5.1. Parties' Comments

Various parties oppose PG&E's proposed revenue requirement. Aglet believes the costs are too high and that less expensive alternatives should be considered.<sup>48</sup> TURN echoes Aglet's comments and notes that some of the costs could possibly be reduced if customers were allowed to self-read the meters. It further urges further investigation of whether the radio transmission feature on the wireless SmartMeters could be turned off and on remotely.<sup>49</sup>

Fairfax also argues that PG&E's cost estimates are overstated since the costs are based on turning off already installed and functioning SmartMeters and do not consider those instances where an analog meter is installed, or where there is community wide opt-out. Fairfax further states that costs could be minimized if PG&E were ordered to retain a sufficient inventory of analog

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<sup>48</sup> Aglet Protest at 3.

<sup>49</sup> TURN Protest at 3-4.

meters now. Similar to TURN, Fairfax also argues that costs could be lowered by allowing customers to read the meters and mail in a postcard.<sup>50</sup>

## 5.2. Discussion

Although only costs for the radio off option was provided, the Scoping Memo stated that other parties recommending other reasonable cost opt-out alternatives would provide the estimated costs of the recommended alternative(s).<sup>51</sup> Several parties proposed alternatives, but expressed difficulty in determining the costs for their recommended alternative. This difficulty was also noticed in a motion filed by DRA on July 22, 2011 and voiced at the September 14 workshop. Consequently, an ALJ Ruling was issued on October 12, 2011 directing PG&E to provide cost information for the following opt-out options:

1. Replacement of wireless SmartMeter with an analog meter;
2. Replacement of wireless SmartMeter with a digital meter with no radio installed; and
3. Replacement of wireless SmartMeter with a wired smart meter (telephone or fiber-optic).

PG&E's response to the October 12 ALJ Ruling was filed and served on all parties on October 28, 2011. As presented in Table 1 below, PG&E's estimated costs would be the same for all non-communicating opt-out options, while certain costs for the wired option will be significantly higher.

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<sup>50</sup> Fairfax Protest at 15-17.

<sup>51</sup> *Assigned Commissioner Ruling and Scoping Ruling*, May 25, 2011, at 3.

**TABLE 2**  
**ESTIMATED COSTS FOR OPT-OUT OPTIONS**

	<b>Analog Meter</b>	<b>Radio Out</b>	<b>Wired</b>	<b>Radio Off</b>
<u>Initial Costs</u>				
Meter	\$51.24	\$29.28	\$355.50	N/A
Labor (Site visit)	\$128.00	\$128.00	\$128.00*	\$128.00
<u>Monthly Charges</u>	\$10.69	\$10.69	\$10.42	\$10.69
<u>Other Costs</u>				
Network Capital Costs	\$36,385,335	\$36,385,335	\$36,385,335	\$36,385,335
Information Technology Costs	\$2,317,621	\$2,317,621	\$2,25,983,287	\$2,317,621
Call Center	\$3,007,620	\$3,007,620	\$3,007,620	\$3,007,620
Operations Expenses	\$15,371,390	\$15,371,390	\$45,308,990	\$15,371,390
Other Costs	\$57,081,966	\$57,081,966	\$115,766,712	\$57,081,966
Revenue Requirement per Opt-Out Customer***	\$416	\$411	\$613	\$402

NOTES:

\* Excludes additional \$150.00 for wiring charge.

\*\* Costs to read gas meter

\*\*\* Assumes 145,800 Opt-Out Customers

As outlined in Table 2 above, PG&E estimates that the majority of the estimated costs for all of the opt-out alternatives are associated with developing and maintaining a separate back office system for the non-communicating meters. PG&E's estimates demonstrate that there is no significant cost advantage over one non-communicating opt-out option over another.

Further, it appears that some of the suggestions for reducing costs, such as remote shut-off of the SmartMeters or a daily “snap read” of the SmartMeter, will not reduce costs in actuality. For example, PG&E states that its gas SmartMeters cannot be remotely shut off because they do not receive radio communications. Therefore, even if a remote shut-off capability were developed for the electric SmartMeters, the cost of a field visit would still be incurred to shut off the gas SmartMeter. Additionally, PG&E states that a field visit would be necessary to place an identifying marker that the customer had selected the opt-out option.<sup>52</sup>

This additional cost information indicates that there is little difference in cost between the various non-communicating opt-out options. However, PG&E states that while the cost estimates are based on its best efforts, there may be other costs that are unknown at this time. Further, it states that the cost estimates are based on offering a single opt-out option and contends that there would be increased costs of multiple opt-out options are offered.<sup>53</sup>

Given the significant cost uncertainties, we believe that it would be premature to make any determination concerning the reasonableness of PG&E’s revenue requirements. Rather, as discussed in Section 7 below, PG&E shall track its costs in a two-way memorandum account and seek recovery of these costs as part of its annual Energy Resource Recovery Account (ERRA) application.

We are unpersuaded by Fairfax’s arguments that an analog meter option would be less costly to implement. Fairfax’s comments are premised upon an analog meter opt-out option being adopted and the opt-out option being

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<sup>52</sup> PG&E Response of ALJ October 12, 2011 Ruling, filed October 28, 2011 at 3-4.

exercised by local entities, such as towns or counties. However, as discussed above, an analog meter opt-out option is incompatible with our ongoing energy policies. Additionally, we decline to allow the opt-out option to be exercised by local governments or communities. Moreover, as discussed above, a PG&E's price information indicates that the cost of an analog opt-out option is not significantly different from other non-communicating opt-out options.

## **6. Cost Recovery for the Opt-Out Plan and Rate Structure**

PG&E proposes to recover the incremental costs to the SmartMeter Program to provide the opt-out option from customers exercising the option. Based on its estimated revenue requirement, PG&E proposes two fee schedules for customers electing to not have a wireless SmartMeter.<sup>54</sup> One schedule would have a lower initial opt-out fee, with higher monthly charges, while the other would have a higher initial opt-out fee, with lower monthly charges.<sup>55</sup> Under both schedules, there would be a 20 percent discount for customers enrolled in the California Alternate Rates for Energy (CARE) program. The proposed fees, assuming 148,500 customers decide to opt out, are:

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<sup>53</sup> PG&E Response of ALJ October 12, 2011 Ruling, filed October 28, 2011 at 2.

<sup>54</sup> PG&E Testimony at 1-2 - 1-3.

<sup>55</sup> Customer could pay for monthly charges on either a flat-fee basis or based on their energy consumption.

Schedule A (lower initial fee and higher monthly charges)

Non-CARE          \$135 upfront          \$20 / month

CARE                \$105 upfront          \$16 / month

Schedule B (higher initial fee and lower monthly charges)

Non-CARE          \$270 upfront          \$14 / month

CARE                \$215 upfront          \$11 / month

In addition to the initial fee and monthly charges, customers would be charged a separate “exit” fee of \$135 (or \$105 for CARE customers) if the customer decides to have the radio communications turned on at a later date or terminates service at that location.<sup>56</sup> This fee is to cover costs associated with enabling the SmartMeter’s radio communications.

In response to the ALJ’s October 12, 2011 Ruling, PG&E also submitted proposed rates for each of the other opt-out options. These rates are as follows:<sup>57</sup>

**TABLE 3**  
**CUSTOMER CHARGES BY OPT-OUT OPTION**

	<b>Analog</b>	<b>Radio Out</b>	<b>Wired Meter</b>	<b>Radio Off</b>
Initial Fee	\$270	\$270	\$470	\$270
Monthly Charge	\$16	\$15	\$41	\$14
Exit Fee	\$130	\$130	\$130	\$130

<sup>56</sup> PG&E Testimony at 2A-5.

<sup>57</sup> PG&E Response to ALJ October 12, 2011 Ruling, filed October 28, 2011, Attachment A, Summary. On November 9, 2011, PG&E filed a revised version of Attachment A to correct some calculation errors. The charges in Table 3 include the corrections contained in the November 9 filing.

### 6.1. Parties' Comments

Most intervenors oppose imposing any fee on ratepayers for opting out. Both Lake and Mendocino maintain that PG&E should have already accounted for providing a radio off option, as it had been considered in Application (A.) 07-12-009. As such, they argue that PG&E should not now be imposing costs on customers to provide this option.<sup>58</sup> Network contends that customers have been harmed by the SmartMeters, and, thus, argues that it would be unfair to charge customers to opt-out.<sup>59</sup> EON further argues that ratepayers should not be required to pay for a solution that does not solve the problems.<sup>60</sup> These parties generally maintain that costs for the opt-out option should be the responsibility of PG&E shareholders.

Aglet states that the majority of incremental costs for the opt-out option should be allocated to all customers. It contends that the need for an opt-out option is driven by the SmartMeter Program as a whole. Therefore, it believes that, just as the SmartMeter Program costs are allocated to all customers, so should the costs associated with the opt-out option.<sup>61</sup> DRA also states that the Commission should consider whether the program costs should be recovered from customers exercising the opt-out option, utility shareholders or all ratepayers.<sup>62</sup>

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<sup>58</sup> Lake Protest at 4; Mendocino Protest at 3-4.

<sup>59</sup> Network Protest at 5.

<sup>60</sup> EON Protest at 14.

<sup>61</sup> Aglet Protest at 3.

<sup>62</sup> DRA Response at 6.

Alameda, Lake, and Mendocino also maintain that imposing opt-out fees on low-income customers is discriminatory. Lake argues that PG&E arbitrarily applies a 20 percent discount to customers enrolled in the CARE program but provides no discount for families enrolled in the Family Electric Rate Assistance (FERA) program. It further contends that imposing opt-out charges on low-income would be contrary to the objectives of these low income programs, “as these additional charges would place these low-income customers at the same rate as Non-CARE customers who do not opt to have the radios in their Smart Meters turned off.”<sup>63</sup>

## **6.2. Discussion**

We do not agree with Protestants’ arguments that PG&E’s shareholders should be responsible for incremental costs associated with the opt-out option. PG&E’s implementation of the SmartMeter Program is consistent with the requirements of D.06-07-027. Our determination that the SmartMeter Program should include an opt-out option is in response to customer demands. As such, the costs to implement this program are not due to PG&E’s failure to comply with the requirements of D.06-07-027 and should be recovered from ratepayers to the extent they are appropriate, reasonable, and not already being recovered in rates.

We agree with PG&E that a customer selecting the opt-out option should be assessed an initial charge to install the non-communicating meter and a monthly charge. The Commission authorized the utilities to deploy SmartMeters throughout their territories and complete deployment by December 31, 2012. Consequently, the standard for metering has been

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<sup>63</sup> Lake Protest at 4.



transitioned from the older technology, analog meters, to today's technology, SmartMeters. In this decision we are not reversing that transition, however, we do approve an option for specific customers who for whatever reason would prefer a non-communicating digital meter. This option to move away from the standard will require PG&E to incur costs such as purchasing a new meter, going back to the customer location to install and service the meter, monthly cost of reading the meter, and labor involved in rendering the existing SmartMeter non-communicative.<sup>64</sup> These are some of the examples of the additional cost required to opt-out of the standard wireless SmartMeters.

We agree with Aglet that the costs for the opt-out option should not be solely the responsibility of just those electing to opt-out. While some of the costs for the opt-out option are directly associated with disabling the radio transmission capability of the SmartMeter, other costs are related to the SmartMeter infrastructure as a whole. These infrastructure costs will allow for the preservation of system benefits of the SmartMeter system. Further, as stated above, the actual costs of the opt-out option will be dependent upon the number of customers electing to enroll in the program and their impact on the SmartMeter infrastructure. Since these costs could vary significantly from the costs estimated by PG&E, we do not believe it would be reasonable for them to be recovered from only participants in the opt-out option. As such, we believe that it is appropriate that all ratepayers share in a portion of these costs.

As we noted above, the majority of the costs to provide the opt-out option are associated with developing and maintaining a separate back office

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<sup>64</sup> PG&E's Response to the October 12, 2011 ALJ Ruling.

system for the non-communicating meters. Furthermore, some of the costs associated with the installation of the opt-out option are for administrative and overhead expenses. We believe these types of costs are related to the SmartMeter Program as a whole and should be the responsibility of all residential customers. Therefore, a portion of the opt-out costs shall be allocated to all residential ratepayers, not just those participating in the opt-out option.

PG&E's estimated initial costs for each the proposed opt-out options range from \$128.00 (for the radio-off option) to \$483.50 (for the wired option). However, it proposes to charge an initial fee that would range of either \$270.00 (for the analog, radio out and radio-off options) or \$470.00 (for the wired option). We believe that these proposed rates are unreasonable in light of the uncertainty of costs and our determination that a portion of the costs should be borne by all residential customers. Consequently, we believe that a more reasonable initial fee is \$90 for Non-CARE customers.

PG&E estimates that the average monthly cost per manual read of a non-communicating meter is \$10.69. However, it proposes to charge customers between \$14 and \$16 per month depending on the type of non-communicating meter utilized. We find that a more reasonable monthly fee for Non-CARE customers is \$15/month.

PG&E proposes to charge an exit fee of \$130. This amount would be the same regardless of which opt-out option is adopted. PG&E has not provided sufficient information to justify why an exit fee is necessary. Therefore, we do not adopt an exit fee.

We recognize that assessing an initial fee and monthly charges could present a hardship to CARE customers. At the same time, we do not believe it would be appropriate for CARE customers to receive a different level of service

at no additional cost. Therefore, to ensure that CARE customers may participate in the opt-out option, we will not assess an initial fee. However, CARE customers will be subject to a monthly charge of \$5.00.

In light of these considerations, we decline to adopt PG&E's proposed rate structure and adopt the following fees for a non-communicating opt-out option:

For Non-CARE and Non-FERA Customers:

Initial Fee	\$90.00
Monthly Charge	\$15.00/month

For CARE and FERA Customers:

Initial Fee	\$0.
Monthly Charge	\$5.00/month

We agree with Lake that any discount provided to customers enrolled in the CARE program should also be provided to customers enrolled in the FERA programs. However, we do not agree with Lake's assertion that imposing opt-out charges on low-income would be contrary to the objectives of these low-income programs. Lake incorrectly compares the rates to be paid by CARE customers electing a non-communicating SmartMeter with Non-CARE customers who do not opt out of wireless SmartMeters. These two groups of customers are not receiving the same type of service, since their meters will have different levels of functionality (wireless communications vs. no communications). Further, the wireless SmartMeter is the standard adopted for PG&E's Advanced Meter Infrastructure program. Therefore, any customer opting to have a non-communicating meter is electing to not have the standard. More importantly, the opt-out option is voluntary, as a customer may participate for any reason, or no reason at all. As such, the fact that a CARE customer's electric bill will increase because the customer has decided to participate the

opt-out option should not be considered “defeating” the purpose of the low-income programs.

## **7. Cost Recovery Mechanism**

PG&E proposes to recover the actual revenue requirements associated with the opt-out option in new two-way electric and gas Modified SmartMeter Balancing Accounts (MSMBA). All revenues collected from individual customers participating in the opt-out option would be credited to the appropriate balancing account.<sup>65</sup> PG&E proposes that any over- or under-collection would be trued-up annually through the Modified SmartMeter Program rates via PG&E’s Annual Electric True-Up (AET) and Annual Gas True-Up (AGT) filings.

Aglet and TURN both oppose the proposed two-way balancing account. Both argue that this treatment would not provide for further reasonableness review of costs.<sup>66</sup>

PG&E’s cost recovery mechanism is premised upon only recovering all costs associated with the opt-out option from those customers selecting this option. This decision does not make a determination on the reasonableness of the costs or approving a revenue requirement. Rather, this decision adopts a policy to charge residential customers for a portion of the costs if they participate in the opt-out option, and to recover the remaining costs from all other residential customers.

As such, we will not adopt a balancing account treatment, because such a methodology indirectly makes a determination of the reasonableness of the

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<sup>65</sup> MSMBA-E would be for electric and MSMBA-G for gas.

<sup>66</sup> Aglet Protest at 3-4; TURN Protest at 4.

utilities' proposal costs to offer an opt-out option to its customers. A two-way memorandum account will allow the utility to track costs and revenues arising from offering the opt-out option. By tracking these costs and revenues in a two-way memorandum account, the utility preserves the opportunity to seek recovery of these costs and revenues at a later date. More importantly, by authorizing a two-way memorandum account, the Commission reaffirms that it has not yet determined whether recovery of booked costs and revenues are appropriate, unless so specified. Accordingly, PG&E is authorized to establish new two-way electric and gas Modified SmartMeter Memorandum Accounts to track revenues and costs associated with providing the opt-out option. PG&E shall seek recovery of the net costs in its annual ERRRA proceedings.

Our determination that PG&E should track its revenues and costs in a two-way memorandum account at this time is due to the current uncertainty associated with both the costs to provide the opt-out option and the number of customers that will select this option. However, we believe that PG&E would likely have a better knowledge of the costs to provide the opt-out option, along with the opt-out rate, after the option has been offered for a couple of years. Therefore, we direct PG&E to file a Tier 3 Advice Letter by no later than March 31, 2014 providing information on the actual revenues collected and costs incurred to provide the opt-out option between January 1, 2012 and December 31, 2013 as compared to the estimated costs and revenue requirement contained in this application. We believe this comparison would provide a reasonable review of the actual costs and revenues, since PG&E's application contains its projected revenue requirement for the two-year period 2012-2013. The advice letter shall include:

1. The costs associated with the initial costs to install a non-communicating meter, the monthly charges and other costs (e.g., network capital costs, information technology costs).
2. The number of customers that have selected the opt-out option.
3. Revenues collected from customers, separated by type of charge (i.e., initial fee, monthly charge or exit fee).
4. A breakdown of what portion of revenues was collected from customers selecting the opt-out option and what portion of revenues was collected from all residential ratepayers.

This information, along with the amounts PG&E requests to recover through the ERRA applications, will allow us to assess whether, and to what extent, the fees and monthly charges established in this decision should be revised to appropriately allocate costs between those customers selecting the opt-out option and all residential customers.

## **8. Next Steps**

We wish to have the opt-out option implemented without undue delay. Consequently, PG&E is directed to file a Tier 1 Advice Letter to implement the SmartMeter opt-out option and to establish a SmartMeter Opt-Out Tariff (SMOOT) within 15 days of the effective date of this decision. This Advice Letter filing shall:

1. Identify the non-communicating electric and gas meters (radio-off or radio out) to be offered as the opt-out option to residential customers. PG&E shall include affidavits by both the meter manufacturer selected to provide the opt-out option and the head of PG&E's SmartMeter Program that the selected non-communicating opt-out option for the electric SmartMeter will be capable of collecting interval energy consumption data and allowing PG&E to use it for billing purposes by January 1, 2014.

2. Establish procedures for residential customers to select the option to have a non-communicating meter if they do not wish to have a wireless SmartMeter.
3. Establish procedures to inform customers currently on the delay list that a SmartMeter opt-out option is available and that the customer will be scheduled to receive a wireless SmartMeter unless the customer elects to exercise the opt-out option.
3. Adopt the following fees for residential customers selecting the opt-out option:

For Non-CARE and Non-FERA Customers:

Initial Fee	\$90.00
Monthly Charge	\$15.00/month

For CARE and FERA Customers:

Initial Fee	\$0
Monthly Charge	\$5.00/month

4. Establish new two-way electric and gas Modified SmartMeter Memorandum Accounts to track revenues and costs associated with providing the SmartMeter opt-out option. Recovery of the net costs shall be through PG&E's annual ERRA proceedings.

As part of implementing the opt-out option, PG&E shall comply with the following guidelines:

1. Residential customers may begin signing up to participate in the opt-out option 20 days after the effective date of this decision. PG&E shall have a dedicated phone number for customers to call and sign up for the opt-out option. This number shall be staffed by customer service representatives trained to explain the opt-out option and fees.

2. Since a residential customer may opt-out for any reason, or no reason, PG&E may not require a customer to explain or state why he or she wishes to participate in the opt-out option as a condition for signing up.<sup>67</sup>
3. Customers may pay the initial fee to participate in the opt-out option over a three month period. If the customer does not pay the fee within this period, the customer will be removed from participating in the opt-out option and returned to the wireless SmartMeter.
4. PG&E shall not charge customers the initial fee nor the monthly charges until the customer has a non-communicating meter.
5. Customers currently on the delay list shall be individually notified of the opt-out option by certified mail and shall have at least 30 days prior notice that their analog meter will be replaced with a wireless SmartMeter unless they contact PG&E to participate in the opt-out option.

The September 21, 2011 Assigned Commissioner's Ruling (ACR) directed the utilities to allow residential customers who had not yet received a wireless SmartMeter to retain their analog meter and be placed on a delay list while the Commission considered PG&E's opt-out proposal. Since we are now modifying the SmartMeter Program to include an opt-out option, the ACR is no longer in effect for PG&E.

A number of motions have been filed in this proceeding. Several of the issues raised in the motions have been addressed in this decision and the motions have been rendered moot. All motions not yet ruled or rendered moot by this decision on are hereby denied.

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<sup>67</sup> However, PG&E may ask this question if a response is optional.



## **9. Categorization and Need for Hearing**

The Commission preliminarily categorized this matter as ratesetting in Resolution 176-3272, dated April 14, 2011 and that hearings would be necessary. The categorization was confirmed in the Scoping Memo and reaffirmed in a June 24, 2011 Assigned Commissioner's Ruling. This decision revises the preliminary determination concerning the need for hearings and finds that no evidentiary hearings are necessary as there are no disputed factual issues material to the resolution of this application.

## **10. Comments on Proposed Decision**

The proposed decision of the assigned Commissioner 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 \_\_\_\_\_, and reply comments were filed on \_\_\_\_\_ by \_\_\_\_\_.

## **Findings of Fact**

1. PG&E was directed by Commissioner Peevey to submit a proposal that would allow some form of opt-out for PG&E customers who did not wish to have a smart meter with RF transmission.
2. PG&E proposes that the SmartMeter Program be modified to provide residential customers the choice to disable (turn off) the radio inside their gas and/or electric meters.
3. The four possible alternatives for an opt-out option are: (1) SmartMeter with the radio transmission turned off; (2) digital meter with no radio installed; (3) analog meter; and (4) wired smart meter with wired transmission capability.
4. A non-communicating opt-out option would disable certain electric SmartMeter functions.

5. Customers seeking an opt-out option have expressed concerns that a radio-off option would not reduce the level of RF emissions.

6. The FCC has authority over technical aspects of radio communications and regulates human exposure to RF emissions in order to protect public health and safety.

7. Analog meters are unable to track interval energy consumption data.

8. Interval energy consumption data is critical to the Commission's policies to implement a demand response program and TOU rates.

9. PG&E's application provided cost estimates for the radio-off option.

10. PG&E provided cost information for the radio out, analog meter and wired smart meter opt-out options in response to an ALJ Ruling.

11. PG&E's cost estimates are based on its best efforts and actual costs may be significantly different.

### **Conclusions of Law**

1. A residential customer should be allowed to opt out of a wireless SmartMeter for any reason, or for no reason.

2. D.10-12-001 determined that PG&E's SmartMeter technology complies with FCC requirements.

3. Lake has not presented convincing arguments why the installation of SmartMeters is subject to environmental review under CEQA.

4. The best opt-out option to be adopted must balance the concerns expressed by customers against California's overall energy policy.

5. Allowing residential customers an opportunity to opt out of receiving a wireless SmartMeter does not mean that customers electing this option would not be subject to ongoing state energy objectives.

6. It is important that the selected opt-out option has the capability to take advantage of smart grid benefits in the future.

7. The wired smart meter opt-out option is not cost effective compared to the other options.

8. It is appropriate to adopt a non-communicating meter as the opt-out option.

9. The non-communicating meter (radio off or radio out) should have the capability of capturing interval energy consumption data by January 1, 2014.

10. PG&E's proposed radio-off opt-out option is reasonable only if it will allow PG&E to collect interval data and use this data for billing purpose as of January 1, 2014.

11. It would not be reasonable to allow the opt-out option to be exercised by local entities and communities.

12. Due to the significant cost uncertainties associated with providing an opt-out option, it would be premature to make any determination concerning the reasonableness of PG&E's revenue requirements.

13. Since PG&E's implementation of the SmartMeter Program is consistent with the requirements of D.06-07-027, it should be allowed to recover the costs associated with the opt-out option to the extent those costs are found to be appropriate, reasonable and not already being recovered in rates.

14. A residential customer selecting the opt-out option should be assessed an initial charge to install the non-communicating meter and a monthly charge.

15. The costs for the opt-out option should not be the sole responsibility of those customers selecting the option.

16. It would be reasonable to have a portion of the opt-out costs allocated to all residential ratepayers.

17. A discount should be provided to customers enrolled in the CARE and FERA programs.

18. PG&E should be authorized to establish two-way electric and gas Modified SmartMeter Memorandum Accounts to track revenues and costs associated with providing the opt-out option.

19. PG&E should provide information on the revenues collected and costs incurred to provide the opt-out option after the option has been in place for a couple of years.

20. The modifications to the SmartMeter Program should be implemented as quickly as possible.

21. The September 21, 2011 Assigned Commissioner's Ruling directing the utilities to allow residential customers to be placed on a delay list should no longer be applicable for PG&E.

22. All outstanding motions should be denied.

23. No hearings were necessary as there were no disputed factual issues material to the resolution of this application.

24. A.11-03-014 should be closed.

## **O R D E R**

### **IT IS ORDERED** that:

1. Pacific Gas and Electric Company's (PG&E) SmartMeter Program is modified to include an option for residential customers who do not wish to have a wireless SmartMeter installed at their location to have a non-communicating meter. This option must be capable of collecting interval energy consumption data to allow PG&E to use for billing purposes by January 1, 2014.

2. Within 15 days of the effective date of this order, Pacific Gas and Electric Company (PG&E) shall file a Tier 1 advice letter in compliance with General Order 96-B. The advice letter shall be served on the service list in Application 11-03-014. The advice letter shall include tariff sheets to modify PG&E's SmartMeter Program to include an opt-out option for customers who do not wish to have a wireless SmartMeter installed at their location and to implement a SmartMeter Opt-Out Tariff (SMOOT). The Advice Letter filing shall:

- a. Identify the non-communicating electric and gas meters (radio-off or radio out) to be offered as the opt-out option to residential customers. PG&E shall include affidavits by both the meter manufacturer selected to provide the opt-out option and the head of PG&E's SmartMeter Program that the selected non-communicating opt-out option for the electric SmartMeter will be capable of collecting interval energy consumption data and allowing PG&E to use it for billing purposes by January 1, 2014.
- b. Establish procedures for residential customers to select the option to have a non-communicating meter if they do not wish to have a wireless SmartMeter.
- c. Establish procedures to inform customers currently on the delay list that a SmartMeter opt-out option is available and that the customer will be scheduled to receive a wireless SmartMeter unless the customer elects to exercise the opt-out option.
- d. Adopt the following fees for residential customers selecting the opt-out option:

For Non-CARE and Non-FERA Customers:

Initial Fee	\$90.00
Monthly Charge	\$11.00/month

For CARE and FERA Customers:

Initial Fee	\$0
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Monthly Charge \$5.00/month

4. Establish new two-way electric and gas Modified SmartMeter Memorandum Accounts to track revenues and costs associated with providing the SmartMeter opt-out option. Recovery of the net costs shall be through PG&E's annual ERRA proceedings.
3. The September 21, 2011 Assigned Commissioner's Ruling directing the utilities to allow residential customers who had not yet received a wireless SmartMeter to retain their analog meter and to be placed on a delay list shall no longer be in effect for Pacific Gas and Electric Company.
4. Pacific Gas and Electric Company shall comply with the guidelines stated in Section 8 of this decision.
5. By March 31, 2014, Pacific Gas and Electric Company (PG&E) shall file a Tier 3 advice letter in compliance with General Order 96-B. The advice letter shall be served on the service list in Application 11-03-014. The advice letter filing shall provide information on the actual revenues collected and costs incurred to provide the opt-out option between January 1, 2012 and December 31, 2013 as compared to the estimated costs and revenue requirement contained in this application. The advice letter shall include:
  1. The costs associated with the initial costs to install a non-communicating meter, the monthly charges and other costs (e.g., network capital costs, information technology costs).
  2. The number of customers that have selected the opt-out option.
  3. Revenues collected from customers, separated by type of charge (i.e., initial fee, monthly charge or exit fee).
  4. A breakdown of what portion of revenues was collected from customers selecting the opt-out option and what

portion of revenues was collected from all residential ratepayers.

6. All motions not yet ruled on are denied.
7. No evidentiary hearings are necessary.
8. Application 11-03-014 is closed.

This order is effective today.

Dated \_\_\_\_\_, at San Francisco, California.