

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA



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Application of Pacific Gas and Electric Company for Approval of its 2010 Rate Design Window Proposal for 2-Part Peak Time Rebate and Recovery of Incremental Expenditures Required for Implementation. (U39E)

Application 10-02-028  
(Filed February 26, 2010)

Application of Pacific Gas and Electric Company for Approval to Defer Consideration of Default Residential Time-Variant Pricing until Its Next General Rate Case Phase 2 Proceeding, or in the Alternative for Approval of its Proposal for Default Residential Time-Variant Pricing and For Recovery of Incremental Expenditures Required for Implementation. (U39E)

Application 10-08-005  
(Filed August 9, 2010)

**OPENING BRIEF  
OF THE DIVISION OF RATEPAYER ADVOCATES**

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## I. INTRODUCTION

Pursuant to Rule 13.11 of the Commission's Rules of Practice and Procedure and the February 7, 2012 Joint Ruling of the Assigned Commissioner and Presiding Administrative Law Judge and Administrative Law Judge's ("ALJ"), the Division of Ratepayer Advocates ("DRA") hereby submits its Opening Brief on Pacific Gas and Electric Company's ("PG&E") Peak Time Rebate ("PTR") application. As discussed below, the Commission should order PG&E to proceed with PTR and reject the company's proposal to delay this beneficial program.

In Decision (D.)09-03-026, the Commission authorized PG&E to substantially upgrade its Smart Meters based on the benefits projected for PTR. California's other two large electric utilities already have moved forward with PTR, and this Commission has found that PTR will lead to significant load reduction for these utilities in its recent Demand Response decision.<sup>1</sup> Further DRA has presented evidence that PTR is supported by customers.

In ordering PG&E to proceed with partial PTR rollout in 2013 and full roll out in 2014, the Commission should adopt DRA's revenue requirement forecasts, and reject PG&E's constantly increasing cost projections for its PTR proposal.

The following is a summary of DRA's recommendations:

1. The Commission should direct PG&E to proceed with its 10% partial PTR rollout in 2013 and full roll out in 2014.

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<sup>1</sup> D.12-04-045, Appendix B, which forecasts that SDG&E's PTR program is expected to produce between 69 and 71 MW of peak load reduction between 2012 and 2014 and SCE's PTR program is expected to produce between 332 and 371 MW of peak load reduction over the same period.

2. The Commission should adopt the following revenue requirement:

|                                  | 2012                       | 2013 <sup>2</sup>          | 2014                     | Total to be authorized via<br>2010 RDW PTR Case<br>(\$ 000) |
|----------------------------------|----------------------------|----------------------------|--------------------------|---|
| Customer outreach<br>& education | Use<br>unspent<br>AMI Fund | Use<br>unspent<br>AMI Fund | Roll into<br>2014<br>GRC | 0   |
| Customer inquiry                 | Use<br>unspent<br>AMI Fund | Use<br>unspent<br>AMI Fund | Roll into<br>2014<br>GRC | 0   |
| Billing, Revenue,<br>Credit      |                            | 107.0                      | Roll into<br>2014<br>GRC | 107.0   |
| IT                               | 2293.2                     | 706.8                      |                          | 3,000.0   |
| Program operation                | 153.5                      | 624.1                      | Roll into<br>2014<br>GRC | 777.6   |
| M&E                              | 385.0                      | 1,295.0                    | Roll into<br>2014<br>GRC | 1,680.0   |
| Total                            | 2,831.7                    | 2,732.9                    |                          | 5,564.6   |

## II. PROCEDURAL HISTORY

PG&E proposed PTR as part of a Smart Meter upgrade in A.07-12-009. In that proceeding, PG&E requested \$572 million in upgrade costs to its Advanced Meter Infrastructure (“AMI”) project.<sup>3</sup> PG&E’s application, in that proceeding, forecasted that PTR would deliver significant benefits to PG&E’s residential customers, which justified the significant costs to upgrade PG&E’s AMI.<sup>4</sup> The Commission approved PG&E’s AMI proposal in D.09-03-026. Subsequently, PG&E filed A.10-02-028 on February 2010. In that February 2010 testimony, PG&E noted that it agreed with the Commission

<sup>2</sup> Reflect PG&E update/correction on program operation (demand responses) as shown in Exhibit PG&E-5 & 6.

<sup>3</sup> The present value revenue requirement (“PVRR”) associated with the \$572 million incremental cost is \$841 million. D.09-03-026, p. 5 & p. 23-24. Ex. DRA-4

<sup>4</sup> Ex. DRA-4, p.23-24, 152-153.

that “the PTR program will encourage residential customers to reduce their peak period usage on peak days.”<sup>5</sup> PG&E served updated testimony in this proceeding on July 16, 2010, and then on October 28, 2011. PG&E’s October 28, 2011 testimony proposed not moving forward with PTR. DRA served its testimony on March 13, 2012, and PG&E served its rebuttal on April 3, 2012.

### **III. SHOULD THE CPUC PROCEED WITH PTR ON THE CURRENT SCHEDULE?**

PG&E should proceed with its proposed partial PTR rollout in 2013 and complete PTR rollout in 2014. PTR is a customer friendly program that will lead to reduction of load during times of high electricity usage (i.e., “peak times”). The CPUC previously ordered PG&E to upgrade its Smart Meters, with the expectation that the PTR program would deliver benefits to PG&E customers and reduce load. Further, California’s other two large electric utilities, Southern California Edison Company (“SCE”) and San Diego Gas and Electric (“SDG&E”), have already moved forward with PTR programs. Recently, the Commission issued its Demand Response Decision indicating that PTR would deliver significant load reduction for both SCE and SDG&E.<sup>6</sup> SDG&E’s PTR program is expected to produce between 69 and 71 MW of peak load reduction between 2012 and 2014. SCE’s PTR program is expected to produce between 332 and 371 MW of peak load reduction over the same period.<sup>7</sup> Further, as discussed in more detail below, all other evidence to date demonstrates that PTR will immediately lead to load reduction, and a positive customer response.

Unlike DRA, PG&E now makes its primary recommendation that PTR should not be implemented because the company prefers other dynamic pricing programs, particularly its current optional residential Critical Peak Pricing (“CPP”) program (called “SmartRate”). PG&E also questions the benefits of PTR and whether or not customers

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<sup>5</sup> See PG&E’s February 26, 2010 testimony in this proceeding, p. 1-3.

<sup>6</sup> D.12-04-045, Appendix B.

<sup>7</sup> Id.

will like the program. PG&E thinks a delay would be beneficial because the Commission should reassess its vision of the future of rate design before proceeding with a PG&E PTR program. PG&E's concerns are without merit, and the company should be ordered to proceed with PTR in 2013 and 2014 and to exert its best efforts to make the program succeed.

#### **A. The SMU Decision**

PG&E should be held accountable for delivering the ratepayer benefits projected in its SmartMeter Upgrade Proceeding. Indeed, one of the reasons why DRA advocates that PG&E proceed with its PTR program is because PTR provided the justification for PG&E's Smart Meter upgrade. In Application (A.) 07-12-009, PG&E requested \$572 million in upgrade costs to its Advanced Meter Infrastructure ("AMI") project.<sup>8</sup> The Commission authorized \$467 million incremental costs<sup>9</sup> The Commission should deny PG&E's request to forgo implementation of default PTR because ratepayers would be deprived the benefits that PG&E claimed PTR would generate. In requesting \$572 million-upgrade costs to its Advanced Meter Infrastructure ("AMI") project, PG&E claimed that the upgrade project would provide \$222 million net present value benefit<sup>10</sup>.

In other words, PG&E's projections indicated that the upgrade project would be cost-effective. The Commission agreed, but the adopted costs and benefits were more conservative, with the PVRR net benefits estimated at about \$31 million.<sup>11</sup> PG&E's projections included \$290 million in PTR benefits<sup>12</sup> and the Commission adopted \$263 million in PTR benefits.<sup>13</sup> Clearly, not implementing PTR would easily erase the mere \$31 million in net benefits that the Commission projected. Therefore, if the Commission

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<sup>8</sup> The present value revenue requirement ("PVRR") associated with the \$572 million incremental cost is \$841 million. D.09-03-026, p. 5 & p. 23-24. Ex. DRA-4.

<sup>9</sup> D.09-03-026, p. 152.

<sup>10</sup> PG&E estimated \$841million PVRR incremental costs and \$1,063 million. D.09-03-026, pp. 23-24.

<sup>11</sup> D.09-03-026, p. 153.

<sup>12</sup> D.09-03-026, p. 24, p. 134.

<sup>13</sup> D.09-03-026, p. 134, p. 153.

agrees with PG&E to forgo PTR now, the whole Upgrade project becomes non-cost-effective. Based on PG&E's numbers, that project would generate a net loss of \$41 million.<sup>14</sup> Based on the Commission's adopted number, it would result in a net loss of \$204 million under PG&E's "vision."<sup>15</sup>

PG&E now proposes to instead rely on an opt-in SmartRate to substitute for these foregone PTR benefits. Yet, SmartRate cannot be used to justify PG&E's AMI upgrade because the same opt-in program already was used to justify PG&E's original AMI proposal in A.05-06-028.

PG&E should be held accountable for the promise that it claimed the project would deliver. The company convinced the Commission to add \$467 million in rates for the smart meter upgrade. The money has been spent. Now PG&E wants to back out of PTR, which would result in the project losing \$204 million. This could cause more rate increases in the future, to the extent that projected AMI benefits fail to be realized.

PG&E supported its AMI upgrade to the Commission based upon PG&E's projection of widespread customer participation in PTR with significant demand response produced by a robust default residential PTR program. D.09-03-026, states:

The [default] PTR program does not require customers to enroll, however awareness of a critical peak event (the day and time period that PTR as well as CPP will be in effect) is critical to achieve both customer bill rebates and DR resources. PG&E estimates that approximately 50% of residential customers will need to be aware of critical peak events in order to achieve anticipated PTR benefits. According to PG&E, awareness is not an indication of a

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<sup>14</sup> PG&E estimated upgrade net of PTR cost: \$841 million - \$28 million = \$813 million (PVRR); PG&E estimated Upgrade project net of PTR benefit: \$1,063 million - \$290 million = \$773 million (million, PVRR). Therefore, the Upgrade project without PTR results in a net loss of \$40 million, which equals \$773 million - \$813 million

<sup>15</sup> The Commission's adopted Upgrade net of PTR cost: \$749 million - \$28 million = \$721 million.(PVRR) The Commission adopted Upgrade net of PTR benefit: \$780 million - \$263 million = \$517 million.(PVRR) The end result is that the Commission's adopted Upgrade project becomes a net loss of \$204 million if PTR is removed (\$517 million - \$721 million).

committed effort. Instead, it provides a proxy for “participation” in the determination of average benefits.<sup>16</sup>

In that proceeding, PG&E testified that it could obtain a 50% customer awareness level within a default residential PTR program. Based on this assumption, PG&E projected 260 MW of peak load reduction in 2012 for its default residential PTR program.<sup>17</sup> This value is comparable to the estimates for SDG&E’s and SCE’s PTR programs contained in Appendix B of D.12-04-045.

In addition to PG&E, both SCE and SDG&E justified their AMI proposals partially on the basis of significant peak load reductions produced by a robust AMI-enabled residential PTR program. In particular, SDG&E projected a 2011 residential PTR impact of 105 MW<sup>18</sup>, which, on a per customer basis, is larger than that estimated by PG&E.<sup>19</sup> SDG&E had a pilot PTR program in the summer of 2012 and will have a full PTR rollout in 2013. SCE will also begin PTR implementation in 2012.

## **B. PTR Pilot Results**

Pilot PTR programs confirm that PTR will be a successful program. Both DRA and PG&E discuss evidence from recent PTR pilots.<sup>20</sup> DRA presented a chart from a

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<sup>16</sup> D.09-03-026, p. 74.

<sup>17</sup> D.09-03-026, p. 128. While PG&E projected a 260 MW peak load reduction from default residential PTR, D.09-03-026 appears to have adopted a modestly lower figure. Per p.133 of D.09-03-026, “we adopt PTR savings through 2030 in the amount of 5,714 MWs as opposed to PG&E’s forecasted amount of 6,307 MWs.” This amounts to a reduction of just under 10% in PG&E’s projected residential PTR aggregate peak load reduction over the multiyear analysis period. Applied to PG&E’s single-year (2012) estimate of 260 MW, the adjustment adopted in D.09-03-026 would yield a projected peak load reduction of 235 MW for 2012.

<sup>18</sup> Ex. DRA-8, p. SG-12, Table SSG-6-4, testimony of Dr. Stephen S. George in SDG&E’s AMI proceeding, A.05-03-015. Dr. George also testified as a rebuttal witness for PG&E in the current PG&E PTR proceeding, A.10-02-028.

<sup>19</sup> SDG&E has about 1.2 million residential electric customers. Assuming half of them would be aware of PTR events (as assumed for PG&E in D.09-03-026), SDG&E’s projection of 105 MW amounts to 175 watts of peak load reduction per active participant. A similar calculation based on PG&E’s larger 4.5 million customer population yields 104 watts per active participant. For comparison purposes, based on data in PG&E’s OP 3 Report (Ex. DRA-3), the response per participant (assuming 100% of those enrolled are active participants) is 235 watts.

<sup>20</sup> Ex. DRA-1, pp. 1-2 and 1-3; Ex. PG&E-2, pp .9-6 through 9-13.

database including 17 PTR studies and 41 CPP studies. DRA noted that the peak load reductions from the two types of programs were comparable. Further, 15 of the 17 PTR studies produced peak load reductions of 10 percent or more<sup>21</sup>. Finally, DRA’s witness noted the absence of reported accuracy problems or customer dissatisfaction with PTR<sup>22</sup>. On the contrary, one utility, Baltimore Gas & Electric (BGE), reported that its customers strongly preferred PTR when it discontinued its parallel CPP study and shifted those customers to PTR.<sup>23</sup> BGE plans to implement default PTR for its entire residential customer population in the near future.<sup>24</sup>

PG&E’s rebuttal discusses five side-by-side pilots of CPP and PTR. While most of these indicated a smaller demand response for PTR relative to that for CPP, all five PTR programs produced at least a 10% peak load reduction per participant or per “event-responder”.<sup>25</sup>

PG&E’s witness also discussed the SDG&E 2011 PTR pilot, and the fact that its results were affected by San Diego’s unusually cool 2011 summer season. Unfavorable weather conditions made it difficult to draw conclusions about the amount of demand response obtained.<sup>26</sup> Nonetheless, SDG&E believes that its PTR pilot was successful, and plans to go forward with its planned full PTR implementation in 2012.<sup>27</sup>

In summary, there is no indication from these pilots that PTR is ineffective in producing demand response, nor is there any indication of customer dissatisfaction or of utility complaints over PTR baseline accuracy.

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<sup>21</sup> DRA/Levin, 4 RT 588, lines 5-8.

<sup>22</sup> DRA/Levin, 4 RT 603, line 23 – 604, line 1.

<sup>23</sup> DRA/Levin, 4 RT 603, lines 8-20.

<sup>24</sup> PG&E/George, 4 RT 535, lines 14-26.

<sup>25</sup> Ex. PG&E-2, p.9-10, Table 9-1 and Q&A 16 beginning p. 9-11.

<sup>26</sup> PG&E/George, 4 RT 523, line 25 through 524, line 13.

<sup>27</sup> PG&E/George, 4 RT 522, lines 9-11.

## **C. Advantages or Disadvantages of Delaying PTR**

### **1. Long Term Residential Rate Vision**

DRA believes that PTR can be part of the Commission's long-term residential rate design vision. PTR is a customer friendly program that can reduce significant peak load. Further, there is no reason that PTR cannot coexist with other rate programs, which are also designed to further reduce load, while also considering customer preference. For instance, PTR can coexist with either a tiered rate structure or a time of use ("TOU") rate structure because the rebate it offers is independent of how particular rate designs allocate and recover marginal demand costs. There is certainly no reason the Commission should delay implementation of PG&E's PTR program until it has decided what the longer term residential rate design vision should be, either through a Rulemaking or other proceeding. The Commission has already ordered SCE and SDG&E to proceed with PTR, and forecasts significant load reduction from these utilities' residential PTR programs in the latest demand response proceeding as discussed below.

PG&E does not think that PTR should be in its long term residential rate vision. PG&E prefers its CPP program, SmartRate, as an optional rate for interested customers. PG&E also believes that tiered rates or TOU rates also could be on the "rate menu" for the future.<sup>28</sup> While DRA does not oppose optional SmartRate, the evidence indicates this program has had very limited success, even after aggressive marketing by PG&E. SmartRate is not a substitute for a default PTR program, and does not make the best use of SmartMeters, which have already been installed for 4 million residential customers. Further, PG&E provides no reason why PTR cannot be a permanent program if it is shown to reduce load.

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<sup>28</sup> Ex. PG&E-2, p. 1-2; PG&E/Zelmar, 1 RT 116, lines 17-25.

## **2. SDG&E Full Rollout**

While DRA supports PG&E implementing PTR in 2013 and 2014, PG&E wants the Commission to review the results of SDG&E's 2013 rollout before ordering PG&E to proceed with PTR.<sup>29</sup> PG&E's argument is without merit. The Commission has authorized SDG&E to proceed with PTR following the SDG&E 2012 partial PTR rollout. Further, the Commission already is projecting PTR benefits for SDG&E and SCE. Therefore, there is no need to wait for SDG&E's implementation to see whether customers will respond positively to PTR. As discussed below, we already know from both the Brattle Group analysis and the BG&E experience, that there has not been customer resistance to PTR. Moreover, it will lead to significant demand response, just as PG&E, SCE, and SDG&E predicted in their respective SmartMeter and SmartMeter upgrade applications.

## **3. Demand Response Benefits of PTR compared with Other Alternatives**

PTR will provide significant system wide demand response benefits, particularly in comparison to PG&E's proposed opt-in SmartRate, which will not produce significant load reduction before, at best, late in the decade. DRA believes that demand response under default PTR will be both more significant and more timely than under SmartRate. PG&E states: "the proposed opt-in approach for time-varying pricing can effectively achieve significant reliable and predictable load reduction without...default PTR."<sup>30</sup> This is largely speculation on PG&E's part. First, PG&E does not define what it considers "significant" load reduction. The low propensity of customers to volunteer for CPP is the Achilles heel of opt-in CPP programs such as SmartRate. PG&E proudly trumpets its SmartRate program as the largest residential opt-in CPP in the United States.<sup>31</sup> Yet, at

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<sup>29</sup> Ex. PG&E-2, p. 1-4.

<sup>30</sup> Ex. PG&E-2 at 2-1.

<sup>31</sup> Ex. PG&E-2, Chapter 2, attachment 1, p. 7.

22,136 participants, it comprises less than 0.5% of PG&E’s residential customers.<sup>32</sup> So, the big advantage of PTR is that it is a default program that cannot adversely impact customers’ existing bills, yet it yields a per participant response comparable to opt-in CPP.

According to PG&E’s “Report on Compliance With D.11-11-008 OP3” (“OP3 Report”), the company’s 22,136 current SmartRate customers are expected to provide 5.2 MW of load relief<sup>33</sup>, which only is about 0.025% of PG&E’s projected 22,000 MW peak load under 1-in-2 summer conditions<sup>34</sup>. Clearly, customers are not enthusiastic about SmartRate. PG&E’s OP 3 Report states that 4.2% of the initial target population volunteered for SmartRate in 2008 and 2009.<sup>35</sup> Some of these initial SmartRate recruits were offered \$50 sign up incentives.<sup>36</sup> Since then, the success of SmartRate recruiting has not improved. In 2011, PG&E sent about 3.5 million direct mail and/or targeted hand delivered communications.<sup>37</sup> This campaign resulted in 1,391 new SmartRate enrollments.<sup>38</sup> As of year end 2011, there were fewer customers on SmartRate than at year end 2009. In summary, there is simply no “strong empirical evidence” that opt-in CPP can achieve a high-enough level of customer participation to produce significant aggregate peak demand reduction.<sup>39</sup>

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<sup>32</sup> PG&E has 4.5 million residential customers. Ex. PG&E-2, p. 2-3.

<sup>33</sup> Ex. DRA-3, Table 2-3, p. 12.

<sup>34</sup> Source, table from 2010 LTPP  
<http://www.cpuc.ca.gov/PUC/energy/Procurement/LTPP/LTPP2010/2010+LTPP+Tools+and+Spreadsheets.htm>

<sup>35</sup> Ex. DRA-3, p. 30, Table 3-4.

<sup>36</sup> Ex. DRA-3, pp. 14, 30.

<sup>37</sup> Ex. PG&E-20, p. 20.

<sup>38</sup> Id.

<sup>39</sup> PG&E’s Rebuttal (Ex. PG&E-2, p.9-18) cites high voluntary participation in several TOU programs in Arizona. TOU is vastly different than CPP in that it involves predictable rates with far less punitive peak period prices than CPP. Arizona’s TOU rate designs are far simpler than SmartRate (at least, in the case of the Salt River Project, which does not use tiered TOU rates). Customers understand and like TOU rates. In short, high participation in Arizona’s voluntary TOU rates has absolutely no bearing on PG&E’s

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In contrast, the evidence indicates that PTR is likely to have higher aggregate demand response than opt in SmartRate. DRA has presented evidence that the demand response per participant, among 17 PTR studies represented in a Brattle Group pricing study database, is comparable to that produced by the CPP studies in the same database.<sup>40</sup> DRA notes that the median peak demand reduction among the 10 Brattle database PTR studies was 15% (without technology) to 17% (without technology) among the 22 CPP studies.<sup>41</sup> Unlike opt-in SmartRate, however, nearly all of PG&E's customers would be enrolled in PTR unless they opt out. So there will be much higher participation. Clearly the aggregate peak demand reduction depends on *both* the demand response per participant and the number of active participants.

Table 1 below shows the peak load reductions estimated for various PTR projections. Table 2 shows similar statistics for various SmartRate growth scenarios. Of note, at full PTR rollout (now expected in 2014), PTR is anticipated to achieve 235 MW of peak demand reduction according to estimates adopted in D.09-03-026. In contrast, under PG&E's aggressive marketing plans to quadruple SmartRate enrollment by 2013<sup>42</sup>, PG&E could achieve at best about 23.5 MW, 10% of the demand response available from a full PTR rollout.

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ability to achieve high participation in PG&E's opt-in SmartRate program. For further comparison of the features of TOU vs. CPP, see DRA's May 2011 white paper, "Time-Variant Pricing for California's Small Electric Consumers".

<sup>40</sup> Ex. DRA-1, pp. 1-2 and 1-3. DRA's testimony cites a Brattle Group, Inc. dynamic pricing database of 109 pricing studies.

<sup>41</sup> In PG&E's rebuttal testimony in A.10-02-028, filed April 3, 2012, PG&E's rebuttal witness Dr. Steven George took issue with the appropriateness of DRA's median-to-median comparisons. DRA concedes that such comparisons may suffer from some of the weaknesses alleged by PG&E's witness. However, it is incontrovertible that 15 of the 17 PTR studies in the Brattle database produced peak reductions of 10% or more.

<sup>42</sup> PG&E expects to have 100,000 customers on SmartRate in 2013. PG&E/Olsen, 2 RT 303, lines 22-25.

**Table 1: Demand Response from Various PTR Programs**

| Program                                  | Type | Participants | Active Participants | Expected Load Drop (MW) |     | Load Drop per Active Participant (watts) |     |
|--|------|--------------|---------------------|-------------------------|-----|--|-----|
| PG&E per D.09-03-026 (2012)              | PTR  | 4,500,000    | 2,250,000           | 235                     | (1) | 104.4                                    | (5) |
| PG&E, 10% rollout (2013)                 | PTR  | 420,000      | 210,000             | 21.9                    | (2) | 104.4                                    | (6) |
| PG&E, 100% Rollout (2014)                | PTR  | 4,500,000    | 2,250,000           | 235                     | (3) | 104.4                                    | (7) |
| SDG&E per S. George (2011) (A.05-03-015) | PTR  | 1,200,000    | 600,000             | 105                     | (4) | 175.0                                    | (8) |

Notes for Table 1:

- (1) D.09-03-026, p. 128, PG&E's estimated PTR demand response for 2012, (260 MW), less adopted 9.5% downward adjustment (p. 133, ratio of 5,714 MW to 6,305 MW).
- (2) 104.4 watts per active participant x 210,000 active participants
- (3) 104.4 watts per active participant x 2,250,000 active participants
- (4) Testimony of S. George dated July 14, 2006, in A.05-03-015, Table SSG 6-4, p. SG-12
- (5) 235 MW divided by 2,250,000 active participants
- (6) see (5)
- (7) see (5)
- (8) 105 MW divided by 600,000 active participants; 50% assumed aware

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**Table 2: Projections of Demand Response from SmartRate**

| Program                                  | Type | Participants | Active Participants | Expected Load Drop (MW) |     | Load Drop per Active Participant (watts) |     |
|--|------|--------------|---------------------|-------------------------|-----|--|-----|
| PG&E, SmartRate, OP 3 Report (Dec. 2011) | CPP  | 22,136       | 22,136              | 5.2                     | (1) | 234.9                                    | (4) |
| PG&E, SmartRate (2014) Goal              | CPP  | 100,000      | 100,000(a)          | 23.5                    | (2) | 234.9                                    | (5) |
| PG&E, SmartRate Hypothetical (2020) Goal | CPP  | 1,000,000    | 450,000(b)          | 105.7                   | (3) | 234.9                                    | (6) |

Notes for Table 2:

- (a) PG&E SmartRate recruitment goal for 2014
- (b) Active participation limited, per S. George testimony, to 10% of PG&E’s residential customers who are “event-responders”
- (1) OP 3 Report, Table 2-3
- (2) 234.9 watts per active participant x 100,000 active participants
- (3) 234.9 watts per active participant x 450,000 active participants
- (4) 5.2 MW / 22,136 SmartRate customers
- (5) see (4)
- (6) see (4)

PG&E’s change of heart on PTR is based largely on testimony of its rebuttal witness in this proceeding. Dr. Steven George testified as follows:

Evidence from the ComEd pilot as well as from the recent SDG&E default PTR pilot, shows that, under default PTR (and also under default CPP), there is a relatively small group

of customers, roughly 10 percent, who can be identified as “event responders,” and the remaining customers that are “on the rate” provide little or no measurable load reduction.<sup>43</sup>

Yet applying that 10% “event responder” hypothesis to PG&E’s 4.5 million residential customers would lead one to conclude that about 450,000 PG&E customers are potential “event responders”. This suggests that, the current SmartRate population of 22,136 customers would need to expand by a factor of about 20 to yield 450,000 “event-responders”. The implication of PG&E’s new “event responder” hypothesis for PG&E’s aggregate residential demand response potential limits it to about 105 MW, which is 20 times the current 5.2 MW SmartRate estimate.

PG&E’s “event responder” hypothesis begs the question: If the potential demand response from residential CPP or PTR is limited to about 105 MW because only 10% of the customer population consists of “event responders”, where is the remaining 130 MW of the 235 MW peak demand reduction adopted in D.09-03-026 going to come from? Indeed, in the Upgrade proceeding, PG&E claimed PTR peak demand response of 250 MW was incremental to its CPP (or SmartRate) demand response that was projected in the original AMI proceeding.<sup>44</sup>

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<sup>43</sup> Ex. PG&E-2, p. 9-13.

<sup>44</sup> “The PTR benefits are calculated by PG&E with the same price elasticities as the CPP program using the model developed from the AMI business case in A.05-06-028. The model in this application assumes a total participation rate on both PTR and CPP of 50 percent of the residential customer sector based on PG&E’s proposed awareness marketing. Estimated CPP participation is subtracted out annually and **the residual MW reduction is estimated as the incremental DR benefit attributable to the PTR program.** PG&E forecasts avoided capacity of 6,307 MW through 2030.” D.09-03-026, p.122, emphasis added.

**Table 3: Implications of PG&E’s “Event-Responder” Hypothesis for PG&E’s Residential Demand Response Potential**

| Program  | Type | Participants | Active Participants | Expected Load Drop (MW) |     | Load Drop per Active Participant (watts) |     |
|--|------|--------------|---------------------|-------------------------|-----|--|-----|
| PG&E, SmartRate, OP 3 Report (Dec. 2011)                       | CPP  | 22,136       | 22,136              | 5.2                     | (1) | 234.9                                    | (4) |
| PG&E per D.09-03-026 (2012)                                    | PTR  | 4,500,000    | 2,250,000           | 235                     | (2) | 104.4                                    | (5) |
| PG&E SmartRate Maximum Pot <sup>1</sup> 10% “event-responders” | CPP  | 1,000,000    | 450,000(a)          | 105.7                   | (3) | 234.9                                    | (6) |

Notes for Table 3:

- (a) Active participation limited to 10% of customers who are “event Responders”
- (1) PG&E OP 3 Report, Table 2-3, p. 13
- (2) D.09-03-026, p.128, PG&E's estimated PTR demand response for 2012, (260 MW), less adopted 9.5% downward adjustment (p.133, ratio of 5,714 MW to 6,305 MW).
- (3) 234.9 watts per "event-responder" x 450,000 "event responders"
- (4) 5.2 MW divided by 22,136 participants
- (5) 235 MW divided by 2,250,000 active participants
- (6) see (4)

On Day 1 of the hearings, ALJ Roscow asked: “if the Commission were to cancel the PTR program, what would be the loss in terms of demand reduction by virtue of that program being canceled?”<sup>45</sup> In response, PG&E provided a “current rough high” PTR

<sup>45</sup> ALJ Roscow, 1 RT 83 lines 2-6.

impact estimate of 108 MW and a “current rough low” PTR impact estimate of 48 MW.<sup>46</sup> These results compare quite unfavorably to PG&E’s “Smart Meter Upgrade Estimated PTR impact” of 268 MW.<sup>47</sup> Furthermore, PG&E’s demand response estimates for PTR compare quite unfavorably to the “ex ante” PTR estimates for SDG&E’s and SCE’s PTR programs adopted very recently in D.12-04-045. That Decision projects that SDG&E’s PTR program will produce between 69 and 71 MW of peak load reduction between 2012 and 2014 and SCE’s PTR program will produce between 332 and 371 MW of peak load reduction over the same period.<sup>48</sup>

PG&E’s most recent PTR demand response estimates are heavily caveated and are “sure to be fraught with uncertainty due to still incomplete information”.<sup>49</sup> Therefore, these estimates should be accorded little weight. PG&E’s “high case” estimate of 108 MW is very close to the 105 MW that DRA derived in Table 3 by applying PG&E’s “10% event responder” theory.<sup>50</sup> However, this theory is supported by only two studies, one of which, the SDG&E pilot, was conducted under unfavorable weather conditions. As recently as 2009, PG&E’s witness characterized 30% of residential customers as “high responders”.<sup>51</sup> Given this information, DRA recommends that PG&E’s 108 MW estimate be regarded as a lower bound on the performance of a fully implemented PTR program. DRA sees no solid evidence to indicate that substantially higher values cannot be achieved.

Further, PG&E has testified that, if directed to implement PTR, it can fully roll out PTR to essentially all of its residential customers in 2014. Therefore, with the above information, if PG&E is allowed to halt PTR implementation, the Commission will likely

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<sup>46</sup> Ex. PG&E-18, p. 3.

<sup>47</sup> Id.

<sup>48</sup> D.12-04-045, Appendix B.

<sup>49</sup> Ex. PG&E-18, p. 2.

<sup>50</sup> Ex. PG&E-2, pp. 9-11 to 9-14.

<sup>51</sup> Ex. DRA-9, attachment “Smart Pricing for a Smart Grid World” by Stephen S. George, slide 11.

forego at the very minimum 108 MW of demand response in 2014, but more likely a much higher amount.

PG&E states: “It is very possible the Commission would be giving up little, if anything, if PG&E’s proposal were adopted”.<sup>52</sup> This statement simply isn’t credible. Table 2 shows projected 2014 demand response from a hypothetically wildly successful SmartRate marketing campaign assumed to expand to 100,000 participants from the current 22,136 participants. Scaling up the 5.2 MW<sup>53</sup> from the current SmartRate program results in a 2014 SmartRate demand response of 23.5 MW<sup>54</sup>, which is half of PG&E’s extremely conservative 48 MW PTR low case and less than 25% of PG&E’s 108 MW PTR estimate. Contrary to PG&E’s conclusion, DRA concludes that, in all likelihood, the Commission would indeed be giving up substantial demand response in 2014 (and beyond) if it allows PG&E to halt deployment of PTR.

As discussed above, D.12-04-045, Appendix B, states that SDG&E's PTR is expected to produce 69 MW in 2012 and 71 MW in 2014. SCE's PTR is expected to produce 332 MW in 2012 and 356 MW in 2014. In contrast, PG&E's low case projection for PTR demand response is 48 MW and its high case is 108 MW<sup>55</sup>. There is no evidence on the record to indicate that PG&E's PTR results should be materially different from SCE's or SDG&E’s on a per capita basis. Assuming that the Commission's just-adopted forecasts of demand response from PTR are not wildly inflated, it is clear that PG&E's forecasts are too pessimistic.

#### **4. Customer Impacts and Satisfaction**

In deciding whether or not to proceed with PTR, the Commission should consider customer preference for a reward-only program as opposed to a program with potential

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<sup>52</sup> Ex. PG&E-18, p. 4.

<sup>53</sup> Ex DRA-3.

<sup>54</sup> 23.5 MW = 5.2 MW x 100,000 customers / 22,136 customers.

<sup>55</sup> Ex. PG&E-18, p. 3.

stiff penalties of 60 cents per kilowatt-hour of usage that will not provide as much aggregate load reduction as PTR. PTR's advantages include the fact that 1) there is no risk of higher bills for individual customers on PTR, 2) there is no need for customers to sign up and commit to the PTR program, 3) PTR customers have complete flexibility to use energy as needed for comfort and health, without penalty beyond normal rates, and 4) there is no need to have a minimum number of events, since events actually can be based on need<sup>56</sup>. DRA's evidence indicates that PTR would be preferred by customers; PG&E does not have any evidence that customers have been or would be dissatisfied with PTR.

For instance, DRA's testimony cited a presentation by Baltimore Gas and Electric Company<sup>57</sup> ("BGE") dated November 5, 2009, which summarizes BGE's successful PTR rollout.<sup>58</sup> This presentation, discussed a pilot of CPP and PTR conducted in 2008 and 2009 and states the following findings:

- Price elasticities for DPP [i.e., CPP] and PTR were not statistically different<sup>59</sup>
- On average customers save
  - 22 –37% at peak conditions
  - 18 –33% during 50 critical hours
- More customers were very satisfied with PTR (66%) than with CPP (48%)
- Most (81%) PTR participants think PTR should be standard (default) pricing

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<sup>56</sup> DRA/Levin 4 TR 602 lines 11-26.

<sup>57</sup> Baltimore Gas& Electric serves 1.2 million customers in Maryland.  
<http://www.bge.com/aboutbge/pages/default.aspx>

<sup>58</sup> Ex. PG&E-17, attachment to DRA's response to Q.B.

<sup>59</sup> The Commission basically said the same thing in PG&E's Smart Meter Upgrade decision (D.09-03-026, p. 133.): "With respect to TURN's proposed 30% elasticity adjustment, we are convince by PG&E's arguments that there is no statistically significant difference between the impacts expected from CPP and PTR incentives when estimated based on data from a side-by-side comparison of the two options for the same customer population, and the Anaheim study produced PTR program impacts nearly identical to the estimated impacts using the demand models from the SPP. We will therefore not adopt TURN's recommended adjustment."

- BGE’s experience suggests adding PTR to the mix
- BGE decided to pilot only PTR in 2009 and filed a model tariff that includes PTR for all residential customers

In Slide 14 of the BGE presentation, BGE compares the results of the 2009 pilot (PTR only) with the 2008 pilot, which included both PTR and CPP. Slide 14 states:

“Preliminary Results for 2009 Compare Favorably to 2008

- Persistence
- Satisfaction
- Interest in continuing the pricing structure
- Belief that PTR should be the default structure

Peak Time Rebate was Widely Favored.”

DRA believes that BGE’s experience indicates that a greater percentage of customers will respond favorably to PTR than to CPP (whether opt-in or default).

Further, as noted in PG&E’s OP 3 Report:

“Unlike SmartRate, **PTR is a completely risk-free option for consumers** in that bills do not increase if customers do not respond to the price incentive, but bills can decrease if customers reduce their use during event hours below a threshold level separately calculated for each PTR event day for each individual customer.”<sup>60</sup>

In addition to being riskless for customers, PTR offers the customer far greater flexibility than CPP. SmartRate customers cannot opt out of specific CPP events<sup>61</sup>. This can be problematic in the event of a sudden illness or unexpected visit of elderly or very young relatives. In contrast, a customer on PTR always has the option to use energy as needed to protect the health and comfort of the household, without an economic penalty beyond payment of the customer’s normal energy rate.

Despite the fact that PTR is “a completely risk-free option for consumers” PG&E does not believe PTR is actually in its customers’ best interests anymore and that it will

<sup>60</sup> Ex. DRA-3, p. 16, emphasis added.

<sup>61</sup> PG&E/Pease 1 RT 25, lines 25-27.

cause these customers “confusion and resentment” towards PG&E.<sup>62</sup> PG&E belief that customer will not be happy with PTR is based on two factors: 1) customer may like PTR so much that they will be dissatisfied if they are later switched to a “carrot and stick” program and 2) because “of inherent inaccuracies in the customer-specific reduction level” (“CRL”) caused by variation in day to day usage.<sup>63</sup> These concerns are not valid reasons to not proceed with PTR.

First, there is no reason that PTR has to be a transitional program. PG&E is not even proposing default CPP rates so there is no indication that customer would have to ever leave PTR once it begins. As DRA testified, “based on these commission findings [in D.08-09-039 and D.09-03-026] and accumulating evidence from recent PTR and CPP studies, there is no reason to presume a priori the longer term desirability of phasing out PTR in favor of CPP, PDP (or RTP) for residential customs.”<sup>64</sup> At hearings, PG&E conceded that PTR does not have to be an interim step.<sup>65</sup>

Second, DRA does not believe the problems with the CRL are so serious that they would cause customer dissatisfaction. At hearings, DRA’s witness was asked about possible customer dissatisfaction with not getting a rebate he thought he should get. He testified,

I’m stuck by the fact that there has not been much customer dissatisfaction. In fact, I’m not aware of really any customer dissatisfaction with the at least 17 trials of PTR around the country. So to me, it’s just a theoretical possibility.<sup>66</sup>

PG&E asked DRA’s witness if he was “aware that from the Baltimore Gas & Electric, not a hundred percent of customers were satisfied with the PTR program?” and

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<sup>62</sup> Ex. PG&E-2, p. 2-2.

<sup>63</sup> Ex. PG&E-2, pp. 2-2 to 2-3.

<sup>64</sup> Ex. DRA-1, p.1-7.

<sup>65</sup> PG&E/Zelmar, 1 RT 120, lines 13-17.

<sup>66</sup> DRA/Levin, 4 RT 616-617, lines 25-8, lines 1-3.

that “some of those customers might have been dissatisfied customers, might they not?” DRA testified, “97 percent of the customers on both those rates, actually CPP and the PTR, were satisfied enough that they would stay on the program.”<sup>67</sup> Further, the Commission has ordered SDG&E to continue its PTR program, an indication that the Commission has confidence in this program. Unlike PTR, SmartRate is not customer friendly and has significant disadvantages for individual customers. Customers need to make a commitment to SmartRate to make it work<sup>68</sup>. There is also a great risk of month-to-month bill volatility and the risk of much higher bills after bill protection expires. Finally, SmartRate is not “simple enough to be effectively understood,” as PG&E testified.<sup>69</sup> A SmartRate customer could be subject to 16 different rates depending on which tier of usage he is on, what time of year his usage is occurring, whether or not his usage is occurring on a “Smartday high price period” (an event day) or not.<sup>70</sup>

BGE’s side-by-side pilot of CPP and PTR provides supporting evidence of PTR’s customer friendliness; it elicited such a strong customer preference for PTR that BGE discontinued the CPP portion of the pilot. Because of its intrinsic customer-friendliness, DRA believes that PTR can attract many more active participants than CPP, which also will lead to more load reduction system wide as discussed above.

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<sup>67</sup> DRA/Levin, 4 RT 616, lines 4-16.

<sup>68</sup> DRA/Levin, 4 RT 601, lines 5-10.

<sup>69</sup> Ex. PG&E-2, p. 1-2.

<sup>70</sup> The SmartRate tariff specifies a 60 cents/kWh surcharge that applies during event periods, and a 3 cents/kWh credit that applies only in four of the six months during which critical peak events can occur, AND a 1 cent credit that applies all 6 months but only to upper tier usage. Thus a customer on Schedule E-1 with SmartRate gets eight different prices for the four months during which the 3-cent credit applies: (1) Four prices (representing the four tiers) during event periods, and (2) Four prices (representing the four tiers) during non-event periods. Plus one gets eight different corresponding prices for the two months when there are no 3-CENT credits. Ex. DRA-2 contains the E-1 tariff. A SmartRate customer’s bill is calculated using both the E-1 tariff and the E-RSMART tariff, which is attached to the back of PG&E’s OP3 Report (Ex. DRA-3.)

## 5. Accuracy and “Structural Benefitters”

PG&E’s justification for not implementing PTR because of possible “structural benefitters” greatly overstates importance of this issue, and ignores the fact that PG&E’s proposed SmartRate alternative has the same problems. “Structural benefitters” are customers whose distribution of energy use over time is such that they benefit from the rate program without having to change their energy usage pattern. PG&E’s rebuttal testimony discusses such “structural savings” attributable to PTR and alleges “structurally inherent CRL [customer reference level] inaccuracies.”<sup>71</sup> SmartRate also entails structural savings that could be of a similar magnitude to those of PTR if many structural benefitters could be induced to volunteer for SmartRate.<sup>72</sup> As PG&E’s OP 3 Report states:

The [SmartRate] credit means that SmartRate is not revenue-neutral for the entire service territory. Rather, it is structured to be revenue-neutral primarily for customers in the hotter climate zones where average usage is higher.<sup>73</sup>

If SmartRate *were* revenue-neutral for the entire service territory, the rate credits offered during non-CPP event hours would balance the 60 cent per kWh CPP-hour surcharge, and, with no change in customer usage, revenues would be the same as on the standard tariffs. That is the definition of “revenue-neutral”.

However, as PG&E states, SmartRate is not revenue neutral; “it is structured to be revenue-neutral primarily for customers in the hotter climate zones....”<sup>74</sup> This means that PG&E’s SmartRate credits are overly generous for everyone except for the target audience in “the hotter climate zones where average usage is higher.”

Under PG&E’s SmartRate tariff, a customer whose usage remains within the baseline quantity receives a nearly 3 cent per kWh credit off of the normal 12.845 cent

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<sup>71</sup> Ex. PG&E-2, p. 1-5 and p. 9-30.

<sup>72</sup> DRA/Levin, 4 RT 639 line 7 through RT 640 line 6; 5 RT 686, lines 14-20.

<sup>73</sup> Ex. DRA-3, p. 10.

<sup>74</sup> Ex. DRA-2, p. 10.

E-1 baseline rate, during all non-CPP hours during the months of June through September.<sup>75</sup> This amounts to a 23% discount for such usage. Of course, during CPP hours, the same customer would pay a 60 cent surcharge added to the normal E-1 rate, for a total rate of 72.845 cents per kWh.<sup>76</sup>

For many customers, especially those who live in cooler areas and do not have air conditioning, the added cost of SmartRate CPP surcharges is less than the savings due to the 3-cent (and, in some cases, 4-cent) SmartRate rate credits. Such customers are likely to be structural beneficiaries of SmartRate; they could save money on that program *without reducing or changing their pattern of usage*. In Tables 4, 5, and 6 in the attached Appendix to this brief, DRA estimates the overall percentage discount that would be provided to a hypothetical customer who uses exactly the baseline quantity of electricity in each hour of the May through October summer season. The SmartRate discounts for such customers would range from 7.1% to 10.4% of their summer bills.<sup>77</sup> Therefore, many SmartRate customers, such as those in coastal areas without air conditioning, would be structural beneficiaries if PG&E succeeds in promoting widespread adoption of SmartRate. There is no record on the potential aggregate amount of SmartRate structural savings, but it could be comparable to PG&E's estimate of the aggregate structural savings for default PTR.<sup>78</sup>

DRA does not dispute the PG&E's estimates of \$30-\$50 million in structural benefits related to the CRL.<sup>79</sup> However, the rate impacts are extremely mild (0.6 to 1%).<sup>80</sup> In its rebuttal testimony, PG&E presented further analysis of the CRL issue and

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<sup>75</sup> Ex. DRA-3, Appendix, "Smartrate Tariff"

<sup>76</sup> Id.

<sup>77</sup> The amount of the discount would depend on the number of called CPP events during the summer. The largest discount (10.4%) corresponds to 9 CPP events; the smallest (7.1%) to 15 events. DRA/Levin, 4 RT 617, lines 9-28.

<sup>78</sup> DRA/Levin, 4 RT 639, lines 1-8 though RT 640 lines 1-6.

<sup>79</sup> Ex. PG&E-1, p. 2-6.

<sup>80</sup> Id.

performed CRL simulations.<sup>81</sup> PG&E's simulation, described in apocalyptic terms,<sup>82</sup> does not arrive at a higher value for structural benefits; it merely confirms PG&E's earlier analysis. As another PG&E witness testified, PG&E has long been aware of this problem, and there is nothing new here.<sup>83</sup> In fact, Commission D.07-04-043, in SDG&E's Smart Meter upgrade, questioned the accuracy of the CRL calculation. Nevertheless, recognizing the benefits of the program, the decision authorized PTR to proceed.<sup>84</sup>

Dr. George, PG&E's witness in this PTR proceeding, was also a witness for SDG&E's proceeding where SDG&E advocated for PTR and consulted for PG&E in its AMI and AMI upgrade proceedings.<sup>85</sup> In the SDG&E proceeding, his testimony projected a PTR benefit of 105 MW for 2011.<sup>86</sup> Dr. George's testimony in this proceeding includes a simulation criticizing the CRL. Dr. George's simulation does not reveal anything that was not known before or could not have been discovered five years ago based on either load research data or data from the Statewide Pricing Pilot ("SPP")<sup>87</sup>. Dr. George could have had access to PG&E's load research data and the SPP load data. It has long been known that the CRL calculation has accuracy issues.<sup>88</sup> Dr. George could have and should have examined the accuracy of the CRL calculation prior to recommending PTR for SDG&E and supporting PTR for PG&E if this was a serious concern.<sup>89</sup> Nonetheless, it has been the expert consensus, including Dr. George's until

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<sup>81</sup> Ex. PG&E-2, pp. 9-21-9-29.

<sup>82</sup> Id.

<sup>83</sup> PG&E/Pease, 1 RT 94 through RT 96 line 21.

<sup>84</sup> D.07-04-043, pp. 52-53.

<sup>85</sup> PG&E/George, 4 RT 499 lines 16-28 through RT 500 line 1.

<sup>86</sup> Ex. DRA-8, p. SG-12, Table SSG 6-4.

<sup>87</sup> Ex. DRA-9 includes a presentation Dr. George made involving the Statewide Pricing Pilot.

<sup>88</sup> PG&E/Pease, 1 RT 94 line 22 through 1 RT 96 line 21.

<sup>89</sup> DRA/Levin, 5 RT 723, lines 5-28.

now, that concerns over the accuracy of the CRL do not outweigh the benefits of PTR.<sup>90</sup> The Commission should therefore accord little weight to Dr. George's "change of opinion."

Further, concerns over CRL accuracy are much less relevant to PTR-b customers, who have an automated, technology driven mechanism to allow them to reduce load on event days. With such equipment, the response is programmed into the device and thus is intentional. This better assures that a customer's load drop is not a random event. In summary, both PTR and SmartRate suffer from free-ridership issues; PG&E has not provided a convincing case that PTR has a more severe free-ridership issue than SmartRate or any other CPP program.

#### **6. Timing Relative to Generation Capacity Forecasts**

PTR will provide more timely demand response than SmartRate. This increased demand response is particularly important if the state has less generation than had previously been anticipated. There is now the potential for a prolonged shutdown of SCE's San Onofre Nuclear Generation Station ("SONGS"), which is the largest generator of electricity in southern California. Therefore, DRA now believes there could be an increased statewide need for demand response in 2013 and beyond. This increases the urgency of implementing PTR soon. With the 10% deployment of PTR proposed for 2013, PTR would produce nearly 4 times the demand response of the current SmartRate population. By 2014, SmartRate would have to expand by a factor of 50 to equal the 260 MW demand response of the fully deployed PTR program that PG&E-estimated in its SmartMeter Upgrade Proceeding.

The Commission has recognized that PTR and other programs should move forward in response to the SONGS shutdown. In an April 25, 2012 letter to SDG&E and SCE, the Commission's Energy Division Director directed the utilities to submit advice letters "proposing program augmentations and improvements, including consideration of

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<sup>90</sup> DRA/Levin, 5 RT 723, lines 5-28.

a targeted incentive energy conservation program (e.g., a 20/20 program or similar variation) and/or expansion of existing peak time rebate (PTR) programs to additional customer classes” in response to the SONGS shutdown. Therefore, the Commission’s Energy Division has recognized the SONGS shutdown would require that additional demand response capabilities, including PTR, be ramped up on an expedited basis. PG&E’s system does not exist in a vacuum. PG&E is a member of the California Independent System Operator (“CAISO”) along with SCE and SDG&E. Further, the unavailability of SONGS could compound problems caused by any unforeseen future losses of generation in PG&E’s service territory, and the SONGS shutdown should require the company to bolster its demand response options.

## 7. Cost

In determining whether or not to order PG&E to proceed with PTR, the Commission should consider the cost effectiveness of PTR as compared to PG&E’s proposed alternative residential demand response solution, which is its SmartRate program. D.12-04-045 confirms that SCE’s and SDG&E’s PTR programs are found cost-effective<sup>91</sup> and thus were approved for the 2012-2014 DR program cycle. There is no evidence that PG&E’s PTR program would differ materially from SCE’s and SDG&E’s PTR programs with respect to cost effectiveness. In contrast, there is evidence that PG&E’s SmartRate program is unlikely to be cost effective, and compares unfavorably with default PTR with respect to cost. Recently, in D.12-04-045, the Commission found, “SCE’s Critical Peak Pricing program is “not cost effective.””<sup>92</sup>

PG&E estimates an incremental cost of \$33.7 million to implement default PTR for its 4.5 million residential customers.<sup>93</sup> This amounts to about \$15 per active

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<sup>91</sup> D.12-04-045, p. 121; p. 131. Note, SCE’s “Save Power Day” is its terminology for its residential PTR program (see Footnote 219 on p.118 of D.12-04-045).

<sup>92</sup> D.12-04-045, p. 137.

<sup>93</sup> Ex. PG&E-1, p. 1-1.

participant, under the assumption in D.09-03-026 that about half of PG&E's residential customers would be aware of PTR events. DRA's estimated PTR costs, if adopted by the Commission in this proceeding, are substantially lower than that of PG&E and will further improve the cost-effectiveness of the PTR.

In contrast, according to PG&E's "OP 3 Report", PG&E has spent a total of \$37 million since 2006 on "SmartRate Marketing and Outreach Expenditures" alone, with a net yield of 22,136 customers on SmartRate as of year-end 2011. This translates to \$1,660 per participant. Further, in 2011 alone, the company spent \$19,284,518 for 1,391 new enrollments, which translates to \$13,863.78 per enrollment, an unacceptably expensive marketing campaign borne by PG&E's ratepayers.<sup>94</sup> Clearly, another serious problem with opt-in CPP relative to PTR is that it costs a lot to convince customers to participate. Whereas, with PTR, they are automatically participants, as long as they are aware than an event is being called, unless they opt out.

PG&E has stated its goal to quadruple the enrollment in SmartRate by 2013.<sup>95</sup> However, PG&E provided no cost estimates for the marketing effort needed to achieve this goal, nor did it provide any assurance that such a goal can be achieved in a cost-effective manner. In summary, considerations of cost and cost-effectiveness strongly indicate that the Commission should direct PG&E to proceed with PTR and limit expenditures on SmartRate as DRA proposes.

## **8. Other Issues**

At this point, DRA has not identified other issues. However, DRA reserves the right to reply to other issues that may be addressed by PG&E in its Opening Brief.

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<sup>94</sup> Ex. DRA-3, Tables 3-2, p. 24 and Ex. PG&E-20 table 3-6.

<sup>95</sup> PG&E/Olsen, 2 RT 303, lines 22-25.

## **IV. PROGRAM ELEMENTS**

### **A. Design of PTR Generally**

The general PTR design involves developing two levels of rebates, one on a default and one on an optional basis. The latter one is for the customers who have enabling technology devices and can set the device to reduce load automatically when event day triggers. Based on PG&E's rebuttal testimony, there is no dispute between DRA and PG&E regarding the level of the rebates to customers.

### **B. Design of Customer-Specific Reference Level (CRL) as the Savings Threshold**

There is no issue about how to design customer-specific reference level as the savings threshold.<sup>96</sup>

### **C. Bill Protection**

DRA recommends that residential SmartRate or PDP customers receive first-year bill protection only relative to their otherwise applicable rate, excluding PTR rebates.

#### **a. PG&E's Bill Protection Proposal Creates Asymmetry Between PTR and SmartRate or PDP**

PG&E's bill protection design creates several issues. First, its design is complex and adds costs because it has to track two different dynamic rate calculations for each customer.<sup>97</sup> In addition, PG&E's proposal creates bias against customers enrolling in the PTR program instead of the SmartRate option. The customers who choose SmartRate or PDP when they should have been on PTR are held harmless for their mistake, after a year on SmartRate or PDP has elapsed. However, customers choosing to remain on PTR, who would have been better off on SmartRate or PDP, get no such benefit. This asymmetric

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<sup>96</sup> DRA originally recommended modification to PG&E's CRL, but had later agreed with PG&E's design of CRL DRA/Levin, 3 RT 480, lines 2-8.

<sup>97</sup> Ex. DRA-1, p.2-12. Under PG&E's proposal, it would be required to track both the SmartRate bill and a hypothetical "shadow bill" based on the counterfactual assumption that the customer is on the otherwise applicable rate (e.g., E-1) and may receive PTR rebates, which would be deducted from the "shadow bill". If, at the end of the annual cycle, the total "shadow bill" reflecting PTR rebates would have been lower than the actual bill under SmartRate, the customer would be paid or credited for the difference.

proposal could bias the customers against PTR and in favor of SmartRate and potentially impair the success of the PTR deployment.

- b. PG&E Should Offer First Year Residential SmartRate Or PDP Protection Relative to the Otherwise Applicable Rate Excluding PTR Rebates

DRA proposes that the bill protection for both PTR and SmartRate should be calculated based on their previous rate schedule, which is E-1 in most cases, and no PTR credit should be included. This alternative eliminates the asymmetry described above. Under this DRA proposal, customers cannot be worse off relative to their previous rate regardless of whether they choose PTR or SmartRate/PDP; neither program is automatically favored.

**D. Customer Outreach and Education Methods**

This issue is not addressed in DRA's testimony

**E. Other Program Design Issues**

At this point, DRA has not identified other program design issues. However, DRA reserves the right to reply to other issues that may be addressed by PG&E in its Opening Brief.

**V. PTR REVENUE REQUIREMENT AND COST RECOVERY**

In adopting a revenue requirement, it is essential that the Commission orders PG&E to make sure program and operational benefits are maximized while the costs are minimized. This is the proceeding to determine how PG&E executes the PTR program, and how much more ratepayers have to pay. The Commission now has the opportunity to make sure that PG&E fulfills its claimed benefits as well as keeping the costs in check so that the project would be cost-effective; and ratepayers are paying just and reasonable costs. The Commission can do so by directing PG&E to deliver PTR program efficiently so that the program benefits will be realized. In addition, the Commission should ask PG&E to control its costs in the following manner which are addressed in more detail in the revenue requirement sections below:

- Eliminate activities that are not cost-effective. (Redirect AMI remaining outreach/education funding for PTR)
- Deny incremental cost requests that deliver speculative value or benefits. (Reduce high costs IT components)
- Assign cost responsibility to PG&E unless they were part of Upgrade case projection, or they are truly PTR-b related.
- Mitigate potential duplicate cost recovery by deferring costs that will incur in years 2014 and going forward in the 2014 GRC.

In its Update Application, filed October 28, 2011, PG&E requested approval to recover \$33.7 million in incremental costs incurred in 2012 through 2014 to implement PTR. Included in that amount was \$8.6 million in Information Technology (IT) costs, \$9.0 million for customer outreach and education, and \$10.0 million for customer inquiry.<sup>98</sup> DRA disagrees with PG&E's cost estimates and finds that much of the expenses requested for recovery here could be funded through previous and closely related programs (SmartMeter and/or Residential PDP programs) authorized in previous Commission decisions, thereby forestalling unnecessary rate increases. In particular, DRA asserts that the two largest requested funding categories, Customer Outreach and Education and Customer Inquiry, can, and should, be funded from unspent funds authorized for residential customer acquisition and outreach in PG&E's original AMI decision (D.06-07-027). Additionally, funding requests for year 2014 should be deferred

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<sup>98</sup> Ex. PG&E-3 at 1-11; Ex. PG&E-5 at 2-3. These numbers were later corrected in PG&E's rebuttal: (1) PG&E's October 2012 Updated Prepared Testimony reduced its estimated cost for Demand Response by \$60,000 because these costs had also been requested in the 2012 to 2014 DR Proceeding (A.11-03-001). The proposed and alternate decisions do not grant the requested funding. Accordingly, PG&E has increased its cost request in this rebuttal, Chapter 10, Demand Response Operations, by \$60,000. (2) PG&E has identified that the costs requested for My Energy – PTR-b Notification Enhancement had also been requested as part of the Information Technology cost estimate. To eliminate this duplicate request, the Demand Response Operations cost estimate has been reduced by \$500,000. (3) In response to concerns raised by DRA with regard to labor costs for customer service representatives, PG&E has adjusted its cost down by approximately \$1 million. Ex. PGE-3 at 1-10.

to PG&E’s 2014 GRC Phase 1 proceeding.<sup>99</sup> The following table summarizes PG&E and DRA’s cost estimates reflecting PG&E rebuttal update and both PG&E and DRA’s minor corrections:

**DRA & PG&E Cost Comparison (2012-2014) in (\$1,000)<sup>100</sup>**

|                               | PG&E Proposal | DRA Proposal | PG&E > DRA |
|-------------------------------|---------------|--------------|------------|
| Customer outreach & education | 9,045.4       | -            | 9,045.4    |
| Customer inquiry              | 9,076.4       | -            | 9,076.4    |
| Billing, Revenue, Credit      | 892.0         | 107.0        | 785.0      |
| IT                            | 8,628.3       | 3,000.0      | 5,628.3    |
| Program operation             | 2,261.1       | 777.6        | 1,483.5    |
| M&E                           | 2,361.0       | 1,680.0      | 681.0      |
| Total                         | 32,265.2      | 5,564.6      | 26,699.6   |

**A. Uncontested Issues**

There are multiple cost recovery and revenue requirement ratemaking issues in this proceeding. DRA identifies the following ratemaking issues where DRA has no dispute with PG&E’s proposals:

**1. Approval of PG&E’s request to recover PTR expenses through Dynamic Pricing Memo Account (PDMA) and Distribution Revenue Adjustment Mechanism (DRAM).**

PG&E proposes to recover incremental implementation expenses incurred and approved for recovery in this proceeding by recording actual costs to the DPMA and recovering those cost through DRAM the year after they are incurred. PG&E proposes to retain DPMA and recover capital revenue requirements through DRAM until the PTR

<sup>99</sup> Ex. DRA-1, “Executive Summary”, p. 5-6.

<sup>100</sup> Numbers reflect PG&E’s Update as shown in PG&E-6.

project capital costs can be placed in rate base beginning in the Test Year of the next GRC phase 1 case after the 2014 GRC. PG&E proposes to utilize the DPMA and DRAM mechanisms through the first year where Stage 2 is in place for the summer plus one year.<sup>101</sup> DRA does not take issue with these proposals.

**2. PTR costs should be allocated based on the allocators adopted for 2011 GRC settlement in between GRCs. (PG&E appears to agree with DRA in its rebuttal testimony.)**

In 2011 GRC Phase 2 Application, parties reached a settlement on how revenue requirements were to be allocated to customer classes in the test year and in subsequent years between the GRCs. The Commission adopted the settlement in D.11-12-053. The settlement adopted an allocation of 44 percent and 14.5 percent to residential and small non-residential customer class respectively for both AMI and DPMA costs.<sup>102</sup> DRA recommends that PTR costs be allocated based on these same settlement terms. Thus, it appears that there is no disagreement between DRA and PG&E based on PG&E's rebuttal testimony.<sup>103</sup>

**3. Approval of PG&E's estimates for program operations, and measurement and evaluation for 2012 and 2013, totaling \$2.5 million.<sup>104</sup>**

DRA believes that measurement and evaluation are a high priority because little evidence currently exists about the relative aggregate demand response impacts of PTR and SmartRate/PDP. Therefore, DRA recommends approval of

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<sup>101</sup> Ex. PGE-1, p. 13-4.

<sup>102</sup> Source: Attachment to e-mail from Dan Pease, January 21st, 2011, File name "Updated\_2011GRC2\_Settlement\_AllocatorsRev1Total\_p.xls".

<sup>103</sup> Ex. DRA-1, p. 5-7.

<sup>104</sup> PGE-3, p. 1-11, Table 1-1, revised DR operation and M&E.

PG&E’s PTR demand response operation and measurement and evaluation costs for 2012 and 2013.<sup>105</sup>

**B. Outreach and Education Costs**

As discussed in Sections III.C.7 and V.E, DRA recommends that PG&E shift its priorities and use unspent SmartRate funding for PTR. Further, PG&E should make 2014 funding requests for these programs in its 2014 GRC, where the Commission will already be considering outreach and education costs on a broader level. Hence, DRA’s primary recommendation is for no new funding for PTR outreach and education in this PTR proceeding.<sup>106</sup>

However, if the Commission does not follow DRA’s primary recommendation to not authorize any additional outreach and education for PTR in this proceeding, the Commission should adopt DRA’s forecast of \$7 million instead of PG&E’s forecast of \$9 million.<sup>107</sup> PG&E’s track record indicates that direct mailing is not a cost-effective communication tool. Therefore, DRA recommends that the Commission deny the costs for direct mailing in lieu of more cost effective media. This would reduce the requested funding by \$2.0 million.

**PG&E versus DRA: Cost Comparisons By Year<sup>108</sup>**  
(in millions of dollars)

|      | 2012  | 2013  | 2014  | Total PTR |
|------|-------|-------|-------|-----------|
| PG&E | \$0.4 | \$0.5 | \$8.1 | \$9.0     |
| DRA  | \$0.4 | \$0.5 | \$6.1 | \$7.0     |

<sup>105</sup> Ex. DRA-1, Executive Summary, p. 6. (Reflect PG&E’s corrected number as shown in PG&E-6, Table 1-1.)

<sup>106</sup> Ex. DRA-1, p. 3-1.

<sup>107</sup> Ex. DRA-1, p. 3-2.

<sup>108</sup> Ex. DRA-1, p. 3-2, Table 3-1.

**1. PG&E Demonstrated that Direct Mail was not Cost-Effective.**

PG&E proposes three direct mailings to varying numbers of customers in 2014 at a cost of \$2.0 million. DRA already explained how costly PG&E's SmartRate outreach and education costs have been in Section III. B. 7 above. PG&E's OP3 Report, Table 3-2, demonstrated that the majority of outreach and education activities for SmartRate were associated with direct mail.<sup>109</sup> Starting from 2008, PG&E has been sending direct mailings to its customers and spent close to \$37 million on marketing and outreach million by the end of 2011.<sup>110</sup> However, it has generated very few (22,136) enrollments. This translates to \$1,660 per participant. Further, in 2011 alone, the company spent \$19,284,518 to for 1,391 new enrollments, which translates to \$13,863.78 per enrollment, an unacceptably expensive marketing campaign borne by PG&E's ratepayers.<sup>111</sup> In 2011, close to 3 million customers were sent direct mail material, but after attrition, the total 2011 SmartRate enrollment (22,136) decreased from 2010 (24,242).<sup>112</sup>

Clearly, direct mail campaigns have been too costly and did not generate effective customer enrollment. PG&E should pursue other more cost-effective methods.

**2. PG&E Has Requested Substantial Funding for Other Outreach/Education Communication Channels.**

PG&E also includes \$7 million to cover mass media, social media (e.g. Google, Yahoo, Facebook and Twitter), website development, e-mail, e-newsletters, and bill inserts. The most expensive resource is the mass media, at \$6.0 million including development costs, and it constitutes the majority of the funds requested.<sup>113</sup>

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<sup>109</sup> In responding to the ALJ's direction, PG&E submitted its Exhibit PGE-20 to update its OP3 Report, Table 3-2.

<sup>110</sup> Ex. DRA-3, p.42; Ex. PG&E-20, table 3-6.

<sup>111</sup> Ex. DRA-3, Tables 3-2, p. 24; Ex. PG&E-20 table 3-6.

<sup>112</sup> Id., Table 3-2.

<sup>113</sup> Ex. DRA-1, p. 3-6.

DRA supports PG&E's proposal to use multiple media to reach customers, as it creates customer great awareness of an important demand response program. It can achieve benefits that the AMI infrastructure was intended to accomplish. Therefore, DRA has not reduced any of PG&E's mass media cost estimates.

However, PG&E's direct mail costs of \$2 million (at \$0.75 per piece) compare unfavorable to the costs of a bill insert to all customers, listed at \$50,000. Thus direct mail is 67.5 times more costly than a bill insert.<sup>114</sup> Furthermore, the bill insert is in addition to a bill that currently is being redesigned to include more space for customer messages. The additional space in the new bill format can be leveraged to provide PTR information to customers. Furthermore, PG&E intends the new bill format to include charts that provide easily recognizable energy usage information to the customers.<sup>115</sup> Part of the approximately \$20 million funding for the new bill redesign was meant to convey clearer messages to customers relating to time-varying rates.<sup>116</sup> Combined with this redesigned bill format, DRA believes that the bill insert is a much more cost effective tool than the direct mail option. Moreover, PG&E's planned direct mail pieces all have an e-mail or bill insert equivalent. The direct mail option, as an additional channel, and is superfluous and costly<sup>117</sup>

### **C. Customer Inquiry**

The table below shows that 91% of PG&E's proposed expenditures for 2012 – 2014 would occur in 2014. As indicated before, DRA's primary recommendation

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<sup>114</sup> Ex. DRA-1, p. 3-7.

<sup>115</sup> Specific IT functionality, including charge by tiers & peak period, graphic/visual presentment, message areas. (D.12-03-015, p. 14.)

<sup>116</sup> The RCES settlement meets the goals of (a) improving the clarity and usefulness of the billing information in the Customer Energy Statement, (b) motivating the customer to understand the effect of their behavior on energy usage, and (c) promoting customers' interest in pursuing dynamic pricing options. D.12-03-015, FOF 14.

<sup>117</sup> Ex. DRA-1, p. 3-7.

is that 2014 costs be deferred to the 2014 GRC, and that the balance of costs in 2013 be covered using the unspent Smart Rate funding.

If this primary position is not adopted, DRA recommends that customer inquiry costs be reduced approximately \$5.9 million from \$9.1 million to \$3.2 million<sup>118</sup>. DRA’s estimates are due to a more modest expectation of increased call volume and a lower customer service representative (CSR) salaries.<sup>119</sup>

**PG&E versus DRA: Cost Comparisons By Year<sup>120</sup>**  
(in millions of dollars)

|      | 2012  | 2013  | 2014  | Total PTR |
|------|-------|-------|-------|-----------|
| PG&E | \$0.0 | \$0.8 | \$8.3 | \$9.1     |
| DRA  | \$0.0 | \$0.4 | \$2.8 | \$3.2     |

**1. PG&E’s Customer Inquiry Costs**

PG&E estimated that 5 percent of customers defaulted to the new rate will make calls within the first year and 2 percent of these defaulted customers will make calls within the second year. In addition to these calls of a general nature, PG&E estimates that 1 percent of customers will make calls each year regarding event days.

SDG&E recently completed a report on its PTR pilot program, which showed very few customer inquiries (0.25 percent).<sup>121</sup> DRA finds that the SDG&E PTR pilot to be a valid reference point. DRA makes substantial allowance to SDG&E’s experience and recommends PG&E’s PTR funding be limited to 1 percent for default rate questions and

<sup>118</sup> These numbers reflect PG&E and DRA’s final numbers as described in Exhibit PG&E-22.

<sup>119</sup> Ex. DRA-1, p. 3-2.

<sup>120</sup> Numbers reflected PG&E and DRA’s mutual understanding and corrections of their respective numbers as shown in Exhibit PG&E-22.

<sup>121</sup> Ex. PG&E-11, “Peak Time Rebate 2011 Pilot Evaluation”, SDG&E, January 30, 2012, p. 23.

0.5 percent for event related calls instead of 1 percent. This would create a \$5.9 million savings for ratepayers.<sup>122</sup>

DRA believes that its proposal is more reasonable than that of PG&E's. PG&E's witness tried to convince the ALJ that its customer inquiry would remain at 5 percent without the SmartMeter deployment.<sup>123</sup> However, PG&E's answer to the ALJ's question reveals the difficulties PG&E has had in dealing with SmartMeter related customer issues. The answer also clearly showed that PG&E had these problems in mind in estimating its customer inquiry costs:

A: And I think what I was just – the point I was trying to make here was I think there are more sensitivity around SmartMeters in the PG&E service territory than what was being experienced in San Diego service territory. And I was comparing what we were seeing in the San Diego pilot with what we could see here in the PG&E service territory.

Q: And what were the reasons in your mind for the higher levels of sensitivity around PG&E's service territory?

A: Oh, boy. There's been a long history since the initial installations in Bakersfield of customer concerns about SmartMeter. They're pretty much on the record. PG&E has tried to modify our customer service and our customer communications to address those issues. We've petitioned the Commission for a opt-out rate, because that drove a lot of concerns on SmartRate. And so we tried to listen to our customers and tried to remediate some of the initial concerns that we had in Bakersfield with those rollouts.<sup>124</sup>

In no instance did PG&E's witness identify explicitly excluding SmartMeter related inquiries from its estimates. On the other hand, SDG&E's PTR pilot represents a more regular business encounter when promoting a PTR program to utility customers.

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<sup>122</sup> Ex. DRA-1, p. 3-8 & Ex. PG&E-22 (update).

<sup>123</sup> PG&E/Phillips, 5 RT 773, lines 6-19.

<sup>124</sup> Id., p. 770-771, lines 12-28, lines 1-7.

The Commission should not reward PG&E for mistakes made in the past by granting a high customer inquiry budget.

## **2. PG&E's CSR Costs**

DRA noted, in its testimony, that a 2009 total compensation study by Towers Perrin indicates that PG&E service representatives are paid 17.8 percent above a peer group composed of similar utilities and major corporations in the San Francisco metropolitan area.<sup>125</sup> Applying this adjustment to PG&E's original request would create \$1.8 million in savings, and \$0.9 million in savings on DRA's proposal. PG&E, in its rebuttal testimony, adjusted its CSR salaries by \$1 million downward. DRA appreciates that PG&E revised its salary to the right direction. However, there is no reason why ratepayers should pay for higher than the costs paid by similar utilities. Therefore, DRA recommends that its numbers be adopted.

## **3. The Commission should Reject Substantial Customer Inquiry Costs Requested by PG&E**

Though DRA does allow for modest customer inquiry funding, it believes that it sets a bad precedent. Nowhere did PG&E suggest that there would be incremental inquiry costs in the AMI Upgrade proceeding. In the Upgrade proceeding, the Commission cited PG&E's plan to perform the outreach and education for the PTR program and it identified the associated costs:

*PG&E will begin the PTR program in 2010 and will not have the SmartMeter Program Upgrade technology and features, including interval billing, fully deployed in the PG&E service territory that year. As a result, the marketing campaign will be limited geographically in 2010 and is estimated to cost \$3.4 million. Years 2011 and 2012 are estimated at the full \$7.5 million annual cost for the two-phase education strategy. Years 2013-2030 have a lower annual estimated cost of \$1.8 million due to the assumption of a transition to a more direct*

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<sup>125</sup> Ex. DRA-1, pp. 3-8 through 3-9 citing a Total Compensation Study, Towers Perrin, October 2009, Table 5-C. Report commissioned by PG&E.

*method of event notification through in-home displays and enabling DR technologies the customer will choose to install.*<sup>126</sup>

And the amount requested, as detailed in the above statement, is similar to that make in this PTR filing.<sup>127</sup> However, there was no equivalent identification of customer inquiry implementation costs in the Upgrade case.

PG&E's exclusion of customer inquiry costs from the Upgrade proceeding may have been based on the fact that PG&E routinely ask for tens or hundreds of millions of dollars in customer inquiry costs in its GRC Phase one proceedings. To the extent that relatively minor incremental costs might have been foreseen, they could easily have been absorbed into the GRC budget.

If there are material incremental costs, they obviously were excluded from the cost-benefit analysis in the SmartMeter Upgrade Proceeding. The Commission should refrain from granting additional funding when it was PG&E's responsibility to be as inclusive as possible when it developed its SmartMeter Upgrade Project business case. PG&E should not be allowed or encouraged to understate its costs to justify a project, and once it is approved, turn around and request additional cost recovery.

#### **D. Information Technology and Online Enablement**

##### **1. PG&E's IT Cost Request is a Moving Target and Dubious**

As explained earlier, PG&E first asked for its PTR IT funding through the Upgrade proceeding (A.07-12-009). PG&E included the PTR costs and benefits in the cost-benefit analysis it used to justify the cost effectiveness of the Upgrade.<sup>128</sup> The Upgrade decision approves PG&E's PTR IT costs, which was based on one-tier PTR,

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<sup>126</sup> D.09-03-026, p. 75.

<sup>127</sup> It also matches with PG&E's 2010 RDW PTR filing, which shows what it requested for PTR costs in the Upgrade case. See PG&E PTR testimony submitted on Feb. 26, 2010, p. 4A-1 & 4A-2.

<sup>128</sup> D.09-03-026, pp. 24-25.

which would apply to all residential customers. However, the Commission directed PG&E to develop a two-tier or two-part PTR program and to request incremental funding to implement it in the Rate Design Window (“RDW”) proceeding. Two-tier (or two-part) PTR offers two incentive levels, with a higher incentive rebate for customers who have enabling technology and are more likely to respond to event calls proactively. So, this RDW proceeding allows PG&E to ask for the incremental IT costs associated with implementing the second part of the PTR rebate, which PG&E calls “part b.”

DRA notes that PG&E more than doubled its incremental IT cost requests between its February 2010 and October 2011 update filings. The cost increase appears to have been caused by two major factors. One is a contingency allowance of \$1.6 million approved in D.09-03-026, which was accounted for in the February 2010 filing<sup>129</sup> but excluded from the October 2011 update filing, increasing the incremental cost request in the latter.<sup>130</sup> The second factor is that, a few months after its February 2010 filing, PG&E identified a few additional high cost functions that it claimed it had not accounted for and it added them to the October 2011 update.

The costs associated with these changes resulted in more than a doubling of PG&E’s incremental cost request between its February 2010 and October 2011 filings. In its February 2010 testimony, PG&E requested an incremental cost of \$3.9 million to cover the additional functionality needed to expand PTR to include a 2-part (2-tier) option.<sup>131</sup> Afterwards, the PTR case was suspended for more than one year. PG&E then filed an update in October 2011. In the update, PG&E asserted that it needed \$8.3 million to cover the incremental the IT costs for the 2-part option.<sup>132</sup>

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<sup>129</sup> See PG&E PTR testimony submitted on Feb 26, 2010, p. 9-22, lines 406; Ex. DRA-5;

<sup>130</sup> Ex. PG&E-1, p. 9-22.

<sup>131</sup> See PG&E testimony submitted on Feb. 26, 2010, p. 9-23, table 9-2; Ex. DRA-5.

<sup>132</sup> Ex. PG&E-1, p. 9-2. PG&E requested \$12.3 million in overall funding, less the \$4 million approved in the upgrade, yields \$8.3 million. \$0.3 million of that request was for project management expenses not previously requested.

The following table contrasts PG&E’s PTR IT cost requests made in Feb. 2010 and October 2011 update (Update) filings:

| Line No.         | Description  | Amount<br>Approved<br>in Upgrade<br>Decision<br>09-03-026 | Total Revised<br>PTR IT Cost<br>Estimate From<br>Table 9-1 | <b>Difference –<br/>Amount<br/>Requested in<br/>2010 RDW</b> |
|------------------|--------------|---|--|--|
| (a)              | (b)          | (c)   | (d = c – b)  |  |
| <b>Feb 2010</b>  | PTR IT Costs | 5.6   | 9.5  | <b>3.9</b>   |
| <b>Oct. 2011</b> | PTR IT Costs | 4.0   | 12.3   | <b>8.3</b>   |

It is unclear why PG&E now disregards the \$1.6 million contingency allowance authorized by D.09-03-026. Even PG&E’s workpapers show the company was granted a \$1.6 million contingency on top of the \$4 million previously granted for these IT costs.<sup>133</sup>

**2. The Costs for PG&E’s Increased IT Functionality Are Unjustified and Not Supported**

DRA questions why PG&E requires additional costs in its PTR October 2011 Update. Many of the claimed new functions appear not to be cost-justified. DRA recommends disallowing some of these “new” functionality requirements. The disallowed items are associated with:

- 1) Moving enrollment functionality and processes, currently supported by a 3<sup>rd</sup> party provider, to an internally supported functionality through enhancements to the PG&E Customer Care and Billing (CC&B) system. There is no assurance that this would save money in the long run.
- 2) Calculating rebate estimates specific to a particular customer’s baseline. This functionality appears to be of little value and of high cost. Worse yet, the estimates could be incorrect and thus misleading. This functionality provides an estimate of the potential cost savings a specific customer could achieve,

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<sup>133</sup> Ex. PG&E-3, p. WP 4-7.

given a specific reduction in usage on a Peak Day, based on that customer’s baseline usage. This information would be displayed for the customer on the PG&E Customer Portal website. DRA recommends that PG&E make general rebate information available on the Customer Portal. Providing general rebate information would require an addition to the primarily static content to the portal. But the implementation costs to would be minimal.

- 3) Inclusion of cost recovery for the default PDP Bill Protection functionality as part of the PTR case. This functionality calculates what the customer’s charges would have been if they had not been moved from PDP to PTR. If the commission does not decide to adopt default PDP, this functionality will not be necessary. This cost should be recovered in whatever future proceeding authorizes a default PDP rate rather than in this PTR proceeding.

The following table summarizes DRA’s recommendations:

| <b>Area</b>   | <b>Cost</b>        | <b>Work Packages</b>                                |
|---|--------------------|---|
| <b>Move enrollment functionality from an external system into PG&amp;E’s CC&amp;B System</b>        | \$ 2,258,237       | Parts of Work Packages 2, 3, and 17                 |
| <b>PDP Bill Protection</b>  | \$ 419,278         | Work Package 27 and Parts of Work Packages 3 and 11 |
| <b>Estimate each customer’s rebate before the event day, based on the customer’s baseline usage</b> | \$ 1,408,831       | Work package 9                                      |
| <b>TOTAL</b>  | <b>\$4,086,345</b> |   |

PG&E has not shown the incremental benefits that these high cost elements would generate. Moreover, ratepayers already paid substantial costs for the Upgrade project and have yet to receive any significant benefits. Until benefits are realized, it is inequitable for ratepayers to pay for additional high cost business requirements. The Commission

should not continue to allow PG&E to ask ratepayers to pay without providing factual support.

**E. Recovery of Costs in the GRC vs Recovery in this PTR Proceeding**

**1. Minimize Potential Duplicative Cost Recovery by Deferring Costs for 2014, and going forward, to 2014 GRC Phase One**

PG&E argues that it is not proper to move 2014 cost recovery into the GRC because 1) PG&E was specifically granted authority to seek cost recovery for implementing PTR in this 2010 RDW; 2) not all PTR costs are appropriate for consideration in the GRC, and some may be more properly considered in the DR proceeding; and 3) PTR implementation may be delayed beyond 2014.<sup>134</sup>

First of all, if the Commission agrees with DRA that PG&E should use unspent SmartRate outreach/customer funding for PTR, there will be no issue about deferring costs to the GRC. If DRA's recommendation in this regard is not adopted, then the GRC becomes a logical venue because customer education and outreach and customer inquiry costs are routinely requested in GRCs. The danger of asking for the funding in this case is that it is very difficult for the Commission and intervenors to assure that they are not duplicative of those normally requested in the GRCs. As repeated several times in this brief, PG&E justified its Smart Meter Upgrade based on its significant PTR demand response benefits that have yet to be realized. For ratepayers to additionally be exposed to double cost recovery would compound the problem.

PG&E acknowledges that these type of costs are routinely requested in GRCs and will do so after this case is closed and PTR is implemented. In fact, when answering its own question of how PG&E will proceed if PTR is delayed beyond 2014, it stated:

*PG&E will continue to seek recovery of all costs, including ongoing customer inquiry costs, in the 2010 RDW. For customer inquiry, PG&E plans to request ongoing customer*

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<sup>134</sup> Ex. PG&E-2, pp. 1-14, lines 21-33 & 1-15, lines 1-2.

*inquiry costs in both the 2010 RDW and the 2014 GRC, but would make subsequent adjustments so that the costs would only actually recovery once.* <sup>135</sup>

PG&E suggested as an alternative venue the DR proceeding. However, the 2012-2014 DR proceeding has just been concluded, and it is dubious that PG&E would be willing to defer such costs to the next DR proceeding while the 2014 GRC would be more suitable with the time line associated with its 2014 PTR costs.

PG&E, in requesting its inquiry costs in its prior GRC, has expressed that part of the costs are to cover increased calling time, call volume and call complexity.<sup>136</sup> However, DRA stated in its testimony, and PG&E's own workpapers show, that outreach/inquiry costs associated with PTR are relatively small in comparison to what PG&E normally requests in its GRC. For instance, in its 2011 GRC Phase 1, PG&E requested \$117 million for outreach and approximately \$68 million for customer engagement.<sup>137</sup> In this case, PG&E estimated approximately \$16 million related to both functions.<sup>138</sup> It is logical to include such PTR costs in the GRC umbrella to improve regulatory efficiency and to reduce ratepayer risks.

## **F. Other Revenue Requirement/Cost Recovery Issues**

### **1. PG&E's Request To File for Excess Cost Recovery Should Be Rejected.**

PG&E asks that the Commission find its PTR incremental costs reasonable as long as the actual costs are equal to or less than the forecast adopted in this application.<sup>139</sup> It

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<sup>135</sup> Ex. PG&E-2, p. 1-15, lines 3-10.

<sup>136</sup> Ex. PG&E-1, WP4-11.

<sup>137</sup> PG&E describes customer engagement to cover tariffed program outreach/education, market researches, account services, process customer bills, etc. (Ex. PG&E-3, WP 4-11.) A substantial part of the processing customer bills appear to relate to support customer bills under complex rate schedules due to AMI and its upgrade.

<sup>138</sup> PG&E-5, p. 2.

<sup>139</sup> PG&E-1, p. 13-5.

also asks permission for recovery of costs greater than the adopted forecast through an after-the-fact reasonableness review.

DRA urges the Commission to reject PG&E's request to be allowed to seek recovery for excess costs not adopted in this proceeding. First, PG&E files this application seeking cost recovery and claims its projected cost is reasonable. Even if the final adopted number differs from PG&E's request, the proceeding allows parties to present their best evidence to advocate for a certain reasonable cost level, and at the end the Commission makes the decision based on the record presented. Asking for additional cost recovery, beyond the authorized amount through the aforementioned process, basically provides to PG&E a second opportunity to litigate the same costs. This moots the hard work expended by parties litigating this proceeding and violates their due process rights. Second, obtaining permission to ask for excess cost recovery would reduce PG&E's incentive to make an accurate projection of its costs or properly control its costs.

If the Commission does see fit to authorize after-the-fact reasonableness review, then it is critical that this review include all the costs and not just the excess costs, so that the Commission can determine whether or not PG&E prudently spent the money. For instance, PG&E could use part of the funds for something that is tangentially related to PTR, depleting the funding prematurely, and, then seek additional cost recovery. Another example would be if PG&E does not implement the program in an optimal manner, resulting in cost over-runs. Such cost overruns would likely to be considered imprudent and would not be allowed even if the Commission were to entertain possible excess cover recovery in a reasonableness review.

## **VI. OTHER ISSUES**

DRA has not identified any other issues at this time, but reserves the right to respond to any "other issues" PG&E raises in its Opening Brief.

## VII. CONCLUSION

For the foregoing reasons, the Commission should order PG&E to proceed with a partial PTR implantation in 2013 and a full PTR deployment in 2014. PTR has proven to be an effective program for reducing load. PG&E's arguments to the contrary are without merit and should be rejected. Further, the Commission should adopt DRA's cost estimates for the PTR program and reject PG&E's inflated forecasts.

Respectfully submitted,

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# **APPENDIX: Tables 4-6**

# TABLE 4

## Baseline E-1 Customer Bills With, And Without, SmartRate

| 12 CPP Events |                                | 12     |        |          |            |
|---------------|--------------------------------|--------|--------|----------|------------|
| SmartRate     | Effective Rate (cents per kWh) | Base   | Credit | CPP chg. | Total Rate |
|               |                                | (a)    | (b)    | (c)      | (d)        |
|               | CPP hours                      | 12.845 |        | 60       | 72.845     |
|               | Non-CPP hours                  | 12.845 | -2.992 |          | 9.853      |
| Non-SmartRate | All hours                      | 12.845 |        |          | 12.845     |

- (a) Baseline rate from E-1 Tariff  
 (b) SmartRate Non High-Price Period credit from E-RSMART Tariff  
 (c) SmartDay High Priced Period Charge from E-RSMART Tariff  
 (d) = (a) + (b) + (c)

| Baseline usage (kWh)               |                    | Baseline Territory |            |  |
|------------------------------------|--------------------|--------------------|------------|--|
|                                    |                    | T                  |            |  |
| Usage                              | Per day            | 7.5                | (1)        | Baseline quantity from E-1 Tariff      |
| Usage                              | Per hour           | 0.3125             | (2)        | (1) /24                                |
| Usage                              | Summer CPP         | 18.75              | (3)        | (2) x CPP hours                        |
| Usage                              | Summer Non-CPP     | 1361.25            | (4)        | (2) x Non-CPP hours                    |
| Usage                              | Total Summer       | 1380               | (5)        | (3) + (4)                              |
| Baseline Bill                      |                    |                    |            |  |
|                                    | Summer CPP         | \$ 13.66           | (6)        | (d) [CPP hours] x (3)                  |
|                                    | Summer Non-CPP     | \$ 134.12          | (7)        | (d) [Non-CPP hours] x (4)              |
|                                    | NO Credit May&Oct. | \$ 13.91           | (8)        | 62 x (1) x (b)*                        |
| <b>SmartRate Total Summer Bill</b> |                    | <b>\$ 161.70</b>   | <b>(9)</b> | (6) + (7) + (8)                        |
| Non-SmartRate Total Summer Bill    |                    | \$ 177.26          | (10)       | (5) x (b) [All-hour std baseline rate] |
| Customer Savings on SmartRate      |                    | \$ 15.57           | (11)       | (10) - (9)                             |
| % savings on SmartRate             |                    | 8.8%               | (12)       | (11) / (10)                            |

\* adding back in 62 days of credits  
 NOT provided in May and October

|                      |      |      |     |
|----------------------|------|------|-----|
| Summer Hours         | 4416 | May  | 31  |
|                      |      | June | 30  |
| CPP hours (max)      | 60   | July | 31  |
| non-CPP hours (min.) | 4356 | Aug  | 31  |
|                      |      | Sep  | 30  |
|                      |      | Oct  | 31  |
|                      |      | Days | 184 |

## TABLE 5

**Baseline E-1 Customer Bills With, And Without, SmartRate**

**9 CPP Events**

**9**

| SmartRate     | Effective Rate (cents per kWh) | Base   | Credit | CPP chg. | Total Rate |
|---------------|--------------------------------|--------|--------|----------|------------|
|               |                                | (a)    | (b)    | (c)      | (d)        |
|               | CPP hours                      | 12.845 |        | 60       | 72.845     |
|               | Non-CPP hours                  | 12.845 | -2.992 |          | 9.853      |
| Non-SmartRate | All hours                      | 12.845 |        |          | 12.845     |

- (a) Baseline rate from E-1 Tariff
- (b) SmartRate Non High-Price Period credit from E-RSMART Tariff
- (c) SmartDay High Priced Period Charge from E-RSMART Tariff
- (d) = (a) + (b) + (c)

| Baseline usage (kWh)               |                    | Baseline Territory   |  |
|------------------------------------|--------------------|----------------------|--|
|                                    |                    | <b>T</b>             |  |
| Usage                              | Per day            | 7.5 (1)              | Baseline quantity from E-1 Tariff      |
| Usage                              | Per hour           | 0.3125 (2)           | (1) /24                                |
| Usage                              | Summer CPP         | 14.0625 (3)          | (2) x CPP hours                        |
| Usage                              | Summer Non-CPP     | 1365.9375 (4)        | (2) x Non-CPP hours                    |
| Usage                              | Total Summer       | 1380 (5)             | (3) + (4)                              |
| Baseline Bill                      |                    |                      |  |
|                                    | Summer CPP         | \$ 10.24 (6)         | (d) [CPP hours] x (3)                  |
|                                    | Summer Non-CPP     | \$ 134.59 (7)        | (d) [Non-CPP hours] x (4)              |
|                                    | NO Credit May&Oct. | \$ 13.91 (8)         | 62 x (1) x (b)*                        |
| <b>SmartRate Total Summer Bill</b> |                    | <b>\$ 158.74 (9)</b> | (6) + (7) + (8)                        |
| Non-SmartRate Total Summer Bill    |                    | \$ 177.26 (10)       | (5) x (b) [All-hour std baseline rate] |
| Customer Savings on SmartRate      |                    | \$ 18.52 (11)        | (10) - (9)                             |
| % savings on SmartRate             |                    | 10.4% (12)           | (11) / (10)                            |

\* adding back in 62 days of credits  
NOT provided in May and October

|                      |      |      |     |
|----------------------|------|------|-----|
| Summer Hours         | 4416 | May  | 31  |
|                      |      | June | 30  |
| CPP hours (max)      | 45   | July | 31  |
| non-CPP hours (min.) | 4371 | Aug  | 31  |
|                      |      | Sep  | 30  |
|                      |      | Oct  | 31  |
|                      |      | Days | 184 |

## TABLE 6

### Baseline E-1 Customer Bills With, And Without, SmartRate

#### 15 CPP Events

15

| SmartRate     | Effective Rate (cents per kWh) | Base   | Credit | CPP chg. | Total Rate |
|---------------|--------------------------------|--------|--------|----------|------------|
|               |                                | (a)    | (b)    | (c)      | (d)        |
|               | CPP hours                      | 12.845 |        | 60       | 72.845     |
|               | Non-CPP hours                  | 12.845 | -2.992 |          | 9.853      |
| Non-SmartRate | All hours                      | 12.845 |        |          | 12.845     |

- (a) Baseline rate from E-1 Tariff
- (b) SmartRate Non High-Price Period credit from E-RSMART Tariff
- (c) SmartDay High Priced Period Charge from E-RSMART Tariff
- (d) = (a) + (b) + (c)

| Baseline usage (kWh)               |                    | Baseline Territory |            |  |
|------------------------------------|--------------------|--------------------|------------|--|
|                                    |                    | T                  |            |  |
| Usage                              | Per day            | 7.5                | (1)        | Baseline quantity from E-1 Tariff      |
| Usage                              | Per hour           | 0.3125             | (2)        | (1) /24                                |
| Usage                              | Summer CPP         | 23.4375            | (3)        | (2) x CPP hours                        |
| Usage                              | Summer Non-CPP     | 1356.5625          | (4)        | (2) x Non-CPP hours                    |
| Usage                              | Total Summer       | 1380               | (5)        | (3) + (4)                              |
| Baseline Bill                      |                    |                    |            |  |
|                                    | Summer CPP         | \$ 17.07           | (6)        | (d) [CPP hours] x (3)                  |
|                                    | Summer Non-CPP     | \$ 133.66          | (7)        | (d) [Non-CPP hours] x (4)              |
|                                    | NO Credit May&Oct. | \$ 13.91           | (8)        | 62 x (1) x (b)*                        |
| <b>SmartRate Total Summer Bill</b> |                    | <b>\$ 164.65</b>   | <b>(9)</b> | (6) + (7) + (8)                        |
| Non-SmartRate Total Summer Bill    |                    | \$ 177.26          | (10)       | (5) x (b) [All-hour std baseline rate] |
| Customer Savings on SmartRate      |                    | \$ 12.61           | (11)       | (10) - (9)                             |
| % savings on SmartRate             |                    | 7.1%               | (12)       | (11) / (10)                            |

\* adding back in 62 days of credits  
NOT provided in May and October

|                      |      |      |     |
|----------------------|------|------|-----|
| Summer Hours         | 4416 | May  | 31  |
|                      |      | June | 30  |
| CPP hours (max)      | 75   | July | 31  |
| non-CPP hours (min.) | 4341 | Aug  | 31  |
|                      |      | Sep  | 30  |
|                      |      | Oct  | 31  |
|                      |      | Days | 184 |