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Admin. Law Judge	:	Yip-Kukigawa
DRA Project Mgr.		Cherie Chan
Witnesses		Lee-Whei Tan, Dan Willis, Cherie Chan

DIVISION OF RATEPAYER ADVOCATES
CALIFORNIA PUBLIC UTILITIES COMMISSION

Testimony on

SmartMeter Opt-Out Program Phase 2

Proceeding

San Francisco, California
October 5, 2012

List of DRA Witnesses and Respective Chapters

Chapter Number	Description	Witness
1	Overall Cost and Policy	Lee-Whei Tan
2	PG&E Opt-Out Program	Lee-Whei Tan
2A	PG&E IT Costs	Cherie Chan
3	SoCalGas Opt-Out Program	Dan Willis
4	SCE Opt-Out Program	Dan Willis
5	SDG&E Opt-Out Program	Dan Willis

CHAPTER 1

DRA RESPONSES TO ACR QUESTIONS AND RECOMMENDATIONS

(Witness: Lee-Whei Tan)

On June 8, 2012, an Assigned Commissioner's Ruling ("ACR"), Amending Scope of the Proceeding, directs parties to respond to a number of questions. The first set of questions is about opt-out costs and cost allocation issues. The second set of questions relates to community opt out. On September 28, 2012, the Administrative Law Judge ("ALJ") issued an e-mail deferring the community opt-out issues to a later date[1].

The Division of Ratepayer Advocates ("DRA") testimony only addresses the opt-out cost estimates of the four Investor-Owned Utilities ("IOUs"), which are Pacific Gas and Electric Company ("PG&E"), Southern California Gas Company ("SoCalGas"), Southern California Edison Company ("SCE"), and San Diego Gas and Electric Company ("SDG&E"). DRA does not take a position on either how the opt-out costs should be allocated or on the community opt-out issues[2].

In this response, DRA recommends several modifications to the utility proposals with the goal of reducing or eliminating unreasonable costs associated with the IOU's Opt-Out Programs ("Programs"). It is essential that the costs be just and reasonable to meet the legal requirements specified in Public Utilities

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[1] ALJ Amy Yip-Kikugawa's Septeber 28, 2012 e-mail states "This ALJ Ruling grants the joint motion of the County of Marin, County of Santa Cruz, Town of Fairfax, City of Marina, City of Seaside, City of Capitola, City of Santa Cruz and the Town of Ross (Local Governments) to delay the submission of intervenor testimony concerning community opt-out issues until after a decision addressing the legal issues surrounding community opt-out has been issued."

2 The June 8, 2012 Scoping ruling asked whether opt-out should be extended to local communities and identified the following sub-issues:

a. Will the costs associated with this option, and the fees to be charged to community opt-out participants, be different than those assessed for individual opt-out participants?

b. Are there statutory or contractual restrictions associated with allowing local governments or multi-unit dwellings to participate in a community opt-out option?

(continued on next page)

("PU") Code §451[3]. The IOUs should make every effort to find least cost solutions so that the Programs are not unreasonable for the opt-out customers and also mitigate any costs that might be allocated to non-participants. In the following chapters, DRA provide its analysis of each IOUs' opt-out cost proposals and elaborate on how DRA adjusts their costs and makes certain recommendations. DRA provides its answers to the ACR cost questions below and also summarizes its cost recommendations.

I. Answers to the ACR Cost Questions

a. What are the utility costs associated with offering an analog meter opt-out option?

In general, the IOUs identify costs for information technology ("IT") system development, exchanging smart meters for analog meters, customer support, meter equipment, and manual meter reading costs for the Opt-Out Program. DRA has recommended modifications to each of the IOUs' costs.

(continued from previous page)
c. How would non-residential customers, or customers who wish to have a wireless smart meter, be accommodated?

[3] PU Code §451 "All charges demanded or received by any public utility, or by any two or more public **utilities**, for any product or commodity furnished or to be furnished or any service rendered or to be rendered shall be just and reasonable. Every unjust or unreasonable charge demanded or received for such product or commodity or service is unlawful."

Table 1-1 shows the IOUs' estimates and DRA's alternative estimates for each of them.

TABLE 1-1

Opt-Out Costs

	PG&E	SoCalGas	SCE[4]	SDG&E
IOU	$43.1 million	$29.9 million	$20.8 million/ $18.6 million	$1.5 million
DRA	$27.2 million	$13.4 million	$17.8 million/ $15.6 million	$1.4 million

The detailed information supporting these costs is provided in each of the chapters addressing the IOU proposals.

DRA makes the following general observations about each of the IOUs' cost estimates:

1. PG&E has relatively smaller meter reading costs than the other utilities but higher initial costs. The higher initial costs are largely because PG&E[5]:

    - Includes legacy meter purchase costs.
    - Counts payments to Wellington[6] for completing the last of the 250,000 difficult to complete ("DTC") smart meter installations as part of the Opt-Out Program, though many of the associated customers are not assumed to ultimately opt out.
    - Has relatively high installation costs for legacy meters.
    - Has relatively high IT costs. IT is an area where many of the costs are fixed and throughput generally is scalable. Therefore, one expects IT costs to be largely independent of the opt-out rate. It is not clear why PG&E needs to spend more than $10 million while

[4] Two versions of numbers, the higher number reflects monthly meter reading while the smaller number reflects quarterly meter reading. In addition, all the numbers reflect SCE's updated workpapers sent to DRA on Oct. 3, 2012 correcting some opt-out enrollment that needs analog meters. SCE's testimony has not reflected this correction yet.

[5] Offsetting PG&E's relatively high initial costs is it's the fact that it has the lowest meter reading cost per customer.

[6] Wellington is PG&E's contractor to perform smart meter installations.

SDG&E can establish the Opt-Out Program with a $0.5 million expenditure on IT.

2. SoCalGas is in a unique position because it has not yet implemented its smart meter deployment. Therefore, it has no smart meters that must be exchanged for legacy meters at this time. If there are any meter exchange costs in the next couple of years, they should be very few. Moreover, SoCalGas has the advantage of being able to manage its smart meter project so as to minimize for the number of meter exchanges, at least in the time period covered by this proceeding.

   In addition, SoCalGas' costs have the following features:

   - Exit fees which are built into the initial fee, though SoCalGas also includes an offsetting credit for the avoided cost of installing a smart meter.

   - Very high meter reading costs equal to double or triple that of other IOUs' meter reading costs.

3. SCE's costs have the following characteristics:

   - It includes many costs components, some of which none of the other IOUs assign to the monthly fees. Such adders include, for example, disconnect and reconnect fees, handheld device costs, meter testing costs, etc.

   - SCE has incorporated exit fees into the initial fees without crediting for avoided smart meter installation costs.

4. SDG&E's costs:

   - Include legacy meter purchase costs.

   - Recover some of the initial back office communication costs through the monthly fees, thus increasing the monthly fees.

DRA is particularly concerned about the monthly fees because they will result in a constant ongoing payment. A low meter reading cost, such as PG&E's, should greatly mitigate the customer monthly bill increases. After listening to DRA's suggestion, SCE performed an analysis to show the cost/fee impact based on the quarterly meter reading with estimated bills in between. The result appears to increase initial cost just a little ($3/customer) while improving the

monthly fee substantially, a reduction of $5/month. DRA appreciates SCE's willingness to try innovative solutions.

b. Should more than one opt-out option be offered to customers who do not wish to have a wireless smart meter (e.g., a digital, non-communicating meter)? Consideration of this issue will include determining whether different fees should be assessed based on the type of opt-out meter selected by the customer and, if so, the level of these fees.

DRA does not address this issue.

c. Should all costs associated with the opt-out option be paid by only those customers electing the option, or should some portion of these costs be allocated to all ratepayers and/or to utility shareholders?

Though DRA is not taking a position on this issue, it provides the following observations about how the different IOUs address variously this topic.

a) PG&E

DRA notes that PG&E's intention to retain the interim fees adopted in D.12-02-014 will, by their very nature, result in socializing the costs to all customers. PG&E has converted its $43 million cost to annual revenue requirements. For the years 2012 and 2013, prior to next General Rate Case ("GRC"), PG&E estimates the revenue requirement is $9.51 million. Based on PG&E's estimates, the interim fees may only recover $4.25 million[7] of this amount. Therefore, more than 50 percent of the revenue requirements will be allocated to non-participants. It should be noted that the $9.5 million is only a fraction of the total costs. So, a much larger share of the costs are likely to be socialized in the future depending on the number of opt-out participations.

[7] PG&E testimony p. 6-2.

b) SoCalGas

SoCalGas makes projections of the opt-out participation for the period from 2012 through 2017, which coincides with its smart meter deployment schedule. It plans to recover all of the opt-out costs from customers choosing to opt-out. In other words, none of the costs would be socialized.

c) SCE

SCE in general suggests recovering costs mainly from the opt-out customers. However, its capital investments are only partially recovered by the opt-out participants in this GRC cycle (2012 – 2014). SCE has not indicated whether the unrecovered part will be allocated to all customers or just to those who opt out during the next GRC cycle.

d) SDG&E

SDG&E appears to propose recovering 100 percent of the costs from opt-out customers. Due to the very small number of opt-out customers, it suggests recovering some of its initial costs through the monthly fees. If it had not done so, its initial fee would increase by $102 per customer.[8]

d. What fees should be assessed on customers who elect the opt-out option and should the fees be assessed on a per meter or per location basis?

DRA agrees with the IOUs that there are implementation costs associated with establishing the infrastructure required for running the Opt-Out Program. DRA believes that these are best recovered in the initial fees. In addition, the IOUs will incur ongoing operational costs to serve opt-out customers, and they should be charged through the monthly fees. Table 1-2 presents DRA's and the IOUs' total cost estimates per participant, without considering whether or not some of those costs ultimately should be socialized.

[8] SDG&E testimony p. CS-17.

TABLE 1-2

Opt-Out Fees/Costs per Customer ($)

	Initial		Monthly	
	IOU	DRA	IOU	DRA
PG&E/DRA (Single commodity)	75/527[9]	369	10	7
PG&E/DRA (Dual commodity)	75/715	418	10	7
SCE/DRA (monthly meter read)	93[10]	74	24	20
SCE/DRA (quarterly meter read)	96	76	19	16
SoCalGas/DRA (No module installed)	126	80	24	10
SoCalGas/DRA (Module installed)	179	106	24	10
SDG&E/DRA (Single Commodity)	158	137	12.8	12.8
SDG&E/DRA (Dual Commodity)	189	169	13.3	13.3

The subsequent chapters explain how DRA produced its estimates. Below, DRA briefly summarizes some common issues for the IOUs as well as issues that are unique to each of them.

i. The Initial Fee

DRA recommends:

- Disallowing PG&E's and SDG&E's legacy meter purchase costs as the IOUs are still recovering significant costs for the

[9] PG&E intends to keep the interim fee at $75, but the actual cost is $527 and $715 per customer for single or dual commodity installations respectively.

[10] SCE's number in its testimony was $98. The $93 reflects correction it provided DRA on October 3, 2012.

legacy meters. SCE and SoCalGas have not asked for meter cost recovery in this opt-out proceeding.

- Disallowing PG&E's request for Wellington cost recovery relating to the DTC smart meter installation in cases where the customers ultimately do not opt out. Including this cost would add hundreds of dollars to each opt-out customer's initial fees or millions to non-participants. These costs should be considered part of PG&E's smart meter deployment – especially since PG&E has been granted hundreds of millions of dollars in contingency allowances to cover potential cost over-runs.

- Disallowing SoCalGas' cost for inspecting and tagging legacy meters for opt-out participants. This task can be combined with other functions (e.g., meter reading), thereby avoiding an additional $24 initial charge per opt-out customer.

- Disallowing exit fees but tracking the associated costs for reassessment in the next GRC. All the IOUs intend to collect initial fees when the customer first signs up for the Program as well as charging another initial fee whenever they move to another location within their service territory. The exit fees are variously charged when the customer moves or as part of the initial fee. At this moment, there is little or no data to support exit fees.

ii. The Monthly Fee

DRA recommends that:

- The IOUs, especially SoCalGas, develop innovative solutions to reduce meter reading costs to mitigate monthly fees.

- PG&E correct its meter reading costs to properly reflect the fact that the incremental cost of reading a second meter for dual commodity customers is negligible.

- SCE's disconnect and reconnect fees not be included in the monthly opt-out fee. Such costs only should apply to customers who fail make the required payments in compliance with the disconnection rules.

iii. The High Cost of Meter Reading

Meter reading is the single most significant cost component of the monthly fees. DRA notes that SCE and SoCalGas' monthly fees are relatively high compared to the other IOUs. This kind of ongoing fee could produce monthly bill increases of 20 to 70 percent, and they could be infeasible unless they are socialized. In the process of reviewing the case, DRA discussed with the IOUs potential ways to mitigate such costs. These options included:

- Joint meter reading to cover common geographical territory for single commodity utilities, including solutions that involve out-source the task, using temporary positions, or leveraging this function on other field tasks.
- Bi-monthly or quarterly meter read supplemented by level pay plan.

The IOUs identified numerous obstacles and difficulties in adopting the options suggested by DRA. It is not DRA's intent to provide solutions that may not be ideal for the IOUs' operation. However, as DRA indicated earlier, such high monthly costs will be a huge burden on participants and could potentially spill over to non-participants. DRA urges the IOUs to be creative and to take the initiative to find lower or least cost solutions to address the monthly meter reading cost issues. SCE did take DRA's input into consideration and perform a quarterly meter reading solution. DRA appreciates SCE's effort. SCE's analysis shows promising monthly cost reduction results as mentioned earlier.

DRA observes that PG&E has the lowest meter reading cost. It appears that PG&E obtained reasonable costs by using temporary workers for meter reading tasks. So, there may be out-source solutions to help SCE and SoCalGas to reduce their meter reading costs, especially if they use the same workforce for both IOUs. In addition, the IOUs have the capacity to logistically plan field worker time so as to accomplish multiple tasks. For example, such as meter reading and replacement could be done along with other routine tasks in order to minimize overall costs.

In summary, it is up to the IOUs to find solutions to these monthly cost issues. There are various issues associated with each of these recommendations, and none of them may be ideal. But, the IOUs should figure out whether there may be ways to mitigate the high cost of meter reading, and whether the benefits of these alternative approaches could outweigh the cost of applying them. Finally, DRA agrees with the IOUs that fees should be assessed on a per location basis.

e. Should there be different fees based on whether the customer is selecting to opt-out of a single commodity or two commodities?

DRA supports applying different fees to a customer with a single or dual commodities. The initial costs of exchanging meters are different for one versus two meters. The travelling time to the same premise may be the same for one or two meters, but the installation time will be greater for installing two meters instead of one. It takes somewhat longer to read a second meter at the same location, so the monthly meter reading cost for dual commodity customers should be higher, though only slightly.

f. Should there be an "exit fee" imposed on customers who elect the opt-out option and return to a wireless smart meter?

DRA recommends the Commission deny the IOUs' exit fee proposal, whether the fees are incorporated into the initial fee or charged at the end, and reassess this issue in the next GRC. Table 1-3 illustrates the IOUs and DRA's positions on exit fees.

It is clear that the IOUs have a wide range of opinions about how to handle the exit fee. PG&E notes that there is no data for exit cost at this time, though it would record the associated costs in as memorandum account as they arise. SoCalGas would count both installation and meter costs in determining exit costs but also credit customers for avoided or delayed smart meter costs. In addition,

SoCalGas would include the exit fee as part of the initial fee. SDG&E would charge mainly the installation but no meter cost consideration. SCE would include more than just meter equipment and installation in exit costs and would spread these costs to all opt-out participants by including them in the initial fee. DRA's recommendation is to not charge an exit fee or allow exit costs because there currently is no data to adequately establish exit fees. DRA recommends that this issue be reassessed in the coming GRC.

According to the IOUs, an opt-out customer will be charged the initial opt-out fee every time he or she moves and continues to choose the Opt-Out Program.[11] Charge the customer an exit fee as well as another initial fee, or alternatively including this cost as part of an initial fee paid by all program participants, will create significant cost burdens on opt-out participants.

[11] If customers stay within IOUs' service territory rather than move out of state.

TABLE 1-3

Exit Fee

	IOU	DRA
PG&E/DRA (Single commodity)	Intends to recover exit costs but currently has no data to establish such a fee	0
PG&E/DRA (Dual commodity)	Intends to recover exit costs but currently has no data to establish such as fee	0
SCE/DRA	Built into the initial fee	0
SoCalGas/DRA (Smart meter module not installed)	Built into initial fee but allow a credit for the smart meter cost avoided ($22)	0
SoCalGas/DRA (Smart meter module already installed)	Built into initial fee but allow a credit for the smart meter cost avoided ($73)	0
SDG&E/DRA (Single Commodity)	Charged when customer exits ($43.07)	0
SDG&E/DRA (Dual Commodity)	Charged when customer exits ($74.49)	0

DRA notes that opt-out program participants will constitute a very small fraction of the population (0.2 to less than 1 percent). Therefore, the number of customers who choose to opt-out, then later revert back to a smart meter or relocate to another premise is likely to be even smaller. Furthermore, separating the opt-out costs from the general smart meter costs (i.e., for customer growth and meter replacement) that are requested in the GRC and it may be difficult, and avoiding double recovery of costs may be challenging. Combining all of the reasons aforementioned, the Commission should reject exit fees at this time. DRA recommends that IOUs be allowed to track the exit costs, if there are any, and to reassess them in the next GRC.

II. Conclusion

DRA is not currently taking a position on several of the issues posed in the Scoping Ruling. This does not mean that DRA endorses all of those positions and the associated cost estimates presented by the IOUs. Thus, DRA does not necessarily deem reasonable those cost items that it leaves unchanged in this testimony. In addition, DRA reserves the right to develop its position on those issues based on new information as this proceeding evolves.

CHAPER 2

PG&E OPT OUT PROGRAM

Witness: Lee-Whei Tan

I. PG&E's Proposals

PG&E, already having installed smart meters for the majority of its customers, has been operating its Opt-Out Program since February of 2012. Using the interim fees established in Decision 12-02-014, PG&E began billing Program participants in May. It has been recording the associated revenues and the costs in electric and gas memorandum accounts SOMA-E and SOMA-G. In this proceeding, PG&E requests recovery of the Program costs, in excess of revenues, that are incurred before the end of 2013. These include both those costs that already have been incurred and those that will be incurred through 2013, based on PG&E's projected enrollment in the Program of approximately 54,000 customers by that time.[1] PG&E represents that only the incremental costs of operating the Program are included in this Phase 2 request, and that costs that will be covered by its 2014 GRC are not included. The GRC will cover revenues and costs associated with customers who opt-out after 2013.

PG&E identifies three major areas where it will incur costs associated with the Opt-Out Program: Customer Operations Support ($8.75 million), Metering ($24 million) and Information Technology ($10.35 million). Customer Operations Support includes informing residential customers about the program and handling related questions, communicating with PG&E staff during program operation, processing enrollment and billing, and program management. Metering costs include the purchasing of analog meters, meter exchanges, installing analog meters where customers have been using a smart meter, and monthly manual meter reading. Information technology costs include updating PG&E's automated

[1] PG&E Testimony, page 1-4

customer service system, restoring the network of smart meters expected to degrade through replacing some smart meters with analog meters, and the replacement of meter reading devices. PG&E's total cost estimates and DRA's proposed adjustments are illustrated in section III of this chapter.

The metering costs are the largest cost category. PG&E requests $1.74 million for the purchase of analog meters and $711,000 for removing gas meter modules. Meter exchange costs total $14.7 million and include the cost of travelling to a customer's location and installing an analog meter where a smart meter was being used. They also include a charge paid to Wellington to attempt to install a smart meter where a customer was notified about the Opt-Out Program but has not yet provided reasonable access for a smart meter to be installed. Monthly meter reading is expected to cost $5 per meter read[2], and PG&E estimates that these costs will total to $6.88 million through 2013.

II. DRA's analysis and proposals

A. Meter Purchases – The Commission should Deny PG&E's Meter Purchase Costs

PG&E estimates that it would need to spend $1.74 million to purchase additional electromechanical (legacy) meters for opt out customers.[3] DRA objects to this request.

1. Duplicative Cost Recovery

Granting PG&E's legacy meter purchase requests would amount to double cost recovery. In D.11-05-018, the Commission allowed PG&E to expedite its legacy meter depreciation over the next six years due to the replacement of smart meters.

> *"The undepreciated balance of electromechanical electric meters replaced by SmartMeters, amounting to $340,966,000, shall be amortized over the six-year period 2011 through*

[2] PG&E workpapers page 3-4

[3] PG&E Testimony page 3-3

2016. The applicable rate of return on the unamortized balance shall be 6.3%. As part of Pacific Gas and Electric Company's test year 2014 general rate case, the applicable rate of return used for the retired electromechanical meters for the years 2014 through 2016 may be modified to reflect the most recent authorized returns for long-term debt, preferred stock, and a recalculated return on equity equal to the average of the most recent long-term debt rate and otherwise applicable return on equity. Whether the remaining balance should be amortized on a levelized or declining basis may be addressed at that time."

There are substantial legacy meter costs in the ratebase (more than $340 million), and ratepayers will continue to pay for the associated costs through 2016. Not only will PG&E continue to recoup the associated depreciation expenses (approximately $58 million/year) , but also will earn a return (about $15 million)[4] on these "not used nor useful" meters. To ask ratepayers also to pay for legacy meter costs through the Opt-Out proceeding results in ratepayers paying for the legacy meters twice, once through the GRC and again through the Opt-Out proceeding. This is on top of the high costs that ratepayers are paying for the smart meters themselves. This is not reasonable. PG&E can present its request in the 2017 GRC for any new legacy meter needs beyond 2016 if there is a need.

2. Ratepayers Appear to Overpay for Legacy Meters

Even if separate recovery of legacy meter costs is allowed in the Opt-Out proceeding, the costs that PG&E requests are excessive. In responding to DRA's data request, PG&E stated that it had considered selling legacy meters at a value of $1/meter, but decided to use a recycler to dispose of them instead.[5] DRA is surprised that PG&E disposed all legacy meters given that the looming concern

[4] PG&E's response to DRA-10 confirms that PG&E's getting about $74 million for these legacy meters. The same data request response also indicates that analog gas meters were not retired at all. They were modified by adding a smart meter module to convert them to smart meters. Therefore, PG&E basically should remove the module for customers who (if they already got the module) decided to opt out. There is no need to buy new gas legacy meters.

about radio frequency emissions, and the need for an Opt-Out program, began to loom more than a year ago. In that period of time, PG&E has disposed of literally hundreds of thousands of legacy meters. In addition, PG&E's asserted low market price of legacy meters implies that there was no demand for the legacy meters. This is at odds which PG&E's projected analog gas meter cost of $60 and electric meter cost of $28[6]. It is unclear why PG&E was not able to obtain a cost closer to the alleged resale value, and how the price apparently has changed so dramatically in a relatively short period of time.

SCE's response to DRA's inquiry reveals that the price for legacy meters can be reduced at a bulk purchase of 10,000 meters or more[7]. If PG&E is unable to commit to orders of that magnitude, DRA hopes that the IOUs would make an effort to coordinate their legacy meter purchases to minimize the costs since the number need for these meters required for the Opt-Out programs is limited.

B. Meter Exchange Costs

PG&E estimated a $14.665 million meter exchange cost for 2012 and 2013. This cost mainly covers the labor involved in exchanging smart meters for legacy meters. There were three major components of these costs. One is the recorded costs incurred from 2012 through July 2012 for meter exchanges for premises that already had smart meters, and a second is for those exchanges after July of 2012. The third is to pay to Wellington for attempting to install 250,000 smart meters on the DTC premises still using analog meters.

PG&E stated that it pays $44/meter to Wellington to visit the 250,000 premises without smart meters. It anticipates that 83.3 percent of these visits will result in successful conversions to smart meters, and that only 16.7 percent of them would opt out to legacy meters. Clearly, the only part that could be charged

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[5] PG&E response to DR-DRA-003-Q07

[6] PG&E workpaper WP 3-2.

[7] SCE response to DRA-SCE-02 Question 03b. Electric analog meters quoted at $12.65/unit

to the Opt-Out program is the visits to the 16.7 percent of customers who become participants in the Opt-Out program. But PG&E charges 100% of these visits to the Opt-Out program. As for the post-July 2012 costs to premises that already have smart meters, PG&E uses as a proxy 35 percent of the 16.7 percent of the 250,000 customers, even though the 250,000 premises allegedly do not have smart meters. These meter exchanges are performed by PG&E personnel, resulting in an additional labor cost on top of the $44 Wellington visit.

The following table illustrates these three categories of costs based on PG&E's estimates:

TABLE 2-1

Meter Exchange Costs

Wellington Truck Roll for 250,000 Meter Installation	PG&E Claimed Recorded Meter Exchange Costs (Feb. – July 2012)	PG&E Assumed Future Meter Exchange Costs (post-July 2012)	Total PG&E Estimated Meter Exchange Costs
$11 million	$1.37 million	$2.13 million	$14.7 million[8]

1. Wellington Truck Roll Costs Are Smart Meter Installation Costs and should not be Allowed in the Opt-Out Cost Recovery.

As mentioned earlier, PG&E estimated that there are still 250,000 customers who have not yet had smart meters installed. These customers may include customers on the delay list, in hard to reach areas, or difficult to complete customers. PG&E suggested that it would pay $44 to Wellington to travel to these customers' premises and attempt to complete smart meter installations. Through that process, some may choose to opt-out. Though 16.7 percent of these visits could be charged to the Opt-Out program, they are really intended to finalize smart meter installation. They are not costs associated with the Opt-Out program. Whether or not the Opt-Out program existed, Wellington would still need to visit

[8] Numbers may not add up due to rounding.

all 250,000 premises. Thus, to load these costs onto opt-out customers would unreasonably inflate the opt-out costs.

Granted, PG&E encountered more problems with the DTC installations than it probably anticipated. However, PG&E was given $128.8 million to cover cost over runs as part of its $1.68 billion initial advanced meter (or smart meter) infrastructure ("AMI") build out, as well as another $90 million through a cost-sharing mechanism invoked after the risk-based allowance is exhausted.[9] The risk-based allowance represents a total of 13% project costs to cover contingencies or unexpected events. A large part of the AMI project costs were related to installing smart meters for all residential customers.

The AMI Decision (D.) 07-07-027 cited part of PG&E's brief in approving a risk-based or contingency allowance of $128.8 million:

> *As a part of the project costs, PG&E included what it described as a Risk-Based Allowance or a contingency of $128.8 million. If one part of the project exceeds budget then there is a process for project managers to draw-down" or authorize the use of the contingency to complete the project. In effect, by approving the proposed budget, the Commission explicitly allows PG&E the discretion to spend $128.8 million to address delays, overruns or other unforeseen contingencies as a part of the reasonable costs of the project. DRA supports the contingency.*

As mentioned, PG&E also was given another $90 million (which is 5.3 percent of total project costs) for recovery without subject to reasonableness review:

> *In addition to the risk-based allowance included in the deployment cost forecast, PG&E and DRA stipulated (Ex. 28) to project cost recovery even if the Commission adopted a different revenue requirement than agreed to between PG&E and DRA. The stipulation includes:*

[9] It should be noted that PG&E requested additional AMI funding subsequent to the issuance of D.07-07-027. The Commission via D.09-03-026 granted PG&E another $670 million for AMI upgrade, and included was another $49 million contingency funding.

1. $1.6846 billion of project costs would be deemed reasonable and recovered in rates without any after-the-fact reasonableness review.
2. 90% of up to $100 million in project costs beyond the $1.6846 billion, if any, would also be deemed reasonable and recovered in rates without any after-the-fact reasonableness review. The remaining 10% will be absorbed by PG&E's shareholders. 3. Costs in excess of $100 million over the $1.6846 billion will be recoverable only if approved by the Commission in a reasonableness review.[10]

If PG&E exceeded the original project costs ($1.68 billion), which provides a contingency allowance of $128.8 million, and on top of that incurred another

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[10] *The stipulation also provides for cost overruns due to events beyond PG&E's control which may be recovered by PG&E, with Commission approval, without the 10% shareholder penalty described above. These include material changes in the project's scope by governmental or regulatory actions, delay in approving this application beyond September 21, 2006, delays caused during deployment by cities and local governments, and force-majeure events. We note that the force-majeure paragraph includes a descriptive list including two items, "transportation accidents" and "strikes or other labor disturbances…" (Ex. 28, p. 3.) where it is conceivable that PG&E could be a participant rather than an innocent victim as it would be during an earthquake (also on the list). PG&E must clearly demonstrate that any claim of force majeure was in fact beyond PG&E's ability to anticipate or control. Force-majeure should only include transportation accidents when PG&E can demonstrate that it was neither intentionally nor negligently responsible for any transportation accident-related delays to the project. We are also concerned that the force-majeure language might excuse PG&E's actions during a labor dispute with its own workforce. Therefore, we will exclude from the force-majeure list "strikes or other labor disturbances" involving PG&E, or its vendors or contractors. We will only allow PG&E to seek recovery of costs due to transportation accidents or labor disputes, in the event that all overruns exceed the $100 million shared range and PG&E can demonstrate the reasonableness of its actions and costs at the time. However, PG&E cannot recover these costs as force-majeure. We find that the modified stipulation concerning overruns is reasonable. Under this modified stipulation PG&E will have an incentive (the 10%/$10 million exposure) to minimize and mitigate overruns. There is also an administrative efficiency to avoid litigation when a $90 million exposure for the ratepayer represents an added 5.34% of the forecast $1.6846 billion in project costs. We therefore adopt the stipulation on overruns, as modified for force majeure. (D.06-07-070, pp. 13-15.)*

(continued on next page)

$90 million in costs, PG&E could seek cost recovery subject to reasonableness review. To instead request recovery of these Wellington smart meter installation costs in the Opt-Out proceeding is inappropriate. Therefore, the Commission should disallow this $11 million from PG&E's Opt-Out proceeding.

2. The Number of Customers Requiring Legacy Meters may be Over-stated

PG&E's workpapers assumed 16.7 percent of the 250,000 meters would opt-out and that 35 percent of the 16.7 percent opt-out would have to be switched back to legacy meters. Obviously, this is at odds with the notion that the 250,000 meters are not yet exchanged for smart meters. DRA, however, accepts PG&E's estimate as a proxy as it does believe that, post July 2012, there will be customers who already have smart meters who wish to opt-out. Developing a better estimate at this time is not possible with the data PG&E has submitted so far. Therefore, DRA has not adjusted the costs associated with the 35 percent legacy meter switches. DRA reserves the right to modify these numbers if PG&E submits new data that allows a more accurate presentation.

3. PG&E's Legacy Meter Installation Costs are High

This category of costs relates to the post-July 2012 meter exchanges where the customer already has a smart meter. The PG&E labor costs are several times that of the other IOUs:

TABLE 2-2

Installation Costs ($)

	Electric	Gas
PG&E	128	117
SCG		32
SCE	39	
SDG&E	43	43

(continued from previous page)

It is unclear why this should be the case. PG&E provides the following list of activities to complete a meter exchange:

- Processing customer opt-out requests and field order
- Daily dispatching
- Ensuring adequate inventory for daily installation
- Travelling to customer premises
- Interaction with customer
- Removing smart meter
- Tagging the meter
- Logging the new meter information to system

SCE appears to perform similar tasks:

- Travelling to customer site
- Removing existing smart meter
- Installing analog meter
- Accounting for total time at customer site[11]
- Reading the meter information into system.

DRA recommends use the average of the other three IOUs' installation costs as a proxy to adjust for PG&E's cost.

C. Meter Reading Costs

1. PG&E over-states meter reading costs

In PG&E's workpaper page 3-4, meter reading expenses are calculated by multiplying the cost to read a single meter by the number of meters that are expected to be part of the Opt-Out Program. However, PG&E has acknowledged to DRA that the cost to read two meters at a premise, in cases where the customer with dual commodity service has enrolled in the Program, is only slightly higher

[11] Assume this would have included some customer interaction.

than the cost to read one meter.[12] Thus, DRA has recalculated the expense to be the product of the cost to read a single meter and the number of customers enrolled rather than the number of meters enrolled. This value of $4.45 million for meter reading expenses should be more accurate than the value of $6.88 million shown in PG&E's Testimony.

III. Summary of DRA Adjustments to PG&E Cost Estimates

As shown in Table 2-3below, the areas that DRA has identified would reduce PG&E's IT cost to $9.4 million[13], eliminate meter purchase costs, decrease meter exchange costs to $2.4 million, and reduce meter reading costs to $4.5 million, for an overall cost difference of over $16 million.

TABLE 2-3

PG&E Opt-Out Cost Estimates			**DRA Adjustments**
Category		Cost ($)	Cost ($)
Customer Operations Support		**8,749,541**	**8,749,541**
Information Technology		**10,351,067**	**9,412,694**
Meter Purchases	1,741,326		**0**
Gas Module Removal	711,101		**711,101**
Meter Exchanges	14,665,257		2,411,643
Meter Reading	6,881,469		4,451,089
Metering		**23,999,154**	**9,005,374**
Total Costs 2012-2013		**43,099,762**	**27,167,609**

[12] PG&E response to DR DRA-004-Q05c: "Generally, once the meter reader has arrived at an individual customer's residence and has located and read the first meter, the time needed to read the second meter for a dual-commodity customer would be minimal in most instances."

[13] IT costs are discussed in Chapter 2A.

CHAPTER 2A

PG&E IT Costs

Witness: Cherie Chan

I. SUMMARY

In its opt-out proposal, PG&E requests that the Commission adopt its forecasted IT costs of $4,270,314 associated with the AMI Opt-Out program. DRA finds that the Information Technology ("IT") costs, as characterized by PG&E, to be high. DRA makes the following recommended adjustments to PG&E's IT cost estimates:

1. Subtract $532,623 in IT contingency costs.
2. Subtract $405,750 in meter reading capital costs

The table below summarizes PG&E's IT Cost request[1] and DRA's recommended adjustments.

Table 2A- 1: Summary of PG&E's IT Cost Request
(Dollars)

Description	PG&E Request	DRA Adjustments	DRA Recommendation
Customer Operations Support IT	4,270,314	532,623	3,737,691
Meter-Reading Devices	550,000	405,750	144,250
Total IT	**4,820,314**	**938,373**	**3,881,941**

II. PG&E Overstates the Magnitude and Uniqueness of Any Changes to its IT Systems

PG&E already has spent over a half a billion dollars[2] in IT costs to deploy an AMI infrastructure. PG&E alleges that the complexity of its systems render

[1] Derived from PG&E Testimony Table 4-1 on page 4-2. Numbers from the column titled "PG&E Request" reflect PG&E's summarized request. Note that the expenses in this section exclude the $5.53 million in costs associated with the compensating mesh network on lines 5—8 of PG&E Table 4-1.

[2] "Monthly Smartmeter™ Steering Committee Update Report Of Pacific Gas And Electric Company For August 2012 In Accordance With The May 4, 2010 Assigned Commissioner's Ruling" in A.05-06-028. October 1, 2012.

any system modifications difficult. It states that "any major CC&B[3] system modification is a significant undertaking with myriad interdependencies"[4] and further, that "PG&E must perform extensive testing to ensure the new Program functionality performs correctly."[5] Nevertheless, DRA does point out that the Opt-Out programs being considered in California are neither new nor completely unique within the industry. Indeed, several states are considering or implementing smart meter Opt-Out programs.

While DRA acknowledges the historic problems PG&E has faced in implementing changes to its Customer Information Systems ("CIS"),[6] DRA encourages the Commission to require PG&E to keep its IT costs within the range of what is contemplated by SDG&E in this proceeding. Accordingly, it recommends that PG&E work with its vendors to seek a more efficient long-term productized solution that considers more efficient leveraged development across utilities to lower development costs for PG&E as well as other utilities in jurisdictions considering AMI opt-out programs. Such savings, when realized, should be returned to the opt-out customers through lower opt-out fees.

PG&E is not the only CC&B customer contemplating an opt-out program, nor is California the only state with an opt-out program. A complete listing of utilities running CC&B is not publically available. However, a simple internet search, summarized in Table 2A- 2 below, shows that a number of utilities, which also run Oracle's CC&B system, also have Opt-Out programs. Therefore, PG&E's funding request for custom-development of CC&B should not be uniquely difficult, and the scope of work contemplated here should not be overstated.

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[3] CC&B refers to the Oracle® Utilities Customer Care and Billing system in production at PG&E.

[4] PG&E Testimony 4-6, lines 1-2.

[5] PG&E Testimony 4-6, lines 4-5.

[6] Energybiz Magazine March/April 2005, pages 43-46, available at http://energycentral.fileburst.com/Sourcebooks/gsbk0305.pdf.

Table 2A- 2: A Partial Listing of CC&B Utilities in Opt-Out States

State/ Jurisdiction	Opt-Out Status	Known CC&B Customer in Production
Vermont	Opt-Out[7] Program Passed the Senate	Green Mountain Power[8]
Florida	Considering an Opt-Out Option[9]	Lee County Electric Cooperative[10] Jacksonville Electric Authority[11]
Georgia	Per SB 459,[12] passed 03/07/2012.	Cobb Energy[13]
Florida	Florida – Considering an Opt-Out Option[14]	Jacksonville Electric Authority[15]

The tasks involved with SDG&E's IT proposal appear to be very similar to those of PG&E, with both utilities implementing their IT upgrades in two phases. Though SDG&E seems to cover very similar tasks as does PG&E, its IT costs are

[7] Bill Sec. 1. 30 V.S.A. § 2811Introduced and passed by Senate, publically-available at: http://www.leg.state.vt.us/docs/2012/bills/Senate/S-214.pdf

[8]http://www.vmware.com/files/pdf/partners/Green_Mountain_Power_Technical_OracleNetApp_Whitepaper.pdf

[9] Per Florida Public Service Commission Staff Workshop on Smart Meters, dated September, 20 2012. The Agenda is posted at: http://www.psc.state.fl.us/utilities/electricgas/smartmeter/09_20_2012/Agenda.pdf

[10] "Lee County Electric Cooperative (LCEC), an electric distribution cooperative serving a five-county area in Southwest Florida in the US, has chosen Oracle utilities solutions to upgrade its existing Oracle Utilities customer care and billing application."http://utilitiesnetwork.energy-business-review.com/news/us-state-utility-picks-oracle-utilities-smart-grid-application-280312.

[11] "JEA Deploys Oracle Customer Care, Billing", February 12, 2008. http://tdworld.com/info_systems/highlights/jea-oracle-customer-care-billing/

[12] Georgia SB 459 - Electric Utilities; consumers may elect not to use smart meters; Public Service Commission may create/regulate a surcharge for consumers who elect not to use smart meters" Available at: http://www1.legis.ga.gov/legis/2011_12/sum/sb459.htm

[13] "Cobb Energy Implements Oracle® Utilities Customer Care and Billing to Improve Operational Efficiency and Streamline Billing Processes " July 2, 2008. Press Release found at: http://www.oracle.com/us/corporate/press/015885_EN

[14] Per Florida Public Service Commission Staff Workshop on Smart Meters, dated September, 20 2012. The Agenda is posted at: http://www.psc.state.fl.us/utilities/electricgas/smartmeter/09_20_2012/Agenda.pdf

[15] Posted by oracleutilities on Sep 13, 2010, "Jesus Garcia, business analyst, JEA discusses how Oracle Utilities Customer Care and Billing is enabling JEA to enhance flexibility, improve call handling time, and reduce the number of calls coming into the call center. Jesus also elaborates on JEA's plans to provide its customers with a portfolio of self-service options." http://www.youtube.com/watch?v=40mV-hu_8ic

about five percent of PG&E's. SDG&E estimates that its total actual IT system development cost to complete both phases of its IT project to cost $60,927.00 and $137,528 respectively, for an overall IT system development cost of $198,455.[16] Compared with PG&E's IT request in excess of 4.8 million dollars, DRA believes PG&E's IT expenditures associated with the Opt-Out program should receive a second look.

A. Phase 1 IT Contingency Costs Should be Disallowed

PG&E shows IT project costs for two stages of development. The first stage focused on automating rates and billing for the Opt-Out Program, while the second stage included IT efforts to support Enrollment and Field work. Within each stage, PG&E includes a 15 percent contingency allowance. However, according to PG&E's testimony, Phase 1 was completed and cut over to operations on August 31st, 2012.[17] As PG&E already has completed phase 1 of this effort, no uncertainty remains; hence, PG&E's contingency request of $197,674[18] should be disallowed.

B. PG&E's Phase 2 Costs are Also Excessively High

DRA is concerned that PG&E's Phase 2 IT costs are very high. For the most part, the IT efforts and scope of work required should be comparable with that of other California IOUs, as well as with IOUs outside the state with similar opt-out programs. PG&E's revisions to its CC&B system are to automate the Program's enrollment, billing, and field process.

PG&E was asked for IT Project "costs broken down by Task or Gantt Chart with hours and labor rates including but not limited to design, testing, training, project management, and implementation."[19] In response to DRA's data

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[16] SDG&E testimony, pp. CS-5 & CS-6.

[17] PG&E testimony, page 4-6, table 4-2, line 1.

[18] PG&E testimony page 4-7, table 4-3, line 6.

[19] From DRA Data Request 4, question 7, requested September 6th, due Sep 14th, and received September 25th.

request, PG&E provided a sample spreadsheet with line-items such as "Oracle Build" for 447 work-days (apparently to be completed between September and November), at a total cost of $894,000,000. There was no additional detail or justification of whether other planned product updates are included in this release, or whether this would negate the need for or be consolidated with a future CC&B release in the future. DRA finds PG&E's cost request to be unsubstantiated and unsupported, and recommends that phase 2 costs by reduced, at least by the contingency allowance on IT costs of 15 percent as a proxy. Therefore, DRA recommends that PG&E's phase two IT cost estimates be reduced by $334,949 to account for its excessively high costs. In total, by removing both contingency factors from PG&E's estimates, DRA proposes to reduce PG&E's IT costs by $532,623.

III. Hand-Held Meter Reading Devices

A. Summary

PG&E reports that its "…proposed Field Collection Systems (FCS) Project will purchase [350] new Itron hand-held devices and docking stations and upgrade the Itron software.[20]" at a total cost of $1.1 million. These devices will allow reading the new analog meters purchased for this project. PG&E arbitrarily allocated the cost of hand-held meter reading devices 50/50[21] between the next GRC and this proceeding "for upgrading the Company's existing hand-held meter reading devices or the supporting software."[22] DRA proposes that the number of devices purchased for the FCS project be reduced, and that the associated software and implementation costs be allocated to the GRC, as they are not incremental to

[20] PG&E Testimony, page 4-10, lines 8—10. The number of new handheld devices and docking stations, 350, was added to the quote for clarity.

[21] From DRA Data Request 4, question 7, requested September 6th, due Sep 14th, received September 24, 2012.

[22] PG&E testimony 4-10, lines 16—17.

the AMI opt-out program. PG&E's cost estimates[23] and DRA's recommended adjustments to those values[24] are detailed below.

Table 2A- 3: Hand-Held Meter Reading Device Costs
(Dollars)

	PG&E's Proposal			DRA's Proposal			Difference
Device Cost	#	Opt-Out	GRC	#	Opt Out	GRC	Opt Out
Hand-Held Devices	350	471,625	471,625	100	134,750	134,750	336,875
Docking Stations	350	33,250	33,250	100	9,500	9,500	23,750
Software and Implementation		45,125	45,125		0	90,250	45,125
Total		550,000	550,000		144,250	234,500	405,750

B. PG&E's Projection of 350 Hand-Held Devices to read Opt-Out AMI Meters is Excessive

PG&E alleges that it will need to purchase 350 new hand-held devices and docking stations to support meter reads for opt-out customers.[25] DRA finds these values to be high. Assuming 25,000 opt-out customers[26] and a 20-day billing cycle, PG&E claims to require 350 hand-held devices to read 1250 meters per day, resulting in fewer than 4 meter reads per device per day. PG&E has not provided data supporting the total number of incremental meter readers required to cover its service territory. DRA thus recommends that PG&E's request for 350 new handheld devices be reduced from 350 to 100 devices, reducing PG&E's costs for handheld devices by $360,625.

DRA does not challenge PG&E's proposal to allocate 50% of costs of the hand-held device and docking stations themselves to the opt-out class in this case. Indeed, these costs do vary with the number of premises requiring manual meter

[23] Derived from PG&E Workpapers SmartMeter Opt-Out Phase 2 Testimony Workpapers_Chapters 1-4.xls, WP 4-8.

[24] Derived from DRA Workpapers SmartMeter Opt-Out Phase 2 Testimony Workpapers_Chapters 1-4.xls, WP 4-8

[25] PG&E Workpapers 2_SmartMeter Opt-Out Phase 2 Testimony Workpapers_Chapters 1-4.xls, tab WP 4-8, lines 6 and 7.

[26] Id, tab WP 1-3, line 11.

reads, which is heavily dependent on the number of customers opting out of Smart Metering. The latter is fairly uncertain at this time.

C. PG&E's Hand-Held Devices and Software

DRA does not find PG&E's hand-held meter reading Software and Implementation Costs to be purely incremental as required for expenses in this request.[27] PG&E states, "there will be an ongoing need following completion of SmartMeter™ deployment to manually read a small number of SmartMeters™ that will fail for various reasons and will need to be manually read until they can be repaired or replaced." By this logic, even without this opt-out proceeding before us, PG&E would be requesting some type of funding to support or extend its manual meter reading capability, and would thus would have to pay software and implementation fees. PG&E's workpapers also note, in support of DRA's position, that "expenses for training meter readers to use the new devices are assumed to be funded 100% by the GRC."[28] For the reasons stated above, DRA recommends that the $45,125 requested in this proceeding be eliminated, or moved to the GRC for further discussion if justified.

In summary, DRA recommends that PG&E's overall meter reading Capital costs associated with new hand-held devices of $1.1 million (or the $550,000 associated with the Opt-Out proceeding) be reduced. By reducing the number of hand-held devices and docking stations needed, and moving the costs of meter device software and implementation to the GRC along with training expenses, PG&E's request will be reduced from $550,000 to $144,250 overall.

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[27] Per PG&E, "only the incremental costs of operating the Program are included in this Phase 2 request." Page 4-2, lines 10-11.

[28] PG&E Workpapers: SmartMeter Opt-Out Phase 2 Testimony Workpapers_Chapters 1-4.xls Tab WP 4-8.

IV. Conclusion

DRA was unable to complete a detailed audit of the IT costs of all the utilities in the limited time available in this proceeding.[29] Nevertheless, at a minimum, PG&E's overall IT costs should be reduced from $4.8 million to $3.8 million dollars. DRA recommends that the Commission seriously consider the cost implications of approving an opt-out program and the associated costs of the program to cost utility ratepayers.

[29] For example, DRA only received workpapers from PG&E on August 29, 2012.

CHAPTER 3

SOCALGAS SMART METER OPT OUT COSTS

Witness: Dan Willis

I. SOCALGAS' PROPOSALS

In its Prepared Testimony, SoCalGas estimates the Opt-Out program costs that it will incur and the associated fees that each customer will be charged, assuming the costs are assessed only on those individuals electing to Opt-Out. SoCalGas proposes to charge different initial fees to customers who already have an advanced meter module and to those who do not. The monthly fee would be the same ($24) for both of these groups and it is entirely composed of the cost to perform a monthly meter read. CARE customers would pay initial and monthly charges that are 20% lower than those of non-CARE customers.

For customers who already have an advanced module installed, SoCalGas proposes an initial fee of $179. It would be composed of the following cost categories:

- Account set-up and customer communications: $9
- A fee to remove the module and identify the meter as "Opt-Out:" $32
- Information system development costs: $65
- A charge that combines an exit fee and an advanced module credit: $73

The module credit applied to these customers includes the discounted value of an advanced module that can be returned to inventory. The exit fee includes the hardware and installation costs of a new smart meter module when the customer's premise is returned to advanced meter service.

For those with no advanced meter, the initial fee of $126 is composed of the following cost categories:

- Account set up and customer communications: $15
- A charge to inspect and identify the meter as "Opt-Out:" $24

- Information system development costs: $65
- A charge combining an exit fee and a credit reflecting the avoided cost of not having installed an advanced module: $22

SoCalGas provided DRA with estimates of the total costs of the Opt-Out Program through 2017, the year it is expecting to have completed installation of advanced meters. Assuming a 0.5% participation rate, the cost attributed to the initial fees is expected to be $4.37 million, while the cost of monthly meter reading is expected to be $25.5 million.[1] Total costs are broken down in section III of this chapter.

II. DRA'S ANALYSIS AND PROPOSALS

A. Exit Fee Should Be Disallowed

The Commission's June 8, 2012 Scoping Memo poses a series of questions. One of them asked: "Should there be an 'exit fee' imposed on customers who elect the opt-out option and return to a wireless smart meter?"

In answering that question, SoCalGas stated,

> *"customers who opt-out should pay an exit fee. SoCalGas will incur costs to install the module when the opt-out customer vacates a residence or elects to have an advanced meter module installed at the residence at which they originally choose to opt-out. SoCalGas proposes to charge the exit fee as part of the initial fee along with the credit provided to the opt-out customers for not installing an advanced meter module[2]."*

SoCalGas developed an exit fee of $90 per premise. This fee consists of the present value of the revenue requirement of a new module and the module installation cost.[3] Offsetting this fee, SoCalGas estimated a credit for customers who do not already have an AMI module. This credit reflects the cost avoided

[1] SoCal Gas Response to DRA Data Request DRA-002

[2] SoCalGas testimony, p. 9.

[3] The numbers are shown in SoCalGas' workpapers. DRA is not showing the numbers here

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from not having installed a smart meter. If a customer's site already has an AMI gas module installed, the credit would be reduced. This is based on SoCalGas' assumption that the present value revenue requirement of the used module returned to inventory is reduced[4].

SoCalGas can be commended for considering a credit for customers who opt out of AMI. However, SoCalGas underestimates the avoided costs for smart meters for opt-out customers. This is especially true during this General Rate Case ("GRC") cycle (2012 through 2014) because SoCalGas' smart meter deployment schedule will just start in Oct 2012 and is expected to go through 2017. The avoided costs and exit fees are likely to cancel each other out during this time frame. Therefore, DRA recommends that a zero net exit fee (no exit fees, and no credit) be applied to the opt-out customers for this GRC cycle.

The following table shows SoCalGas and DRA's initial fee estimates:

TABLE 3-1

	No Module Installed		Module Installed	
	SoCalGas	DRA	SoCalGas	DRA
Account set up, communication	$15	$15	$9	$9
Remove Module, tag meter	NA	NA	$32	$32
Inspect and Tag meter	$24	$0	NA	NA
IT	$65	$65	$65	$65
Module Credit & Exit Fee	$22	$0	$73	$0
Total Initial Fee	$126	$80	$179	$106

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because SoCalGas claimed these numbers proprietary information.

[4] The numbers are shown in SoCalGas' workpapers. DRA is not showing the numbers here because SoCalGas claimed these numbers proprietary information.

1. It is Unlikely that SoCalGas Would Incur Any Material Costs Due to Opt-Out Customers Moving Out or Revoking Opt-Out Status Prior to its Next GRC cycle.

SoCalGas has not yet begun its deployment of smart meter modules but expects to initiate the process in October 2012 with a mass deployment beginning in 2013.[5] SoCalGas assumed that 0.5 percent of its customers would opt out by 2017. In 2012 through 2014, SoCalGas estimates that approximately 0.26 percent of its customers will opt-out.[6] SoCalGas' workpapers indicate that it applies the net exit fee to all assumed opt-out customers.

For the purpose of this opt-out proceeding, DRA recommends limiting SoCalGas' opt-out cost recovery for the years 2012 through 2014, that is, prior to the next GRC cycle, as the other IOUs have done. SoCalGas projects that in the 2012 to 2014 time-frame, less than three tenths of a percent of customers will opt-out. Therefore, we are talking about a very limited percentage of customers who will opt out.

In addition, SoCalGas still has much opportunity to intelligently manage the smart meter deployment process and carefully determine who really desires to opt out. SoCalGas has not yet begun its deployment, and can learn the lessons from the other three IOUs, which are all reaching the completion of their smart meter deployments. The utilities normally take multiple steps to inform customers about their plans to install smart meters before smart meters are actually installed. The multiple steps include sending letters, phone calls, as well as physically visiting the customer sites and placing door hanger notifications, knocking on doors, etc. Through these multiple tracks, SoCalGas should also include information about the opt-out program and the associated costs[7].

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[5] SoCalGas testimony, p.2.

[6] SoCalGas response to DRA 02.

[7] SoCalGas' Case Manager, Greg Healy, on September 27, 2012, provided DRA a copy of its

(continued on next page)

None of SoCalGas' customers currently have a smart meter module. So, if the process is managed well, very few of them will receive smart meters that have to be exchanged for analog meters. Of those for whom no installation was required, very few are likely to subsequently change their minds and revert back to smart meter service if the customer already made a conscious decision to opt-out and paid a considerable initial fee to do so. And only a small fraction of those customers will relocate to a new premise between the time they opt-out and the end of 2014. Therefore, it is very unlikely that SoCalGas would incur significant costs due to customers exiting from the Opt-Out program in the interim period before the next GRC, when the exit fee issue can be revisited.

2. In the Long Run, Net Exit Costs are Difficult to be Differentiated from GRC Costs

In future GRCs, SoCalGas will likely make estimates about the costs of purchasing and installing additional smart meters to meet customer growth and replacement. It will be difficult to segregate smart meter wear and tear and replacement costs that are included in the normal GRC operational expenses from opt-out customers relocating or reverting back to smart meter service. This is especially difficult when the number of smart meter opt-out participants is likely to be a small fraction of the number requiring smart meter replacements when meters fail. It is probably also not efficient to try to administratively separate these two groups of customers and track them after smart meter deployment is completed. As stated earlier, DRA recommends no exit fee for now. Parties can reassess this situation and make their recommendations based on data available in the next GRC.

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bill insert to the Customers. The bill insert alerts customers about the Opt-Out Program option as well the interim charges. The notice also notes that the charges may be subject to changes pending the Commission's decision.

B. The $24 to Tag a Legacy Meter should be Disallowed

In estimating the initial fee, SoCalGas identified a cost item of $24 to inspect and tag a legacy meter to make sure that it is clearly identified as an opt-out meter.

DRA appreciates that SoCalGas takes the opt-out issue seriously and wants to make sure that the field staff will not mistakenly install smart meter modules for opt-out customers. However, SoCalGas can accomplish this when its field staff is performing other functions. For instance, when the staff is out installing smart meter modules and realizes that customers would like to opt out, they can simultaneously tag the meters. Or, when a meter reader reads a meter for the first time as part of the Program, he or she can then tag the meter at the same time. The opt-out fees are already quite significant. It is highly inefficient to hold opt-out participants responsible for the cost of an extra trip merely to tag meters.

C. Meter Reading Costs Should be Substantially Reduced

The following table provides a comparison of the IOUs' meter reading cost estimates:

TABLE 3-2

IOU Monthly Meter Reading Cost/Charge Estimates

	SCE	SoCalGas	SDG&E		PG&E	
	Single	Single	Single	Dual	Single	Dual
per meter read costs	$12.84	$24.00	$8.54	$9.04	$5.00	$5.00

Based on the IOUs' cost studies, the meter reading cost is the largest cost included in the monthly opt-out charges. Therefore, it is important to assure that the meter reading cost is reasonable and that the IOUs find ways to mitigate such costs. Based on PG&E and SDG&E's estimates, it is clear that the incremental cost difference between reading one meter and two meters at one site is almost zero. In addition, the cost estimates for SCE and SoCalGas are relatively higher,

especially for SoCalGas. In the following sections, DRA provides support for a $10 meter reading cost for SoCalGas. This lower cost would reduce SoCalGas' total meter reading costs by about $2.3 million[8] for 2012 through 2014.

1. It is Unreasonable for SoCalGas' Customers to Pay Substantially Higher Meter Reading Costs than Do Other IOUs' Customers.

Public Utilities Codes Section 451states that the Commission needs to make sure that ratepayers pay just and reasonable rates. One of the methods used to ensure this is to benchmark the costs and rates across IOUs. SoCalGas' meter reading costs are three times that of SDG&E and almost four times that of PG&E.

One major reason that SoCalGas' meter reading cost is so much higher is because its meter reading time is more than double that of all of the other IOUs. As SoCalGas covers a similar service territory as that of SCE, it seems reasonable to assume comparable meter reading time between the two companies. Furthermore, both SDG&E and PG&E estimate the same meter reading time as does SCE. There is significant geographical diversity among the other three IOUs (SCE, PG&E and SDG&E), and yet they all assume roughly the same meter reading time. Therefore, it is reasonable to apply their meter reading time to SoCalGas for meter reading cost estimates.

2. Labor Rate Should be Based on Meter Reader Cost

The other reason that SoCalGas' meter reading cost is high is because SoCalGas blends a lower labor rate of a meter reader with the higher wage of an energy technician. The latter's salary is more than 60 percent higher than the former. SoCalGas justified its decision to use weighted costs between the two labor rates by noting that it does not expect to retain meter readers across its system. However, this rationale would not apply during the years covered by the current proceeding since SoCalGas has yet to deploy its smart meter project.

[8] At $24, the cost is $3.9 million, at $10, it becomes $1.6 million.

Therefore, DRA recommends using the meter reader labor rate for meter reading cost estimates in the short run. This can be reassessed in the next GRC.

With the combination of both labor rate and meter reading time adjustments, SoCalGas' meter reading cost can be reduced to roughly $9/month, which would be quite comparable to that of SDG&E's. To allow some margin, DRA recommends a $10/month meter reading cost.

3. Joint Meter Reading and Outsourcing as Alternatives to Mitigate Meter Reading Costs

In Chapter 1, DRA identified the need for creative solutions to the high cost of meter reading. Joint meter reading with SCE and outsourcing are two alternatives. SoCalGas' proposed cost of meter reading is not viable. SoCalGas' average residential customer bill is $36/month[9]. Charging opt-out customers another $24 per month fee primarily for meter reading would increase their monthly bill by almost 67 percent. This would cause significant rate shock and fail a standard ratesetting principle of revenue stability. DRA recommends that the Commission direct SoCalGas and SCE to work together to investigate joint meter reading and to present their findings in their next GRC filings.

As shown in Table 2 above, PG&E and SDG&E clearly demonstrate that the difference in cost between reading one meter and two meters at one site is almost zero. Therefore, it would seem to be in the best interest of both SCE and SoCalGas to seek a way to use joint meter reading. Both companies projected that a very small number of customers will opt out of smart meter service. Consequently, the need for manual meter reading in the future will diminish, as both companies acknowledge.[10] It also is very likely that the customers who opt-out of electric smart meters will be the same ones who opt out of gas smart meters.

The Opt-Out program could be a good opportunity to investigate other alternatives to traditional meter reading. Either independently of or as part of

[9] Conference call on 9/20/12 with SoCalGas witness.

[10] SCE Testimony page 20. DRA call with SoCalGas 9/20/12

joint meter reading, SoCalGas could consider outsourcing the meter reading function and/or using temporary workers. Meter reading will become a non-business as usual function in the future, and so non-business as usual solutions seem appropriate. As stated earlier, PG&E anticipated several years ago that need for the meter reading position would decline as its smart meter rollout progressed. Thus it has been hiring temporary meter readers and will continue to do so as part of the Opt-Out Program.[11]

4. Level Pay Plan

Another way to address the cost of meter reading would be to reduce the number of meter reads from once every month to once every two or three months. Doing so would require that a participating customer's bill be estimated over the months that their meter was not read. SoCalGas' current Level Pay Plan ("LPP")[12] could be modified to accommodate Opt-Out Program participants so that meters could be read less frequently.

SoCalGas outlines its LPP in Rule 12 of its tariff. The plan is offered to those who wish to minimize seasonal variations in their monthly bill. The amount paid each month under the LPP is either one-twelfth of the customer's most recent annual bill or an estimate based on information about the customer's premises. Accounts are reviewed and adjusted periodically to "reduce the likelihood of a large imbalance between the actual charges and LPP charges."[13]

An LPP for Smart Meter Opt-Out Program participants would comply with all of the requirements specified under Rule 12 of SoCalGas' tariff. Meters would be read every two or three months and customers would be billed each month at a level that is estimated using the same techniques as those in SoCalGas' traditional LPP. Any corrections in the customer's bill resulting from taking less frequent readings would be corrected as is currently done under the LPP. The LPP

[11] PG&E response to DR-DRA-007-Q06

[12] SoCal Gas Tariff Rule No. 12

could be made mandatory for all Opt-Out program participants in order to effectively minimize meter-reading costs associated with the Opt-Out Program.

DRA believes that applicable tariff rules and relevant past decisions would allow for implementing a Level Pay Plan for quarterly reads of Opt-Out participants' meters. Decision 07-09-041 addressed the issue of PG&E billing its customers regularly based on actual metering data. It found that:

- Rule 17.1 prohibits issuing estimated bills for a period of greater than three months.
- PG&E is allowed to adjust residential bills for a period of three months.
- Rule 9A requires PG&E to issue bills at regular intervals based on actual metering data.

DRA finds that bill estimations are acceptable for a period of up to three months, as long as the IOU ensures that correctly adjusted bills are issued within the allowed three-month time frame. If SoCalGas believes the risk associated with estimating bills for three months is too high, DRA believes it should consider a bimonthly read or proposing a modification to rule 17.1 in order to allow for bill estimation over a longer period of time.

While there is a potential for significantly reducing the costs of SoCalGas' Opt-Out Program through limiting manual meter reading, DRA is aware that there could be incremental costs associated with such an option. These include the additional labor costs associated with estimating bills, issuing manual true-ups of these bills, customer inquiries about their billing process, and other potential back office costs. However, DRA believes that many of these costs currently are incurred through SoCalGas' existing LPP, and there is no additional charge to the customers who now participate in the LPP. SoCalGas has over 150,000 customers enrolled in its LPP,[14] so adding several thousand opt-out customers to

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(continued from previous page)

[13] *Ibid*

[14] SoCalGas email Response to DRA 9/27/12

LPP would not significantly add to the associated costs. In addition, it may be difficult to distinguish between the costs of serving the customers now on LPP and those added by the Opt-Out Program. Thus, while DRA is not recommending that the Commission order SoCalGas to implement a mandatory LPP for those customers who wish to participate in its Opt-Out Program at this time, DRA believes it would be worthwhile for SoCalGas to conduct further analysis of the merits of moving Opt-Out customers onto LPPs. DRA also observes that SCE's study shows significant savings in monthly opt-out charges when applying a LPP with quarterly meter reads, which is explained in Chapter 4.

III. Summary of DRA Adjustments To SoCalGas Cost Estimates

Below, DRA presents its adjustments to SoCalGas total cost estimates of its Opt-Out Program. By eliminating exit fees and the charge to tag analog meters as opt-out, and by significantly reducing meter reading costs, the overall program costs are brought down from $29.9 million to $13.4 million. SoCalGas estimates $5.9 million for costs through 2014 while DRA's estimate is $2.9 million.

TABLE 3-3

SoCalGas Opt-Out Program Cost Estimates ($)	No Module Installed	Module Installed	Total	DRA Adjustments ($)		
				Total	No Module Installed	Module Installed
Account Set-up and Customer Communication	405,000	48,600	453,600	453,600	405,000	48,600
Remove Module and Tag Meter	-	172,800	172,800	172,800	-	172,800
Inspect and Tag Meter	648,000	-	648,000	-	-	-
Information System Development	1,755,000	351,000	2,106,000	2,106,000	1,755,000	351,000
Module Credit and Exit Fee	594,000	394,200	988,200	-	-	-
Total Initial Fee Cost	3,402,000	966,600	4,368,600	2,732,400	2,160,000	572,400
Total Monthly Meter Reading Cost			25,509,635	10,629,014		

CHAPTER 4

SCE OPT OUT PROGRAM

Witness: Dan Willis

I. SCE's Proposals

SCE's Testimony and cost recovery proposals address implementation of its Opt-Out Program for the period between April of 2012 and the end of 2014. Like SoCalGas, SCE proposes a fee structure that would recover its estimated costs associated with the Program from only those customers wishing to opt-out. SCE has been enrolling participants in the Program since May of 2012, and identifies the following categories as its primary cost drivers:

- The procurement of network equipment to restore the smart meter mesh network: $1.5 million
- The acquisition and installation of analog meters: $1.1 million
- Modification and operation of back office systems: $5.2 million
- Ongoing operational expenses including meter reading ($8.8 million) to support the Program: $13.2 million

The total costs associated with the Program are estimated to be $21 million through 2014.

SCE proposes assessing participants a $98 initial fee and a $24 monthly fee, with CARE customers receiving a 20% discount. Included in the initial fee is approximately $20 to recover costs associated with customers exiting the Opt-Out Program and returning to smart meter service, which SCE estimates would cost the company $78 per customer were it applied to individual customers upon their exit from the Program.[1] SCE identifies $2.45 million as the aggregate costs related to the initial fees and $16.6 million as the costs associated with the

[1] SCE Testimony page 10.

monthly fees.[2] The proposed fees are based on a forecast customer participation of 25,055 by the end of 2014.

II. DRA'S ANALYSIS AND PROPOSALS

A. SCE's Initial Fee

SCE estimates total costs of $2,446,300 to set up the Opt-Out Program and assumed a total opt-out of 25,055 customers by 2014. This translates to a $98/customer initial fee. SCE states that this fee would be charged to customers who choose to opt out now. In addition, an opt-out customer would need to pay this initial fee every time he or she moves within SCE's service territory.[3]

When deriving its total costs, SCE built in assumptions about customer turnover and exit costs. In other words, the $2.4 million exit cost includes consideration of customer turnover rate.

SCE's list of initial setup tasks and costs are described below:

TABLE 4-1[4]

		$1,000
1	Initial meter swap to analog meter – basic	$ 577.0
2	Initial meter swap to analog meter – complex	$53.4
3	Initial Account Processing Time for ESC to Analog Meter	$161.4
4	Initial Account Processing Time for Analog to Analog Meter	$ 76.1
5	Initial Processing Opt-Out Postcards	$ 49.2
6	Initial ESC Meter Change-Out Usage Exceptions Usage	$344.2
7	One-Time RSO IT Project Management Support	$ 71.9
8	Initial Employee Training and Implementation Support Costs	$232.2
9	2012,2013,2014 Customers Call to Enroll	$265.8
10	JST-Employee Training Development	$530.3
11	JST-Project Support	$25.9
12	Initial Impact Assessment	$8.9
13	Prepare for Change Impact Assessments	$2.5
14	Develop/Conduct Change Impact/Cross Integration Assessment	$19.5
15	Provide Business Readiness Support	$28.0
	Total Initial Fee Costs	**$2,446.3**

[2] These numbers are revenue requirements. So, they do not add up to the $21 million total costs mentioned earlier. The capital costs are only partially reflected herein that covers this GRC cycle, i.e. from 2012 to 2014.

[3] SCE e-mail response 9/21/12, 2:58pm

[4] These costs reflect SCE's testimony submitted 8/10/12. DRA has received an erratum to SCE's cost estimates, which will be discussed below.

DRA makes two adjustments to SCE's initial cost estimates.

- Remove exit costs from initial fees
- Correction on SCE's opt-out customers who need field visits for meter exchanges in 2012.

1. SCE Should Remove Opt-out Exit Costs in Initial Fees

According to SCE, an opt-out customer will be charged the initial opt-out fee every time he moves and continues to choose the Opt-Out Program.[5] To charge an exit fee as well as another initial fee, or to include this cost as part of an initial fee paid by all Program participants, is burdensome to the customers.

SCE estimated the opt-out rate to be roughly 0.5 percent of the population. An eleven percent turnover rate for these opt-out customers[6] for 2012-2014 would represent around 0.1 percent of the customer population. It is unclear whether or not the projected opt-out rate will be accurate as there is no historical data to validate it. It will require a number of years to observe how customers react to the opt-out fees and the smart meter system. Furthermore, SCE has and will routinely request smart meter related capital additions and operations and maintenance costs in the GRC to meet its customer growth and to cover potential meter replacements. The so-called exit costs, which basically restore smart meters back to a residence once the opt-out customers move, could easily be mixed with the GRC smart meter costs. It will be difficult to prevent duplicative costs.

Combining all of the reasons described above, the Commission should reject smart meter opt-out exit fees. Based on SCE's estimate, this would result

[5] September 21, 2012 e-mail from Eric Yamashita, SCE Regulatory Compliance & Legislative Affairs.

[6] SCE Workpapers, page 14.

in an initial fee of $78 instead of $98.[7] DRA recommends that IOUs be allowed to track the exit costs if there are any and to reassess the exit costs in the next GRC when more empirical data becomes available.

2. SCE Overstated Field Visit Needs for 2012

In SCE's calculation of meter exchange costs, it estimated that 56% of Opt-Out Program participants would require an analog or legacy meter to be installed at their premises.[8] However, SCE issued an erratum to its workpapers on October 3rd, 2012 in which it explains that the correct percentage, for 2012, should be 36%.[9] Inserting this correction into SCE's workpapers, the correct cost for meter exchanges should be $467,300 for basic meter exchanges, and $43,300 for complex exchanges. This reduces SCE's initial fee costs by $120,000, which should decrease SCE's initial fee proposal per customer by $5. Combining this adjustment and eliminating exit fee, the initial fee should be $74 per customer.[10]

B. SCE's $24 Monthly Fee will Cause Rate/Bill Shock

SCE proposed a monthly fee of $24 for opt out customers. For a typical SCE residential customer, the average monthly bill is approximately $100. A $24 monthly charge would represent a 24 percent bill increase, which would clearly fail the established rate design principle of avoiding rate shocks.

DRA makes the following adjustments to SCE's monthly fees:

- Reduce meter reading costs to $10/month to be more comparable to that of the other IOUs.
- Eliminate service disconnection and reconnection charges, which should only apply to customers who actually fail to pay for their bills and incur service disconnection/reconnection.

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[7] SCE Testimony page 10.

[8] SCE Testimony page 14

[9] SCE Opt-Out Analog Workpapers errata, 10/1/12

[10] DRA's understanding was that SCE built its exit costs into the initial fee by dividing the total initial fee costs by a smaller number of customers (25,055) than would actually incur initial fees (31,455) according to SCE's enrollment forecast. DRA tried to use this approach as a proxy to determine its initial fee cost.

- Correct smart meter testing costs.
- Eliminate exit costs such as analog service turn offs to revert back to a smart meter.

1. Meter Reading Cost and Fee

More than 50 percent of SCE's estimated $24 monthly fee is from meter-reading costs. SCE's meter reading costs of $13/month are more than 50 percent higher than SDG&E's and double those of PG&E, as shown in the following table:

TABLE 4-1

IOU Monthly Meter Reading Cost/Charge Estimates

IOU	SCE	SoCalGas	SDG&E		PG&E	
Commodity	Single	Single	Single	Dual	Single	Dual
Per meter read costs	$12.84	$24.00	$8.54	$9.04	$5.00	$5.00

Both SCE and SoCalGas have very high meter-reading costs. It is clear that there are economies of scale for reading multiple meters on the same premise. The incremental cost for reading an additional meter is close to zero. PG&E has low meter reading costs because it has been outsourcing its meter reading tasks for a few years anticipating a reduced meter reading force.[11] There is no justification that SCE's customers should pay much higher meter reading costs. And, the high monthly fees make it unsustainable for many customers.

DRA recommends reducing SCE's meter reading fees to $10 to be more comparable to PG&E and SDG&E's; and offers several solutions to accomplish such a result.

- Joint meter reading with SoCalGas for jointly covered territory
- Balanced payment plan with bi-monthly or quarterly meter reads. Like SoCalGas, SCE has close to 200,000 customers already on the balance pay plan. So, there could be potential savings to leverage on such a plan and reduce reading frequencies.

[11] PG&E response to DR-DRA-007-Q06

DRA elaborated on the above-mentioned alternatives in Chapters 1 and 3 and will not repeat most of them here. DRA commends SCE for taking DRA's suggestion seriously and performing a study to show the cost savings possible from implementing quarterly meter reading with a balanced payment plan proposal. SCE's analysis showed that performing the quarterly meter reading (with fixed bills in between), while it would result in an estimated increase in the initial fee of $3/month, would allow a significant reduction in the monthly fee of $5/month[12].

Lower cost solutions are important for both opt-out customers as well as non-participants to satisfy PU Code Section 451, that rates should be just and reasonable. For the former, it is essential to mitigate monthly bill increases. For the latter, it is necessary to mitigate the magnitude of costs that ultimately may be allocated to these customers.

2. Disconnect and Reconnect Costs

Under a legacy meter system, SCE would have to send field staff out to disconnect a customer for failing to make a timely payment. After the customer makes up his or her payment, SCE would have to send field staff to reconnect electric service. For smart meter customers, SCE can remotely disconnect and reconnect the services. For opt-out customers, these service call costs cannot be avoided. SCE estimates 11% of customers would incur service shut-offs and require a truck rolls to turn service off and back on, and develops a lump sum cost for such services. Then, SCE spreads this cost to all opt-out customers.

DRA objects to SCE's approach of levying such a cost on every opt-out customer, thus socializing the cost to the entire opt-out participant population. These services will be very customer specific, just like the Opt-Out Program in general. SCE should follow the prior legacy approach so that those who fail to

[12] Eric Yamashita e-mail to DRA on Oct. 3, 2012.

pay bills and incur such costs will be responsible for such costs. Removing this monthly cost item reduces SCE's monthly fee by $0.33.

3. SCE's Additional Monthly Cost Items

It appears that SCE includes cost items in their monthly fees that could have been recovered in their initial fees. For instance, these include the cost of handheld devices and meter testing. PG&E includes the cost of handheld devices in the initial fee.[13] Both PG&E and SDG&E include meter testing, as part of meter exchange, in its initial costs. It is not clear whether customers prefer for costs to be included in the initial or monthly fee. Regardless, it is important that SCE eliminate the cost items from the monthly charge once the costs are fully recovered. DRA notes that tracking these costs to determine when they are fully recovered does impose an additional regulatory burden.

DRA observes that SCE added more than $1 million in order to support the meter-reading effort, which itself would amount to $8.9 million. The $1 million includes paying almost $0.4 million for handheld devices, $0.4 million in incremental labor, and less than $0.2 million for software as well as $0.1 million for ongoing maintenance. These costs seem excessive. However, DRA has not had adequate time to investigate them further, and recommends further review in the next GRC.

DRA does make additional adjustments to meter shop testing costs and service turn off costs.

a) Meter Shop Testing

SCE intends to test all smart meters returned from those customers who required a meter exchange in the process of opting out. SCE's erratum, mentioned in part A.2 above, showed that 36%, rather than 56%, of its 15,755 opt-out requests in 2012 would require a meter exchange. Correcting this figure in SCE's projections of Meter Shop Testing reduces these costs from $493,200 to

[13] PG&E response to DR-DRA-004-Q02

$399,400. SCE identifies these as monthly fee costs, which are reduced by $0.13 per customer per month as a result.

b) Service Turn Offs – Basic and Complex

SCE makes the assumption that 11% of its opt-out customers would move within SCE's service territory each year. In order to account for the costs associated with restoring these customers' residences to smart meter service, SCE has built in approximately $20 per customer to its initial fee cost estimates.[14] However, SCE also has included, in its monthly fee, the costs to perform service "Turn-Offs" for these customers in the process of replacing their analog meters with smart meters, amounting to $312,900. On page 15 of its Testimony, SCE states that the installation of smart meters for opt-out customers who restore smart meter service or terminate service will be similar to what occurred initially when the smart meter was exchanged for an analog meter. This is consistent with SCE's inclusion of exit costs as part of its initial fee. DRA has argued that exit related costs not be considered as part of this Proceeding, and excludes this cost item from SCE's Opt-Out Program fees.

This exclusion reduces SCE's monthly fee an additional $0.45. Added to DRA's previous adjustments of $2.84 for meter reading, $0.33 for disconnections, and $0.13 for meter shop testing, SCE's monthly fee is reduced from its proposed $24.06 per month to $20.30 per month. Combining DRA's proposed changes, the initial and monthly fees are contrasted with SCE's in the following tables based on whether meters are read monthly or quarterly.

[14] SCE Testimony page 10

TABLE 4-2

W/ monthly meter reading	Initial	Monthly
SCE	93[15]	24
DRA	74	20

TABLE 4-3

W/ quarterly meter reading	Initial	Monthly
SCE	96[16]	19
DRA	76	16

III. DRA Adjustments to SCE Total Cost Estimates

By eliminating SCE's exit costs, correcting its projection of meter exchanges required, and reducing monthly fees as described above, DRA presents its proposed Opt-Out Program costs for SCE in the following tables.

[15] SCE's testimony presented $98. Later, SCE corrected an error and presented its revised result to be $93. Eric Yamashita e-mail to DRA on Oct. 3, 2012.

[16] Id.

TABLE 4-4

(Based on Monthly Meter Read)[17]

($1,000)

Total Program Cost ($)	SCE	DRA
Initial Fee Costs		
O&M Expense	2,326.6	1,834.5
Capital Costs	-	-
Monthly Fee Costs		
O&M Expense	12,171,0	9,969.8
Capital Costs	5,979.1	5,979.1
Total	20,775.9	17,783.4

TABLE 4-5

(Based on Quarterly Meter Read w/ estimated bills in between)[18]

($1,000)

Total Program Cost ($)	SCE	DRA
Initial Fee Costs		
O&M Expense	2,397.5	1,905.4
Capital Costs	-	-
Monthly Fee Costs		
O&M Expense	9,459.5	6,959.3
Capital Costs	6,721.2	6,721.2
Total	18,578.2	15,585.9

[17] Id.

[18] Id.

CHAPTER 5

SDG&E OPT OUT PROGRAM
(Witness – Dan Willis)

I. SDG&E's Proposals

SDG&E estimates that only 3,000 customers will elect to opt-out of its smart meter service before the end of 2014, and believes that these customers should bear all of the costs associated with the Program. As have SCE and SoCalGas, SDG&E proposes initial and monthly fees that will be assessed only to those customers wishing to opt-out. Costs estimates are based on those incurred through June of 2012 and those expected between June of 2012 and the end of 2014. The cost areas identified by SDG&E are

- IT system development: $198,000
- Field visits either to replace a smart meter with an analog meter (or to remove a gas meter module) or to identify the current analog meter as Opt-Out: $187,000
- Customer service field management support: $15,800
- Meter Shop quality assurance and testing: $36,000
- Purchasing analog meters and meter equipment: $62,000
- Network enhancement: $32,000
- Back office support and communications: $307,000
- Monthly manual meter reading: $636,000

The total projected cost of SDG&E's Opt-Out Program is $1.47 million, as shown in section III below.

SDG&E estimated that reading a single meter costs $8.54 and reading two meters at one location costs $9.04. SDG&E, however, includes certain initial costs in the monthly fee, increasing it to $12.80 for single commodity and $13.30 for dual commodity service. One of the largest upfront costs is that of setting up the back office support and communications infrastructure. Because spreading

these costs[1] over only 3,000 customers could result in significant initial fees, SDG&E proposes to recover those as part of monthly fees[2]. SDG&E proposes an initial fee of $157.83 for single commodity customers, and a $189.25 initial fee for dual commodity customers. CARE customers would receive a 20% discount from the initial and monthly fees. The components of the initial fee are detailed in the following table.

Table 5-1

Initial Fee[3]		
Category	**Single Commodity**	**Dual Commodity or Multi-meter**
IT	$66.15	$66.15
Field Visits	$43.07	$74.49
Customer Service Field Mgmt Support	$5.27	$5.27
Electric Meter Shop QA	$12.00	$12.00
Meter Equipment	$20.60	$20.60
Network	$10.73	$10.73
Initial Fee (Non-CARE)	**$157.83**	**$189.25**
Initial Fee (CARE)	**$126.26**	**$151.40**

Unlike the other IOUs, SDG&E proposes that an exit fee be applied only to those customers who either decide to revert back to smart meter service or who move from their premise to another within SDG&E's territory. These exit fees would be based on costs that are described as field visits and would thus depend on whether the customer was terminating Opt-Out service with one or two commodities. No offsetting credit for smart meter costs avoided is proposed.

SDG&E's costs, in general, are fairly moderate compared to that of the other utilities. What makes the initial fee so high is the relatively smaller number

[1] $306,806 would result in adding $102 per customer to the initial fee. SDG&E proposes to spread this over 24 months and charges $4.26/month as part of monthly fees. SDG&E testimony, pp. CS-17—18.

[2] SDG&E testimony at CS-18.

[3] SDG&E testimony at CS-18.

of participants. Because SDG&E's costs are moderate, DRA has only adjusted the meter exchange costs and exit fees.

II. DRA's ANALYSIS AND PROPOSALS

A. SDG&E's Initial Fee

SDG&E states that it refurbished its existing legacy meter stock and purchased additional meters from a secondary market to support the opt-out program. Overall, it purchased:

- 1,920 Analog Electric Meters (FM2S meters) - $25,910
- 96 Analog Electric Meters (FM2S CL320 meters) - $2,024
- 480 Analog Gas Meters (Sensus Cubix250) - $28,979
- 2,000 Analog Electric Meter Seals (opt-out identifying tag) - $1,612
- 2,100 Analog Gas Meter Screw Caps (opt-out identifying tag) - $460

The total identified meter equipment costs as presented above are $58,985. SDG&E indicates that it will also purchase the following additional meter equipment at an estimated cost of $2,817:

- 3,000 Analog Electric Meter Seals (opt-out identifying tag) - $2,418
- 1,600 Analog Gas Meter Screw Caps (opt-out identifying tag) - $399

DRA recommends that the Commission disallow these meter purchase costs. SDG&E still has $85 million for legacy meters in ratebase. If the Commission continues to allow a rate of return for these meters, the Commission should deny the $62,000 legacy-meter cost recovery here to prevent ratepayers from double-paying for the legacy meters.[4] Though these meter costs are fairly minor on an aggregate basis (a total of $61,802), on a per opt-out customer basis they are a significant cost, ($20.60 per customer).

[4] DRA testimony in SDG&E A.11-12-005/006, Chapter 15, p.9. DRA witness has recommended that the Commission disallow legacy meter cost recovery as they are not used and useful. DRA would agree to allow SDG&E to recover the $62,000 in the opt-out if the Commission adopts DRA's position in A.11-12-005/006.

B. **Exit Fee Proposal**

SDG&E proposes to charge an exit fee of $43.07 for single-commodity and $74.49 for dual-commodity customers upon their moving to a new location or for otherwise terminating Opt-Out Program service. DRA finds this proposal unreasonable. First, these customers are charged an initial fee when they make the decision to opt-out, and if they move within SDG&E's service territory, they will be charged a second initial fee. To charge them an exit fee for leaving one location on top of a second initial fee for service at the new location will be unduly burdensome to customers. DRA appreciates that SDG&E has decided not to apply an exit fee to all opt-out customers as part of this Proceeding as SCE and SoCalGas have proposed. However, at this time, it is difficult to decide how many would exit. The number of customers projected to opt-out is small (3,000)); hence, the number of customers electing to exit would necessarily be even smaller. Therefore, DRA has recommended that exit costs be excluded from the Opt-Out Program for the current GRC cycle, after which parties can reassess the documented costs associated with customers exiting the Program.

III. DRA's Adjustments to SDG&E Cost Estimates

The following table identifies SDG&E's total cost estimates, along with DRA's proposed modification to meter purchase costs. This adjustment would lower SDG&E's total cost from $1.47 million to $1.41 million.

Table 5-2

SDG&E Opt-Out Program Cost Estimates		DRA Adjustments
Category	Estimated Cost ($)	Estimated Cost ($)
IT	198,455	198,455
Field Visits	187,200	187,200
CSF Mgmt Support	15,808	15,808
Electric Meter Shop QA	36,007	36,007
Meter Equipment	61,802	0
Network	32,197	32,197
Back Office and Communications	306,806	306,806
Manual Meter Reading		
Single Commodity	245,952	245,952
Dual Commodity or Multi-meter	390,528	390,528
Total Costs 2012-2014	1,474,755	1,412,953

APPENDIX

DRA Witness Qualifications

QUALIFICATIONS OF

LEE-WHEI TAN

Q.1. Please state your name and business address.

A.1. My name is Lee-Whei Tan. My business address is 505 Van Ness Avenue, San Francisco, CA 94102.

Q.2. By who are you employed and what is your job title?

A.2. I am employed by the California Public Utilities Commission as a Regulatory Analyst V in the Electric Pricing and Consumer Program Branch of the Division of Ratepayer Advocates ("DRA").

Q.3. Please describe your educational background and professional experience.

A.3. I received a Bachelor of Science Degree in Chemistry from National Tsing Hua University in 1979 (Taiwan) and a Master of Arts Degree in Economics in 1986 from San Francisco State University.

In July 1986, I joined the Fuels Branch of the Division of Ratepayer Advocates where I sponsored testimony relating to utilities fuel management practices. I transferred to the Special Economics Branch in July 1987 and was involved in the benchmarking of computer programs (ELFIN, PCAM, PROMOD). In April 1988, I joined the Economics and Energy Rate Design Branch where I was assigned marginal costs and rate design for gas and electric cases. In 2001, I was assigned to the Telecommunications Branch of ORA, where I was assigned to work on telephone utility cases, such as New Regulatory Framework proceedings, mergers, and Public Utilities Code §851 proceedings.

I joined the Electric Pricing and Consumer Program Branch in July, 2009, and have been assigned to work on the revenue allocation and project coordination for San Diego Gas and Electric ("SDG&E") Critical Peak

Pricing Application and Pacific Gas and Electric Company's ("PG&E") 2011 GRC Phase 2 Filing.

Q.4. What is your area of responsibility in this proceeding?

A.4. I am sponsoring Chapters1, Overall Cost and Policy, and Chapter 2, PG&E Opt-Out Program.

QUALIFICATIONS OF
DAN WILLIS

Q.1 Please state your name and business address.

A.1 My name is Dan Willis. My business address is 505 Van Ness Avenue, San Francisco, CA 94102.

Q.2 By whom are you employed and what is your job title?

A.2 I am employed by the California Public Utilities Commission as a Public Utilities Regulatory Analyst in the Electricity Pricing and Customer Programs Branch of the Division of Ratepayer Advocates (DRA).

Q.3 Will you please briefly state your educational background and experience?

A.3 I hold a Bachelor of Science degree in Environmental Economics and Policy from the University of California Berkeley, with a minor in Conservation and Resource Studies. There I completed coursework in economics, specifically in energy and environmental markets, that is relevant to this proceeding. I came to DRA in July of 2012 and have conducted analysis on several proceedings currently before the Commission, including PG&E's Application for an Economic Development Rate.

Q.4 What testimony are you sponsoring in this proceeding?

A.4 I am responsible for Chapters 3, SoCalGas Opt-Out Program, 4, SCE Opt-Out Program, and 5, SDG&E Opt-Out Program.

QUALIFICATIONS OF
CHERIE CHAN

Q.1. Please state your name and business address.

A.1. My name is Cherie Chan. My business address is 505 Van Ness Avenue, San Francisco, CA 94102.

Q.2. By whom are you employed and what is your job title?

A.2. I am employed by the California Public Utilities Commission as a Public Utilities Regulatory Analyst in the Electricity Pricing and Customer Programs Branch of the Division of Ratepayer Advocates.

Q.3. Please describe your educational background and professional experience.

A.3. I hold a Bachelor of Arts degree from the University of California at Berkeley, with a major in Social Welfare and minors in Business and Demography. I have worked as a Billing Analyst at PG&E and as Manager of the Billing Department at Utility.com. At ABB Inc., I helped implement Interval Data Software products for utilities as a Project Manager and Product Engineer, including PG&E's VEE system, a precursor to MDM. I joined the Commission in 2005 and have sponsored Marginal Cost and AMI Technology testimony, departing in 2007 to manage marketing and product management of smart grid programs at eMeter and Oracle. I returned to The Commission in 2009, and have sponsored DRA's Small Commercial Rate Design in various proceeding.

Q.4. What testimony are you sponsoring in this proceeding?

A.4. I am sponsoring Chapter 2A and am responsible for DRA's overall project management in this proceeding.