

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



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**Order Instituting Rulemaking to Reform the
Commission's Energy Efficiency Risk/Reward
Incentive Mechanism.**

**Rulemaking 12-01-005
(Filed January 12, 2012)**

**OPENING COMMENTS OF
PACIFIC GAS AND ELECTRIC COMPANY (U 39 M)**

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Pacific Gas and Electric Company (PG&E) files these Opening Comments in response to the *Order Instituting Rulemaking To Reform The Commission's Energy Efficiency Risk/Reward Incentive Mechanism*, issued January 19, 2012 (OIR). PG&E further responds in these Opening Comments to the *Assigned Commissioner's Ruling Soliciting Further Comments and Production of Data Regarding Energy Efficiency Incentive Programs*, issued December 16, 2011 (ACR). Pursuant to Ordering Paragraph 10 of the OIR, PG&E's response to the OIR and ACR is timely filed ten business days after the issuance of the OIR on January 19, 2012.

I. INTRODUCTION

The OIR raises many important issues regarding the current risk reward incentive mechanism (RRIM), including the design of the RRIM for the investor-owned utilities' (IOUs') 2010-2012 energy efficiency portfolios and for the 2013-2014 bridge period portfolios. State energy policy has consistently supported the use of a RRIM in order to align the IOUs' interests in supporting energy efficiency measures with California's aggressive energy policy goals. This proceeding should be used to consider the design of the RRIM and whether the incentive is commensurate with the return on investment for generation facilities, but should not be used to reconsider state policy, which has repeatedly and consistently called for a financial incentive for successful energy efficiency programs.

PG&E supports continued use of the 2009 RRIM for the 2010-2012 portfolio, and suggests modest adjustments to the design of the RRIM for the 2013-2014 bridge period. Changes to the design of a RRIM should only be made prospectively for the next program cycle to allow the IOUs to design and implement portfolios that consider the changes and allow a reasonable incentive for the IOUs' investors. The modest adjustments PG&E suggests for the 2013-2014 period are intended to better align the Commission's vision to achieve deeper energy savings with the IOUs' goals.

PG&E's response to the questions posed in the ACR and the methodology and details used in the calculation are included in Section III below.

II. COMMENTS ON THE ORDER INSTITUTING RULEMAKING

PG&E provides the following comments on the issues and priorities in this proceeding.

A. The Commission Should Continue An Energy Efficiency Incentive Mechanism.

1. State Energy Policy Supports An Energy Efficiency Reward Mechanism that Levels The Playing Field Between Energy Efficiency and Generation Investments.

The OIR states that "the Commission remains fully committed to promoting energy efficiency as a top priority," but nevertheless finds "it is appropriate to reexamine the premise that an annual RRIM shareholder payment is necessary to secure the IOUs' commitment to energy efficiency."^{1/} As discussed below, State energy policy has consistently supported a shareholder incentive commensurate with the rate of return for traditional generation capacity to encourage the IOUs to reach higher levels of energy efficiency investment. Thus while the design of the RRIM should be included in the scope of the proceeding, the consideration of

^{1/} OIR, p. 7.

whether a RRIM of any type is warranted should not be included in the scope of this proceeding. This proceeding should be structured to implement, rather than re-open, State energy policy.

In the decade following the energy crisis, California has pursued the most aggressive State energy policy in the United States to reduce the environmental impacts of energy usage and, more recently, combat global warming. The state policy to encourage energy efficiency investment has consistently been linked to an incentive mechanism so that the IOUs' investors are indifferent as to whether the IOUs are building new generation capacity or encouraging additional investment in energy efficiency measures.

The first Energy Action Plan (EAP I), approved in 2003, placed cost-effective energy efficiency first in the loading order, and clearly called for the adoption of performance-based incentives for the IOUs' energy efficiency investments "comparable to the return on investment in new power and transmission projects."^{2/}

The state re-affirmed its preference for cost-effective energy efficiency in the Energy Action Plan II, which lists, as one of its 15 Key Actions a requirement that all cost-effective energy efficiency resources be "integrated into utilities resource plans on an equal basis with supply-side resource options."^{3/} The EAP II again explicitly recognized the importance of appropriately rewarding the IOUs for helping the state reach its unprecedented energy efficiency goals. Key Action 12 of the EAP II is a goal to:

"[a]dopt verifiable performance-based incentives in 2006 for IOU energy efficiency investments, with risks and rewards based on performance that will align the utility incentives with customer interests."^{4/}

^{2/} See EAP I, p. 5.

^{3/} Energy Action Plan II, p. 4, Key Action 1.

^{4/} Energy Action Plan II, p. 5, Key Action 12.

California again stepped up its ambitious energy efficiency goals in 2006 through the adoption of AB 32, the Global Warming Solutions Act, which includes as a goal the reduction of greenhouse gas emissions to 1990 levels by 2020. Achieving this greenhouse gas reduction goal unquestionably requires a strong commitment to energy efficiency by the IOUs.

In the 2008 Energy Action Plan Update, the State’s energy policy makers considered the increased energy efficiency investments required to meet AB 32 goals. The 2008 EAP Update again determined that it is appropriate to provide an incentive mechanism to encourage the IOUs to meet aggressive energy efficiency goals:

To ensure that the investor-owned utilities meet these energy efficiency goals and challenges, the Public Utilities Commission recently authorized a risk/reward mechanism to allow utilities to earn financial rewards for meeting or exceeding their goals and includes penalties for not reaching goals. This regulatory approach should give utilities a strong incentive to go beyond traditional approaches to energy efficiency to achieve even greater savings. *This mechanism will give utilities equal opportunities to earn profit, whether they are investing in energy efficiency or supply resources to create a truly level playing field.*^{5/}

The Commission has previously recognized that a RRIM plays a strong role in supporting the Strategic Plan and in maintaining California’s historically low per capita electricity consumption.^{6/} As the Commission discussed in 2010:

The purpose of the RRIM is to offer incentives to the IOUs in a manner that will encourage and compel them to meet and exceed Commission goals for energy efficiency savings, and to extend California’s commitment to making energy efficiency the highest energy resources priority.^{7/}

^{5/} 2008 EAP Action Plan Update, p. 8 (emphasis added).

^{6/} D. 10-12-049, p. 4: “The incentive mechanism reinforces our strong commitment to the goal of decreasing overall future per capita electricity consumption in California by the customers of the IOUs. It cannot be disputed that such reductions benefit the IOUs’ customers and California society at large.”

^{7/} D.10-12-049, pp. 10-11.

State Energy Policy, as consistently applied by the Commission, strongly supports a properly-structured energy efficiency incentive mechanism.

2. A Shared Savings Mechanism Benefits Customers.

The RRIM is not only good energy policy, but also economically benefits the IOUs' customers by focusing IOU efforts on cost-effective energy efficiency actions. Utility customers currently receive the overwhelming majority of net benefits achieved by the IOUs through a shared savings mechanism. Through the existing RRIM, *utility customers retain 93% of the net benefits arising from the IOUs' energy efficiency programs.*

Faced with increasingly aggressive energy efficiency goals, the Commission should continue to support existing state policy by retaining a RRIM that is sufficient to encourage the IOUs to aggressively increase the amount of energy efficiency in their portfolios and provide an equitable share of the rewards between the IOUs' investors and customers. The continuation of an incentive mechanism sends a strong policy signal to the energy efficiency community regarding the Commission's ongoing commitment to, and support of energy efficiency as a preferred resource.^{8/}

B. PG&E Supports Continuation of the 2009 Incentive Claim Mechanism Through the 2010-2012 Program Cycle.

This OIR will consider the design of the RRIM for the 2010-2012 program cycle.^{9/} PG&E agrees this issue is properly in the scope of the proceeding and strongly supports the continuation of a 2009 type RRIM mechanism as modified in D. 10-12-049 and used in the IOUs' most recent 2009 incentive claims, for the 2010-2012 RRIM. As discussed above, the shared savings mechanism motivates the IOUs to maximize energy savings to achieve state

^{8/} D. 07-09-043, p. 2, "Today we adopt a risk/reward incentive mechanism designed to extend California's commitment to making energy efficiency the highest energy resource priority."

^{9/} OIR, p. 8.

energy efficiency policy goals and appropriately shares the savings with utility customers by providing them with most of the net benefits.

PG&E's 2010-2012 portfolio was designed and is being implemented under the premise that a timely and simple shared savings incentive mechanism would be used, as in prior RRIM cycles. This understanding is based on the Commission's use of broad language in Decision 07-09-043 when the shared savings mechanism was originally approved.^{10/} After the fact changes to the RRIM that prevent the IOUs from effectively planning or executing upon its energy efficiency strategy are simply unfair. Two of the three years of the 2010-2012 cycle have already elapsed and there will be no practical way for the IOUs to adjust their 2010-2012 portfolios to comport with any changes to the RRIM by the Commission this year. Changing the RRIM applicable for 2010-2012 at this point in the portfolio cycle would not allow for any meaningful redirection of 2010-2012 program efforts and could hamper the achievement of 2013-2014 goals due to hasty changes made to current programs that should be continued into 2013 and 2014.

While the Commission clearly did not promise to continue the 2009 mechanism for 2010 and beyond, it acknowledged in December 2011 that regulatory certainty regarding the RRIM is beneficial: "By adhering to the treatment of 2009 incentive claims laid out in D.10-12-049, we underscore our commitment to promoting energy efficiency *and preserve credibility in the consistency of our regulatory treatment.*" ^{11/} In Decision 07-09-043, the Commission also acknowledged that in setting a RRIM, it must consider, among other factors: "What level of earnings potential will provide a clear signal to utility investors and shareholders that achieving

^{10/} "Today's adopted incentive mechanism applies to the energy efficiency programs funded for the 2006-2008 program cycle and for subsequent program cycles until further Commission notice." D.07-09-043, OP. 1, p. 219.

^{11/} D.11-12-036, p. 10 (emphasis added).

and exceeding the Commission's savings goals (and maximizing ratepayer net benefits in the process) and will create meaningful and sustainable shareholder value.”^{12/} A steady incentive mechanism can reduce volatility and will encourage the IOUs and investors to fully invest in a long-term and sufficiently aggressive energy efficiency program that will help meet the State's energy policy goals.

The OIR also “will consider whether a prospective RRIM based on *ex-ante* assumptions and whether, or to what extent, there should be *ex post* true-ups.”^{13/} In Decision 11-07-030, the Commission locked down the *ex-ante* values for the current portfolio. In the 2009 program year, DEER 2008 *ex-ante* values were locked down allowing the IOUs and Energy Division to easily replicate the process used to evaluate the 2009 program year savings and reward IOU performance based on established *ex-ante* values. It is reasonable to continue the relatively straightforward and transparent process used to determine and award the 2009 incentive claims for the entirety of the 2010-2012 program cycle.

Although the current mechanism is not perfect, it has seen several improvements since it was adopted in D. 07-09-043. The 2009 RRIM modifications to use *ex-ante* values (unit energy savings, net to gross values, useful lives, installation rates, incremental measure costs, etc.), to include a cost-effectiveness guarantee, and to remove penalties, were necessary steps that should be continued in the current cycle and for any future shared savings RRIM^{14/} to maximize ratepayer benefits of energy efficiency investments. Accordingly, PG&E recommends that the Commission continue to use the 2009 Incentive Mechanism through the current cycle as the

^{12/} D.07-09-043, Finding of Fact 92.

^{13/} OIR, p. 9.

^{14/} Methods for accounting for CFLs in storage should also be reviewed well in advance of implementing the earnings mechanism.

IOUs designed their portfolios with the understanding that a shared savings RRIM, such as was used for the 2009 RRIM, would exist. Continued regulatory certainty based on the IOUs' 2010-2012 portfolio planning efforts and subsequent approval by the Commission, supports the IOUs' continued progress towards achieving the State's aggressive energy efficiency goals.

C. PG&E Supports Exploration of a Modified Incentive Mechanism in Prospective Cycles, Including 2013-2014.

This OIR will also consider the design of the RRIM for the 2013-2014 program cycle.^{15/} PG&E is open to evaluating a modified incentive mechanism for prospective energy efficiency cycles in a future phase of this proceeding before the IOUs file their bridge portfolio applications. PG&E believes a future mechanism can incorporate many of the lessons learned from previous program cycles and drive performance to achieve the Commission's goals of deep, lasting energy savings.^{16/} For incentive mechanisms to be truly effective, they must be simple, transparent, meaningful and timely.

PG&E suggests three potential changes to the incentive mechanism for the 2013-2014 cycle extension to promote the Commission's goals of deep, lasting savings: (1) separate resource vs. non-resource program awards to focus the shared savings mechanism on resource program, and reflect an alternative incentive in the non-resource program; (2) retain *ex-ante* values for all measures and custom projects (*ex-ante* includes all savings calculation and attribution factors, e.g. NTG, EUL, RUL, baseline, etc.) with a true-up allowed for verified installations only; and (3) move to 100% Program Administrator Cost Test (PAC) for Performance Earnings Basis (PEB) purposes to maximize the IOUs' ability to more cost-effectively move the energy efficiency market.

^{15/} OIR, p. 8.

^{16/} ACR Scoping Memo, p. 15 (Oct. 25, 2011) "In addition to the portfolio changes signaled above, this guidance will recommend changes expected to deliver deeper, longer-term energy savings."

1. Separate Resource vs. Non-Resource programs to incent performance in each area.

Separating resource programs and non-resource programs would allow an incentive mechanism to appropriately focus the IOUs' efforts and motivate accomplishments in each category. A mechanism that separates these costs allows the portfolio designer to create both a cost-effective resource portfolio to maximize cost-effective programs while at the same time providing a focus on non-resource aspects of the portfolio that are designed to achieve longer term market transformation benefits.

A mechanism that appropriately separates these two components - resource and non-resource programs - allows the IOUs to design a portfolio that incents: (1) maximized cost-effective performance for savings programs; (2) performance and achievement of non-resource programs; and (3) alignment with Commission goals.

Establishing an incentive for non-resource program benefits by rewarding IOUs for non-resource program achievements motivates greater performance in the non-resource portion of the portfolio. PG&E agrees with TURN^{17/} that an incentive mechanism similar to TURN's 'management fee' model may be appropriate for *a portion* of the total EE portfolio, namely the non-resource portion. There are a number of possible incentive designs that could provide the proper incentive for non-resource programs including fee for performance, or metric-based models. Rewarding the non-resource programs separately differentiates performance and signals to program administrators the importance the Commission places on aspects of the Strategic Plan that are within the IOUs' control. These market transformative benefits and cost-effective resource programs can both be aggressively pursued and rewarded in a revised mechanism that is aligned with the 2013-2014 portfolios.

^{17/} Comments Of The Utility Reform Network On RRIM For 2010-2012, R.09-09-019, p. 3 (Sept. 23, 2011).

2. Retain *ex-ante* values for all measures and custom projects updating only for verified installations.

Resource programs are planned using a detailed set of assumptions and *ex-ante* values that are also, hopefully, the basis for determining the IOUs' goals and targets. A comprehensive listing of *ex-ante* savings values and associated efficiency measure information comprise a share of these detailed assumptions. Portfolio implementation efforts are carefully orchestrated, using these *ex-ante* assumptions, to maximize ratepayer benefits while meeting other Commission objectives and requirements. The Commission has recognized the need for *ex-ante* values in custom measures, as well as deemed measures. The Commission created a methodology for determining *ex-ante* values for custom measures - a process that should be evaluated going forward to determine if it is the appropriate method for establishing *ex-ante* savings values for Custom Measures.^{18/} Successful portfolio implementation requires the use of the predictability of the *ex-ante* values upfront to ensure consistency of focus and rewards. To do otherwise will not support the Commission's desire for creation of a self-sustaining energy efficiency infrastructure in California.

The Commission has recognized the reasonableness of identifying the savings values *ex-ante*.^{19/} PG&E sees the following benefits of using the *ex-ante* values:

- *Ex-ante* values represent the appropriate portfolio starting point and is based on evaluation studies;^{20/}
- Updating *ex-ante* values prior to each cycle informs program planning and creates a fair mechanism for introducing new innovative products mid-cycle;

^{18/} See D.11-07-030 Attachment B.

^{19/} See D. 10-12-049, p. 37: "A more reasonable approach and expectation is for the utilities to modify their portfolios based on assumptions available to them at the time they are developing and implementing their portfolios."

^{20/} "Aggressive, successful programs would be acknowledged for their success, rather than having their own success count against them." NRDC Comments, p. 5 (Jan. 12, 2012) (R. 09-11-014).

- The use of *ex-ante* values allows the IOUs to measure their performance against known and fixed parameters; and
- The use of *ex-ante* values establishes clear performance metrics, improves the predictability of achieving goals, and is the most similar comparison to supply-side earnings.

3. Use a pure PAC method to calculate the performance earning basis.

PG&E suggests the Commission consider a 100% PAC based model that will both simplify the RRIM calculations, and will also focus the IOUs on those elements within their control. A 100% PAC model includes only the incentive cost of the measure, not the total incremental measure cost. This approach has multiple benefits, including: (1) allowing the IOUs to maximize savings by effectively pricing incentives to increase program participation while balancing cost risk; and (2) removing contentious calculations surrounding incremental measure cost which would both streamline and simplify an inherently complex process. Further, a PAC model would allow the IOUs to plan and execute their portfolios on factors within their control, focusing on the incentive or level of customer rebate as opposed to the incremental measure cost. Lastly a PAC model may more appropriately create an incentive for IOUs to support longer-term measures that typically have higher incremental measure costs because the PAC model reduces the impact of large incremental measure costs, typically associated with longer-term more expensive measures, on portfolio cost effectiveness.

D. Proposed Schedule For Resolution of the OIR.

The OIR requests the parties to indicate a proposed schedule for resolution of the issues in this proceeding. PG&E proposes the following schedule.

| Date | Milestone/Resolution of RRIM Issues |
|-------------------|--|
| February 2, 2012 | Opening Comment on RRIM OIR and ACR |
| February 16, 2012 | Reply Comments on RRIM OIR and ACR |
| Mid March 2012 | Proposed Decision on 2010-2012 RRIM mechanism based on 2009 Incentive Claim Model. |
| Early April | Proposed Decision on Modifications to 2013-2014 RRIM |
| Early May | Final Decision on Modifications to 2013-2014 RRIM |
| June 30, 2012 | IOUs file applications for 2010 and 2011 incentive awards. |
| September 2012 | Energy Division Completes Review of 2010/2011 Savings Claim |
| October 2012 | Final Decision on 2010 and 2011 Incentive Claim Application |
| November 2012 | Second Phase of the OIR to review RRIM proposals for 2015 and beyond |

III. RESPONSE TO QUESTIONS IN THE ASSIGNED COMMISSIONER’S RULING

PG&E provides the following response to the requests in the December 16, 2011

Assigned Commissioner’s Ruling (ACR).

A. Calculating A Shared Savings Rate For 2010-2012.

1. Step One: Identify the energy savings in GWh associated with the 2010-2012 portfolio.

Table 1 below, identifies the actual and, for 2012 forecasted, energy savings associated with PG&E’s 2010–2012 portfolio.^{21/}

| Table 1 Forecasted Energy Savings Associated With PG&E’s 2010 - 2012 Portfolio | | | |
|--|------------|--------------|-------------------|
| | MW | GWH | MMTherms |
| 2010 | 295 | 1,766 | 15 |
| 2011 | 323 | 1,979 | 28 ^{22/} |
| <u>2012</u> | <u>273</u> | <u>1,629</u> | <u>16</u> |
| Total | 892 | 5,374 | 59 |

^{21/} The December 16 ACR requests: "To the extent that the IOUs modified their portfolios (and expected savings) as a result of D.11-07-030, the calculations should delineate the portion of the PEB that applies to the period before and after the portfolios and ex-ante savings were modified pursuant to D.11-07-030." PG&E does not delineate between values used before or after D. 11-07-030 as the values established in D. 11-07-030 are retro-active to 1/1/2010 and are used for the entirety of the portfolio savings calculations.

^{22/} PG&E’s 2011 savings included accomplishments from large customized gas projects. Similar projects are not planned for 2012.

The 2010 and 2011 energy savings are based on actual program accomplishments tracked in PG&E's MDSS database and were adjusted for the revised *ex-ante* values adopted in Decision 11-07-030. The 2012 energy savings are forecasted based on the rebalanced portfolio^{23/} goals and were also adjusted for the revised *ex-ante* values adopted in Decision 11-07-030.

As shown in Table 2, the actual 2010 – 2011 accomplishments and the forecasted 2012 accomplishments based on the rebalanced portfolio, which is currently pending approval by the Commission, will exceed 100% of the Commission's 2010 – 2012 energy savings goals assigned to PG&E.^{24/} In order to achieve 125% of goals, additional energy savings will be required as shown on Table 2.

| Table 2 Forecast of PG&E's 2010 - 2012 Energy Savings Compared To CPUC Goals | | | |
|---|------|-------|----------|
| | MW | GWH | MMTherms |
| 2010 - 2012 CPUC Goal | 703 | 3,110 | 49 |
| % of CPUC Goal | 127% | 173% | 121% |
| 2010 - 2012 Savings To Achieve 125% of CPUC Goals ^{25/} | 924 | 5,564 | 61 |

Detailed Methodology.

The *ex-ante* energy savings values for core high impact measures (HIMs) from D.11-07-30 were applied to the 2010 Annual Report accomplishments to determine the portfolio energy savings. These savings values were also applied to 2011 accomplishments to determine the 2011 energy savings. For 2012, the energy savings were forecast using the revised *ex-ante* values from D. 11-07-030.

^{23/} Based on PG&E's September 12, 2011 Advice Letters 3235-G and 3901-E.

^{24/} D. 09-09-047, p. 45.

^{25/} To achieve 125% of CPUC goals, the portfolio must be increased proportionally to allow achievement of 125% of gas goals, but increasing kW and kWh achievements beyond 125% of goals.

To address the dual-baseline issue in D.11-07-030, an analysis was performed by Energy Division and a “work around” was provided to the IOUs in order to quantify the dual-baseline impacts for five linear fluorescent measures. The results of the analysis were applied to the accomplishments through the third quarter of 2011 and extrapolated to the 2010 – 2012 portfolio period to estimate the impact of dual-baseline on the energy savings for 2010-2012.

The energy savings from carryover CFLs from prior years’ programs that were installed in the 2010 – 2012 portfolio period were included in this analysis using the Energy Division’s methodology from the 2009 incentive claim decision (D.11-12-036). The energy savings for the carryover CFLs were adjusted for the revised ex-ante values adopted in D.11-07-030. The energy savings from 2010 – 2012 Codes and Standards (C&S) are included in this analysis, including impacts from federal standards in the 2010 – 2012 portfolio period.

For customized measures, the energy savings were discounted by 10% by applying the 90% Gross Realization Rate (GRR) adopted in D.11-07-30.

2. Step Two: Provide the calculation of the Performance Earnings Basis.

Table 3 below identifies the Performance Earnings Basis (PEB) associated with the 2010 – 2012 portfolio based on actual and forecast results. The PEB was calculated using the revised energy savings from Table 1 and the benefits from the E3 calculator results.

| | Benefits (\$) | TRC Costs (\$) | PAC Costs (\$) | TRC Net Benefits (\$) | PAC Net Benefits (\$) | PEB (\$) |
|-------|---------------|----------------|----------------|-----------------------|-----------------------|---------------|
| 2010 | 942,933,350 | 605,228,959 | 311,922,361 | 337,704,391 | 631,010,989 | 435,473,257 |
| 2011 | 931,404,446 | 602,873,549 | 356,861,134 | 328,530,897 | 574,543,311 | 410,535,035 |
| 2012 | 622,972,133 | 453,084,081 | 273,974,744 | 169,888,052 | 348,997,389 | 229,591,165 |
| Total | 2,497,309,929 | 1,661,186,589 | 942,758,239 | 836,123,340 | 1,554,551,690 | 1,075,599,457 |

Table 4 below identifies the PEB associated with the energy savings shown in Table 2 above. This represents achievement of 125% of Commission goals.

| <p>Table 4 Calculation of Performance Earnings Basis (PEB) To Achieve 125% Of CPUC Goals</p> | | | | | | |
|--|---------------|----------------|----------------|-----------------------|-----------------------|---------------|
| | Benefits (\$) | TRC Costs (\$) | PAC Costs (\$) | TRC Net Benefits (\$) | PAC Net Benefits (\$) | PEB (\$) |
| 2010 - 2012 PEB At 125% Of Goals | 2,585,950,114 | 1,720,149,189 | 976,220,752 | 865,800,925 | 1,609,729,362 | 1,113,777,071 |

Detailed Methodology

The 2010 benefits are based on the existing 2010 Annual Report E3 results adjusted for revised *ex ante* values adopted in D.11-07-030. The 2011 and 2012 benefits are based on previously-run 2011 E3 results adjusted for revised ex-ante values adopted in D.11-07-030. Since 2011 ratios were used for 2012 values, the annual discount rate from the 2010-2012 E3 calculator was applied once to the 2012 benefits only. The benefits for the PEB shown in Table 3 were calculated using the revised energy savings from Table 1 and benefits-to-savings ratios from the previous E3 calculator results. The TRC and PAC costs for the PEB shown in Table 3 were calculated based on the resulting benefits and cost-to-benefit ratios from the previous E3 calculator results. In order to obtain the PEB for the 2010 – 2012 portfolio, the PEB calculation ($\frac{2}{3}$ TRC Net Benefits + $\frac{1}{3}$ PAC Net Benefits) was performed using the revised portfolio savings described above.

For customized measures, the PEB calculation described above uses benefits derived from the energy savings in Table 1 which incorporated the 90% GRR adopted in D.11-07-030.

The PEB for C&S is based on post-2005 advocacy work in the 2010 – 2012 portfolio period, including federal standards.

The PEB shown in Tables 3 and 4 excludes benefits and costs associated with LIEE and Emerging Technologies (ET) per the Energy Efficiency Policy Manual and On-Bill Financing (OBF) loan amounts in accordance with D. 09-09-047.

3. Step Three: Calculate 2010-2012 earnings associated with supply-side resources avoided by energy efficiency

To calculate the 2010-2012 earnings avoided by energy efficiency, PG&E used its previous supply-side equivalence calculation model^{26/} with updated assumptions as requested in the ACR.

Supply-side earnings are the sum of three components: the earnings on utility-owned generation, the earnings on Transmission and Distribution (T&D), and the earnings on the shareholder equity needed to support the debt equivalence of power purchase agreements. In each case, earnings are calculated as the present value of annual earnings on the relevant equity investment over the expected average life of energy efficiency measures. This is then discounted at the utility's authorized rate of return on equity. These earnings are grossed up for taxes in order to determine the dollar incentive in terms of a revenue requirement. Supply-side generation is assumed to be combined-cycle gas turbine plants, half utility-owned and half owned by independent energy producers. The amount of supply-side generation in each of the years 2010-2012 is determined by: (1) the estimated energy savings in each of those years; (2) the assumed capacity factor of the generation units, 90%; and (3) line losses of 9%. The resulting estimate of supply-side earnings is \$465 million, as shown in Table 5.

^{26/} See PG&E's foregone earnings model filed on September 8, 2006: PG&E's Post-Workshop Comments and Updated Proposal on Energy Efficiency Shareholder Risk/Reward Incentive Mechanisms, Attachment A – Analysis of Foregone Supply-Side Earnings, revised as described for Version C in Chapter 2 of PG&E's May 17, 2007 filing in R.06-04-010.

| Table 5 Forecast of Incentive Revenue of Supply Earnings (\$ Millions) | |
|---|-------|
| Supply-side generation (utility owned) | \$238 |
| Supply-side generation from PPAs | \$51 |
| T&D | \$176 |
| 2010 – 2012 Supply-side Incentive Revenue Requirement | \$465 |

Table 6 below contains PG&E's previous and updated assumptions. PG&E worked with the other IOUs to develop these assumptions. Each IOU used a series of similar assumptions while also using IOU specific numbers as needed to represent the different IOU service area's costs. The IOU-specific assumptions are denoted.

| Table 6 Supply Side Assumptions in Supply-Side Equivalence Calculation | | |
|---|-----------------------------|--------------------------------|
| Assumption | PG&E's Previous Assumptions | Current Assumptions |
| Build or Existing | 100% Build | 100% Build |
| Owned vs. Purchased Power | 50/50 | 50/50 |
| Generation Mix | 100% CCGT | 100% CCGT |
| Avoided Cost \$/kw | 2005 MPR, \$939 /kw | 2009 CEC Report, ~\$1,180 / kw |
| Measure Life | 12 years | 9 years |
| Debt Equivalence: | | |
| Risk Factor | 30% | 25% |
| Discount Rate | 10% | 6% |
| Avoided T&D Investment* ^{27/} | \$237 / kw | \$517 / kw ^{28/} |
| Line Losses | 8% | 9% |
| Capacity Reserve Margin | Not Used | Not used |

^{27/} Unless otherwise denoted with an asterisk (*), all values represent common assumptions used by PG&E, SCE, SDG&E and So Cal Gas.

^{28/} This value is from PG&E's 2011 GRC Phase 2 testimony.

The Commission should continue to impute debt equivalence to power purchase agreements (PPAs) for use in the supply-side earnings estimates. Debt equivalence is the additional operating leverage that PG&E incurs when it enters into long-term contracts, such as long-term PPAs. PPAs are like debt in that they require the utility to pay the contractual amount of the PPA whether the power is needed and regardless of the value of that power. Similarly, conventional debt must be paid regardless of whether the underlying assets financed with that debt are needed, and regardless of the value of those assets. As a utility acquires more PPAs, it becomes more leveraged, and hence more risky. To mitigate the credit risk of excessive utility leverage, and to maintain constant proportions of debt and equity so as to sustain its credit ratings, the utility increases its proportion of equity so that its overall leverage when viewed by investors is the same as before the addition of the PPAs. This additional equity has a cost attributable to the PPAs, and that cost is the earnings the utility would have received had it entered into the PPAs.

PG&E estimates the earnings from the equity added to support PPAs by taking the present value of the PPA payments and assuming that figure is the total debt obligation of the utility in each year. PG&E then applies a risk factor of 25% to recognize that a PPA is not exactly the same as debt, and that the generator must perform in order to be paid, and that the Commission is likely to allow PG&E to fully recover its payment obligation under the PPAs. PG&E then assumes it needs an amount of additional equity in each year equal to half of the risk-adjusted obligation of the PPA in each year.

4. Step Four: Calculate the RRIM shared-savings percentage rate required to yield the supply-side equivalent earnings.

The RRIM shared-savings percentage rate is then calculated by dividing the supply-side equivalence of the 2010-2012 savings values (\$465 million as derived in step 3) by the demand-side 2010-2012 cycle PEB of \$1,076 million derived in step 2. The result is 43.2%.

5. Step Five: Adjust the shared savings percentage rate as appropriate to reflect the reduced risk associated with earnings received as incentives.

The ACR requests the IOUs evaluate how to calculate any adjustment to the shared savings percentage rate derived in Step 4 based on a comparison of the risk of the energy efficiency incentive earnings against the risk of supply side earnings. PG&E does not believe that such a comparison can lead to a formulaic adjustment to the results of Step 4. Rather, the results in Step 4, which can vary significantly as assumptions change, can provide a range of supply-side earnings from which a shared-savings percentage rate can be drawn. PG&E believes that a shared-savings percentage rate that results in a meaningful award is appropriate. PG&E believes it reasonable for the Commission to further analyze an appropriate shared savings rate for the 2013 and beyond program years in a future phase of this proceeding.

B. Calculating A Shared Savings Rate For 2013-2014.

The ACR “directs parties to separately comment on how the above assumption or results would change, if at all, for the proposed 2013-2014 time frame.” (ACR, p. 8.) PG&E is unfortunately unable to estimate a shared savings rate for 2013-2014 at this time. This calculation would require the savings goals, and all necessary savings and benefits inputs which are under consideration by the Commission. Once goals are set, the calculation of shared savings rate requires four inputs: (1) the savings achieved by the portfolio; (2) benefits achieved from those savings; (3) the cost of the portfolio and measures; and (4) the equivalent supply-side investments. PG&E lacks three of these four necessary inputs in addition to the goals.

However, while PG&E obviously does not have its goals, *ex-ante* savings values and costs set for the 2013-2014 cycle extension, it is fair to assume that if the goals, *ex-ante* savings values, and costs are similar to those in 2010 - 2012, then the shared savings rate would be similar to the savings rate calculated in Step 4 above.

Secondly, to calculate the portfolio savings requires the underlying savings assumptions of measures in the 2013-2014 portfolios. Given that DEER is not yet finalized and additional needed workpapers are also not yet approved by Energy Division for use in the 2013-2014 cycle, savings calculations cannot be completed. Using a previous set of assumptions is inappropriate given the significant potential changes to DEER and the direct impact those changes may have on savings assumptions.

Third, calculating savings benefits requires final avoided cost inputs. The parties filed opening and reply comments on avoided cost updates in October and November 2011 in Rulemaking 09-11-014. The final decision on the avoided cost updates is needed for PG&E to appropriately calculate benefits associated with the next portfolio.

Lastly, PG&E must know the costs of the portfolio to perform the calculation. Without portfolio goals, and an approved portfolio for the 2013-2014 program cycle, the total budget is unknown. Additionally, the DEER data base and work papers containing required cost information is also incomplete. Given that, PG&E cannot complete the calculation of costs for the 2013-2014 period.

Given the lack of required information, PG&E is unable to calculate savings, benefits or costs for the 2013-2014 portfolio or estimate how the shared savings would differ from the response calculated for 2010 – 2012 portfolios.

However, as envisioned in the OIR, possibly in a subsequent phase of this rulemaking, development of a RRIM for the 2013-2014 programs should be done prior to the development of the 2013-2014 portfolios.

IV. CONCLUSION

PG&E appreciates this opportunity to provide opening comments on the OIR and ACR and requests the final scoping memo be issued consistent with PG&E's comments.

Respectfully submitted,

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