

Decision 12-02-014 February 1, 2012

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 an analog electric and/or gas meter.

This new opt-out option is a service that we are adopting with this decision. This opt-out option is a service because the standard for metering has been transitioned throughout the country and for the most part the world 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 those customers who, for whatever reason, would prefer an analog 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, and monthly cost of reading the meter. These are some of the examples of the additional costs required to opt-out of the standard wireless SmartMeters. As a result, this decision further finds that customers electing the opt-option shall be responsible for costs associated with providing the option. Issues concerning the actual costs associated with offering the analog opt-out option and whether some portion of these costs should also be allocated to all ratepayers or PG&E shareholders will be addressed in a separate phase of this proceeding.

To allow residential customers to begin selecting the opt-out option immediately, this decision adopts interim fees and charges, which will be subject to adjustment upon conclusion of the second phase of this proceeding. A

Non-California Alternatives Rates for Energy (CARE) customer electing the opt-out option shall be assessed an initial fee of \$75.00 and a monthly charge of \$10.00. A CARE customer electing the opt-out option shall be assessed an initial fee of \$10.00 and 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 until a final decision on recoverable costs and cost allocation is adopted.

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 remains open to address cost issues associated with the opt-out option.

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:¹

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.

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

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.
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.² Additionally, the assigned Commissioner issued a ruling on September 21, 2011 specifying the

² 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.

minimum requirements that PG&E, SCE and SDG&E must follow in response to customer requests to delay the installation of a wireless SmartMeter.³

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 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:⁴

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).
2. Relocation – Electric customers may request that PG&E relocate the electric SmartMeter to a different location on the customer's property.⁵

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

⁴ PG&E Testimony at 1-5 – 1-6.

⁵ 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.

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.⁶ 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.⁷ It further states that other alternatives evaluated were a wired meter and a legacy (analog) meter.

A combined workshop to consider opt-out alternatives for all of the investor owned utilities was held on September 14, 2011.⁸ 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.

⁶ PG&E Testimony at 3-2.

⁷ Application at 5.

⁸ 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.

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:⁹

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.

⁹ PG&E Testimony at 2A-4.

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. 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.¹⁰ 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

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

implement mandatory TOU rates for residential customers, as analog meters cannot provide interval energy-consumption data.¹¹

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.¹² 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.¹³

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.¹⁴ It further notes that the Commission should consider the "functional requirements for alternative metering systems used by customers who opt out" in order to preserve the benefits of the SmartMeter system.¹⁵

Lake argues that widespread installation of SmartMeters could lead to violations of FCC compliance requirements.¹⁶ It further alleges that the SmartMeters adversely affect the environment and overburden utility easements.

¹¹ PG&E Testimony at 1-6 - 1-8.

¹² 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.

¹³ Network Protest at 4 & 6; EON Protest at 13-14; Fairfax Protest at 15.

¹⁴ DRA Response at 7-8.

¹⁵ DRA Response at 5.

¹⁶ Lake Protest at 5.

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).¹⁷

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.¹⁸

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.¹⁹ Network also asserts that a radio off option is not acceptable because there is no assurance that the SmartMeter is actually turned off.²⁰

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 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

¹⁷ Lake Protest at 6 – 7.

¹⁸ TURN Protest at 2.

¹⁹ Network Protest at 5; EON Protest at 15; Fairfax Protest at 8-13.

²⁰ Network Protest at 6.

information on the RF emissions under the various options.²¹ Among other things, the ALJ's October 18th 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 18th Ruling were filed on November 1, 2011. These responses directly address some of the more controversial questions that the Commission heard at the September 14th 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 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 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.²² 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

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

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

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.²³

PG&E also includes in its November 1st 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 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.

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

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.²⁴

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 μ antenna gain.²⁵ 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. 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.²⁶

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

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

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

²⁶ 47 C.F.R. § 15.247(c)(3) & (4).

unintentional RF emissions.”²⁷ 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.²⁸ This table is reproduced in Table 1 below.

Table 1
RF Emissions by Meter Type

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

PG&E acknowledges that the analog meters emit no RF.²⁹ 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 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

²⁷ 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).

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

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

proceeding. Further, we determined in Decision (D.) 10-12-001 that PG&E's SmartMeter technology complies with FCC requirements.

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.

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.³⁰ 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:³¹

- be capable of supporting a wide range of price responsive tariffs;

³⁰ D.08-09-039 at 2.

³¹ D.05-09-044 at 3 and 4.

- 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;
- 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.³² We remind parties that while we believe that residential customers should be offered an opportunity to opt-out of receiving a wireless SmartMeter, the selected option should not impede state energy objectives. As such, it is important that the selected opt-out option has the capability to allow customers to take advantage of smart grid benefits in the future.

³² D.10-02-032 at 4.

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.³³ Since the ability to collect interval energy consumption data is a key component to attaining California's overall energy objectives, including matching customer demand with procurement of generation resources, we do not find it reasonable to adopt an electric SmartMeter opt-out option that would not be able 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.

Although a wired smart meter would be capable of collecting and transmitting interval energy consumption data, we do not find it to be a reasonable opt-out option at this time. This option would likely require a significant investment in infrastructure and would not be available for use on a large scale within the near future. Additionally, this option is not available for gas SmartMeters.

The proposed decision also did not find the analog meter option reasonable, as this option is unable to track interval energy consumption data. However, TURN notes in its comments that "[a]ny future time variant pricing tariff must offer all residential customers an opportunity to 'opt-out' without penalty."³⁴ It therefore argues that any customer who opts out of wireless SmartMeter would also opt out of any time-variant pricing. Other intervenors

³³ PG&E Testimony at 1-6.

³⁴ TURN Comments, filed December 12, 2011, at 4. See also, Aglet Comments, filed December 12, 2011 at 4.

argue in their comments to the proposed decision that an analog meter opt-out option also be adopted. Finally, PG&E states in its reply comments that it supports approval of an analog meter opt-out option, in addition to the non-communicating option.³⁵

The proposed decision recommended adoption of a non-communicating meter – that is, a SmartMeter with the radio-off or a digital meter with no communications capability. This option was proposed to enable customers to take advantage of already deployed energy policies, such as net energy metering, demand response and energy efficiency measures. As stated above, California’s energy policies encourage customers to become smart energy users by giving customers more information and better information about their usage in order for customers to make smart choices to reduce their consumption or shift their consumption to reduce the need for additional power plants and a better climate. For example, customers who install small solar, wind, biogas, and fuel cell generation facilities (1 MW or less) to serve all or a portion of onsite electricity needs are eligible for the state's net metering program. Net Energy Metering (NEM) allows a customer-generator to receive a financial credit for power generated by their onsite system and fed back to the utility. The credit is used to offset the customer’s electricity bill. NEM is an important element in managing California’s energy supply, reducing greenhouse gas emissions, and reducing the need to build future power plants.

Demand response is another program that requires interval energy consumption data. Demand response is a resource that allows end-use electric

³⁵ PG&E Reply Comments, filed December 19, 2011 at 1-2.

customers to reduce their electricity usage in a given time period, or shift that usage to another time period, in response to a price signal, a financial incentive, an environmental condition or a reliability signal. It also allows ratepayers to save money if they lower peak time energy usage, which are high-priced. This lowers the price of wholesale energy, and in turn, retail rates. Demand response may also prevent rolling blackouts by offsetting the need for more electricity generation and can mitigate generator market power. Demand response programs require a meter that is able to collect interval data.

In light of parties' comments on the proposed decision, however, we revise the proposed decision and now adopt an analog meter opt-out option. This determination, however, does not diminish our commitment and support to the development of California's energy policies. As such, further review of the feasibility of continuing to offer an analog meter opt-out option may be warranted in the future to ensure that this opt-out option does not impede the full implementation of net metering, demand response and smart grid. At a minimum, this opt-out option should be re-evaluated once default TOU pricing is employed for all residential customers.

Some parties have recommended in their comments that we adopt more than one opt-out option. However, we decline to do so at this time. From a customer standpoint, it would be less confusing if there is only a single opt-out option. Further, in its October 28, 2011 response to an ALJ Ruling requesting cost information, PG&E stated that it would incur additional costs if multiple opt-out options were offered.³⁶ As a result, we believe that further examination of the

³⁶ PG&E's Response to Administrative Law Judge's October 12, 2011 Ruling, filed October 28, 2011 at 2.

additional costs associated with offering multiple opt-out options is warranted before more than one opt-out option is offered.

Finally, we do not make any determination on whether to allow the opt-out option to be exercised by local entities and communities at this time. Parties advocating for a community opt-out option have not sufficiently addressed issues regarding implementation of such an option, including whether such an option is consistent with existing statutes and rules.³⁷ Further, as discussed below, we have determined that any residential customer electing the opt-out option will be assessed an initial fee and monthly charges. It is unknown at this time whether customers who are part of a community opt-out option should be assessed the same, or different, opt-out fees and charges. Consequently, we find that further consideration of whether to allow a community opt-out option should be included in the second phase of this proceeding.

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

³⁷ For example, both PG&E's gas and electric rules define a "customer" as the person "in whose name service is rendered" and whose signature is on the application, contract or agreement for service. (See PG&E Electric Rule 1; PG&E Gas Rule 1.) The rules further state that a customer may seek relief from the Commission if it is "dissatisfied with [PG&E's] determination regarding level, charge or type of service, or refusal to provide service as requested." (See PG&E Electric Rule 4; PG&E Gas Rule 4.) Further development of the record is needed so that we may address whether and how a local entity or community can lawfully impact a customer's utility bill.

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>
Total Incremental Expense Costs	\$75,136
Incremental Capital Costs (thousand \$)	
Field Deployment	\$36,385
Information Technology	<u>1,912</u>
Total Incremental Capital Costs	<u>38,297</u>
Total Incremental Costs	\$113,433

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.³⁸ 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.³⁹

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 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.⁴⁰

³⁸ Aglet Protest at 3.

³⁹ TURN Protest at 3-4.

⁴⁰ Fairfax Protest at 15-17.

5.2. Discussion

Although only costs for the radio-off option were 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).⁴¹ 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.

⁴¹ *Assigned Commissioner Ruling and Scoping Ruling*, May 25, 2011 at 3.

TABLE 2
ESTIMATED COSTS FOR OPT-OUT OPTIONS

	Analog Meter	Radio Out	Wired	Radio Off
<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	\$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 cost estimates are based on offering a single opt-out option and,

it contends that there would be increased costs if multiple opt-out options were offered.⁴²

PG&E's application provided testimony to explain the costs associated with providing a radio-off opt-out option. However, since we have now decided that PG&E should provide an analog meter opt-out option, more detailed information concerning the costs associated with this option is needed. As such, a second phase is needed in this proceeding to consider the costs associated with offering an analog opt-out option. As discussed above, this phase may also consider whether opt-out costs will vary if community opt-out is permitted.

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.⁴³ 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.⁴⁴ 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:

⁴² PG&E Response of ALJ October 12, 2011 Ruling, filed October 28, 2011 at 2.

⁴³ PG&E Testimony at 1-2 - 1-3.

⁴⁴ 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.⁴⁵ 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:⁴⁶

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

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

⁴⁵ PG&E Testimony at 2A-5.

⁴⁶ 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 A.07-12-009. As such, they argue that PG&E should not now be imposing costs on customers to provide this option.⁴⁷ Network contends that customers have been harmed by the SmartMeters, and, thus, argues that it would be unfair to charge customers to opt-out.⁴⁸ EON further argues that ratepayers should not be required to pay for a solution that does not solve the problems.⁴⁹ 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.⁵⁰ 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.⁵¹

Alameda, Lake, and Mendocino also maintain that imposing opt-out fees on low-income customers is discriminatory. Lake argues that PG&E

⁴⁷ Lake Protest at 4; Mendocino Protest at 3-4.

⁴⁸ Network Protest at 5.

⁴⁹ EON Protest at 14.

⁵⁰ Aglet Protest at 3.

⁵¹ DRA Response at 6.

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.”⁵²

6.2. Discussion

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 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 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.⁵³ These are some of the examples of the additional cost required to opt-out of the standard wireless SmartMeters.

⁵² Lake Protest at 4.

⁵³ PG&E’s Response to the October 12, 2011 ALJ Ruling.

The proposed decision had concluded that the costs for the opt-out option should not be solely the responsibility of those electing to opt-out, since some of the costs were related to the SmartMeter infrastructure as a whole. As a result, the proposed decision recommended that a portion of the opt-out costs be allocated to all residential ratepayers. In comments on the proposed decision, some parties have raised various legal and policy arguments on why some portion, or all, of these costs should be paid by all ratepayers or PG&E shareholders.⁵⁴ Based on these comments, we believe it is appropriate to consider allocation of costs as part of the second phase of this proceeding.

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.

⁵⁴ See, e.g., Lake Comments, filed December 12, 2011, at 8 (allocation of costs to all ratepayers is inconsistent with § 728, as non opt-out customers would pay for a benefit received only by opt-out customers); TURN Comments, filed December 12, 2011, at 14-15 (costs associated with offering an opt-out option are a reasonable risk of the AMI program and should be borne by PG&E shareholders).

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

The proposed decision had recommended the following fees and charges for customers electing a non-communicating digital meter 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 decline to adopt an exit fee at this time. PG&E's proposed exit fee would be the same regardless of which opt-out option is adopted, and the current record does not contain sufficient evidence to justify why such a fee is necessary. Therefore, we will consider the appropriateness of an exit fee in the second phase of this proceeding.

Parties' comments on this proposal have ranged from no additional fees for opting out⁵⁵ to setting a reasonable level of fees.⁵⁶ Additionally, DRA has

⁵⁵ See, e.g., California County of San Francisco (CCSF) Comments, filed December 12, 2011, at 4-5; Network Comments, filed December 12, 2011, at 4.

⁵⁶ See, e.g., Aglet Comments, filed December 12, 2011, at 4 (opt-out charges be set at a level that would discourage "frivolous opting out."); TURN Comments, filed December 12, 2011, at 8-10 (need to consider affordability and equity when setting fees).

recommended that there should be a different initial fee depending on whether the customer is selecting the opt-out option for one or two meters.⁵⁷ Based on these comments, and our determination to adopt an analog meter opt-out option, further consideration of the fees and charges to be assessed on customers electing the opt-out option should be included in the second phase of this proceeding.

We recognize that this second phase of the proceeding will take time to complete based on the number of issues identified in this decision. At the same time, we do not wish to delay the implementation of the opt-out option. Accordingly, we adopt interim fees and charges, subject to adjustment once a decision on costs and cost allocation for the opt-out option is issued, for customers electing the opt-out option. The interim fees and charges are as follows:

For Non-CARE and Non-FERA Customers:

Initial Fee	\$75.00
Monthly Charge	\$10.00/month

For CARE and FERA Customers:

Initial Fee	\$10.00
Monthly Charge	\$5.00/month

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. We allow PG&E to track these costs and revenues in a two-way memorandum account so that it will preserve

⁵⁷ DRA Comments, filed December 12, 2011, at 6-9.

the opportunity to seek recovery of these costs and revenues once a final decision on costs and cost allocation is issued.⁵⁸

7. Next Steps

As noted above, it is our desire 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 within 15 days of the effective date of this decision. This Advice Letter filing shall:

1. Establish procedures for residential customers to select the opt-out option if they do not wish to have a wireless SmartMeter.
2. Establish procedures to inform customers that a SmartMeter opt-out option is available. A customer currently on the delay list shall be informed that the customer will be scheduled to receive a wireless SmartMeter unless the customer elects to exercise the opt-out option.

⁵⁸ Authorization of a memorandum account does not necessarily mean that the Commission has decided that the types of costs to be recorded in the account should be recoverable in addition to rates that have been otherwise authorized, e.g., in a general rate case. Instead, the utility shall bear the burden when it requests recovery of the recorded costs, to show that separate recovery of the types of costs recorded in the account is appropriate, that the utility acted prudently when it incurred these costs and that the level of costs is reasonable. Thus, PG&E is reminded that just because the Commission has authorized these memorandum accounts does not mean that recovery of costs in the memorandum accounts from ratepayers is appropriate.

3. Adopt the following interim fees and charges for residential customers selecting the opt-out option:

For Non-CARE and Non-FERA Customers:

Initial Fee	\$75.00
Monthly Charge	\$10.00/month

For CARE and FERA Customers:

Initial Fee	\$10.00
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 until a final decision on costs and cost allocation issues associated with providing an analog meter opt-out proposal is issued.

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.⁵⁹
3. A customer may only enroll in the opt-out program once per calendar year at the same residence.

⁵⁹ However, PG&E may ask this question if a response is optional.

4. 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.
5. PG&E shall not charge customers the initial fee nor the monthly charges until the analog meter has been installed at the customer's residence.
6. 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.

This decision determines that a second phase in this proceeding is necessary to consider cost and cost allocation issues associated with providing the analog meter opt-out option, as well as issues associated with offering a community opt-out option. We anticipate that a prehearing conference to discuss the scope and schedule of this second phase will be scheduled within 45 days of the date this decision is issued. The assigned Commissioner will issue an amended scoping memo to reflect the new issues and schedule.

8. 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 December 12, 2011 by Aglet, SCE, Wilner, DRA, PG&E, TURN, Network, Fairfax, Alameda, EON, CCSF, and Lake. Reply comments were filed on December 19, 2011 by Wilner, SCE, Fairfax, Aglet, CARE, DRA, PG&E, and Network. Informal comments were also received from the public.

In response to comments, the proposed decision has been revised to adopt an analog opt-out option. The proposed decision has also been revised to include a second phase in this proceeding to consider costs and cost allocation issues associated with providing the analog meter opt-out option, as well as issues associated with offering a community opt-out option. Other revisions in response to comments have been made as appropriate.

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. A wired smart meter option cannot currently be used on a large scale and are not available for gas smart meters.

6. Analog meters are unable to track interval energy consumption data.
7. Interval energy consumption data is a key component to attaining California's overall energy objectives.
8. Further review of the feasibility of continuing to offer an analog meter opt-out option may be warranted in the future to ensure that this opt-out option does not impede the full implementation of net metering, demand response and smart grid.
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 assumed that a single opt-out option would be offered.
12. There is an insufficient record to determine whether to allow a community opt-out option.

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. The best opt-out option to be adopted must balance the concerns expressed by customers against California's overall energy policy.
4. Allowing residential customers an opportunity to opt out of receiving a wireless SmartMeter should not impede ongoing state energy objectives.
5. It is important that the selected opt-out option has the capability to allow customers to take advantage of smart grid benefits.

6. The wired smart meter opt-out option is not cost effective nor currently technologically feasible compared to the other options.

7. Although a non-communicating meter is the preferred opt-out option, it is appropriate to adopt an analog meter opt-out option at this time.

8. Until there is additional information on the costs to offer multiple opt-out options, only a single opt-out option should be offered.

9. There is insufficient evidence in the record to determine whether to allow the opt-out option to be exercised by local entities and communities.

10. 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.

11. A residential customer selecting the opt-out option should be assessed an initial charge and a monthly charge.

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

13. There should be a second phase in this proceeding to consider cost and cost allocation issues associated with offering the analog opt-out option.

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

15. An interim initial fee and monthly charge for customers electing the opt-out-option should be assessed until a final decision on cost and allocation issues is issued.

16. 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 until a final decision on cost and allocation issues is issued.

17. 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.

O R D E R

IT IS ORDERED that:

1. Pacific Gas and Electric Company's 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 an analog meter.

2. Within 15 days of the effective date of this order, Pacific Gas and Electric Company 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. The Advice Letter filing shall:

- a. Establish procedures for residential customers to select the option to have an analog meter if they do not wish to have a wireless SmartMeter.
- b. Establish procedures to inform customers that a SmartMeter opt-out option is available. A customer currently on the delay list shall be informed that the customer will be scheduled to receive a wireless SmartMeter unless the customer elects to exercise the opt-out option.

- c. Adopt the following interim fees for residential customers selecting the opt-out option:

For Non-CARE and Non-FERA Customers:

Initial Fee	\$75.00
Monthly Charge	\$10.00/month

For CARE and FERA Customers:

Initial Fee	\$10.00
Monthly Charge	\$5.00/month

- d. Establish new two-way electric and gas Modified SmartMeter Memorandum Accounts to track revenues and costs associated with providing the SmartMeter opt-out option.

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 7 of this decision.

5. Application 11-03-014 remains open.

This order is effective today.

Dated February 1, 2012, at San Francisco, California.

MICHAEL R. PEEVEY
President
TIMOTHY ALAN SIMON
CATHERINE J.K. SANDOVAL
MARK J. FERRON
Commissioners

Commissioner Michel Peter Florio, being necessarily absent, did not participate.

I will file a written concurrence.

/s/ TIMOTHY ALAN SIMON
Commissioner

**Concurrence of Commissioner Timothy Alan Simon on Item 28
[Decision 12-02-014] Decision Modifying PG&E's SmartMeter
Program to include an Opt-Out**

Decision (D.) 12-02-014 modifies Pacific Gas & Electric Company's (PG&E's) SmartMeter Program to include an opt-out option for residential customers who prefer having analog electric and/or gas meters installed on their premises rather than wireless SmartMeters. This Decision adopts interim customer charges, to be finalized in Phase 2 of this proceeding, in the amount of a \$10.00 one-time fee and a \$5.00 monthly charge for California Alternate Rates for Energy (CARE)¹ customers and a \$75.00 one-time fee and a \$10.00 monthly charge for non-CARE customers. These charges compensate PG&E for the incremental costs of purchasing, installing, and servicing the analog meters installed under the subject opt-out program, as well as, for the added labor costs for PG&E employees to physically read the analog meters.

It is worth emphasizing that these interim charges are based on a projected number of customers electing to opt out and, because no one knows at this point the ultimate program cost, PG&E is directed in this Decision to track associated revenues and costs in a two-way Modified SmartMeter Memorandum Account.² This proceeding remains open until the Final Decision is issued that will assign recoverable costs, establish the appropriate customer allocation, and true-up the tracking account.

¹ The CARE program provides a monthly discount on energy bills for income-qualified households and housing facilities. Qualifications are based on the number of persons living in a home and total annual household income

² A two-way memorandum account allows a utility to track authorized costs and revenues. Overcollections are refunded and undercollections are recoverable through rates.

I support this Decision; however, as the Assigned Commissioner to the Low Income Oversight Board (LIOB) and this Commission's energy public purpose programs, I am particularly concerned about how the cost of providing an opt-out choice will impact CARE customers. If, in the final analysis, program revenue requirements are greater than is being projected in this Decision, I will not be inclined to support additional burdens on CARE customers and will seek, instead, consideration of other possibilities to socialize the cost.

Even with my above mentioned concerns regarding CARE impact, I do support this Decision because I sincerely believe the underlying "smart" wireless technology is an important conservation and market-shaping tool for important policy objectives including, but not limited to, energy efficiency, demand response, and load shifting. I further support today's Decision as demonstrative of how public initiative and participation can shape better regulatory policy.

Contrary to anti-wireless activist health concerns, as described in the Decision, neither the Institute of Electrical and Electronics Engineers (IEEE),³ the National Council on Radiation Protection and

³ Established in 1957, the IEEE is dedicated to advancing innovation and technological excellence for the benefit of humanity. It serves professionals involved in all aspects of the electrical, electronic and computing fields and related areas of science and technology that underlie modern civilization. http://www.ieee.org/about/ieee_history.html.

A11-03-014

D12-02-014

Measurements (NCRP),¹ the California Council on Science and Technology (CCST),² the U.S. Environmental Protection Agency (EPA), nor the Food and Drug Administration (FDA) have expressed concerns about human exposure to SmartMeter radio frequency emissions. I find no reason to distrust the data dismissing the existence of health impacts of this important global technology. I hope, going forward, more awareness of the societal benefits will counterbalance the one-sided objections voiced at this Commission.

As I have pointed out in speeches and meetings in the Silicon Valley and in wireless industry forums, I am astonished that beneficiaries of wireless technologies – including, for example, programmers of iPhone and Android applications, analysts who mine and aggregate usage data to hedge commodity risks, retailers who offer internet access, and their customers who seek out public WiFi – have been “radio silent” throughout this proceeding and in the general public forum. I urge them to come forward and to speak in support of their beneficial interests.

¹ NCRP seeks to formulate and widely disseminate information, guidance and recommendations on radiation protection and measurements which represent the consensus of leading scientific thinking. It has been active in the areas of radiation protection and measurements since its inception as “The Advisory Committee on X-Ray and Radium Protection” in 1929.

http://www.ncrponline.org/AboutNCRP/Our_Mission.html.

² Page 13 of D12-02-014 quotes the CCST’s recently released finding 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.” CCST was established in 1988 by unanimous vote of the State Legislature to offer expert advice to the state government on issues of science and technology policy.

<http://www.ccst.us/about.php>.

A11-03-014

D12-02-014

In closing, I believe the FCC's jurisdiction in the regulation of radio-frequency supersedes that of the States,³ but I am a huge advocate of due process and I believe States have an obligation to protect the health and welfare of their citizens. Hence I encourage those opposing wireless smart meter technology to utilize this Commission's rules and procedures to support opening a proceeding which will formally examine the health impacts of this emerging technology. If such an action is taken, participation by the California Health and Human Services Agency and other agencies with jurisdiction over health impacts of emerging technologies should be sought and encouraged.

Dated February 9, 2012, at San Francisco, California.

/s/ TIMOTHY ALAN SIMON

Timothy Alan Simon
Commissioner

³ National Environmental Policy Act of 1969, 42 U.S.C. 4321 et seq. The Act requires federal agencies to evaluate the environmental effects of their actions. To meet this mandate, the FCC adopted requirements for evaluating the impact of human exposure to radio frequency (RF) energy emitted by FCC-regulated transmitters and facilities. FCC rules require permit and license applicants to certify that the facility or device complies with the RF exposure guidelines, or to prepare an Environmental Assessment.

http://transition.fcc.gov/Bureaus/Engineering_Technology/Orders/1997/fcc97303.pdf