STATE OF CALIFORNIA ARNOLD SCHWARZENEGGER, *Governor*

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

SAN FRANCISCO, CA 94102-3298

FILED
11-15-10
04:37 PM

November 15, 2010

Agenda ID #9974
Ratesetting

TO PARTIES OF RECORD IN RULEMAKING 09-01-019

This is the proposed decision of Administrative Law Judge (ALJ) Pulsifer. It will not appear on the Commission's agenda sooner than 30 days from the date it is mailed. The Commission may act then, or it may postpone action until later.

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

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

Comments must be filed pursuant to Rule 1.13 either electronically or in hard copy. Comments should be served on parties to this proceeding in accordance with Rules 1.9 and 1.10. Electronic and hard copies of comments should be sent to ALJ Pulsifer at trp@cpuc.ca.gov and the assigned Commissioner. The current service list for this proceeding is available on the Commission's website at www.cpuc.ca.gov.

/s/ KAREN V. CLOPTON
Karen V. Clopton, Chief
Administrative Law Judge

KVC:oma

Attachment

Decision **PROPOSED DECISION OF ALJ PULSIFER** (Mailed 11/15/2010)

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Examine the Commission's Energy Efficiency Risk/Reward Incentive Mechanism.	Rulemaking 09-01-019 (Filed January 29, 2009)

DECISION REGARDING RISK/REWARD INCENTIVE MECHANISM REFORMS

TABLE OF CONTENTS

Title Page

DECISION REGARDING RISK/REWARD INCENTIVE MECHANISM REFORMS.....1
1. Introduction.....2
2. Procedural Background.....7
3. Overview of the Current Incentive Mechanism.....9
4. Overview of Parties' Proposals for Reform.....12
5. Adopted Reforms to the RRIM.....17
5.1. Starting Point for Implementing Modified RRIM Measures.....17
5.2. Use of Ex Post Evaluated Data in Incentive Determination.....20
5.2.1. Background.....20
5.2.2. Discussion.....21
5.3. Inclusion of Program Participant Expenditures to Calculate Incentive Earnings.....25
5.3.1. Background.....25
5.3.2. Discussion.....27
5.4. Reforms Relating to the use of Minimum Performance Standards.....28
5.4.1. Background.....28
5.4.2. Parties' Positions.....29
5.4.3. Discussion.....30
5.5. Gross versus Net Savings Goals for Use in Measuring Incentive Awards.....31
5.5.1. Background.....31
5.5.2. Discussion.....34
5.6. Separate Incentive Mechanism for Non-Resource Program; and Customized Projects.....35
5.6.1. Background.....35
5.6.2. Discussion.....37
5.7. Level of Incentive Earnings.....39
5.7.1. Background.....39
5.7.2. Parties' Proposals.....42
5.7.3. Discussion.....45
5.8. RRIM Earnings Claim and Recovery Process.....49
5.8.1. Background.....49
5.8.2. Parties' Proposals.....52

TABLE OF CONTENTS
(Cont'd)

Title **Page**

5.8.3. Discussion 55
6. Comments on Proposed Decision 56
7. Assignment of Proceeding 56
Findings of Fact 56
Conclusions of Law 61
ORDER 62

DECISION REGARDING RISK/REWARD INCENTIVE MECHANISM REFORMS

1. Introduction

In this decision, we implement reforms to the energy efficiency risk/reward incentive mechanism (RRIM) for programs administered by Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company (the "investor-owned utilities" or "IOUs"). The revised mechanism will take effect for the first installment of incentive earnings covering the 2010-2012 program cycle.[1] We reserve the option of considering longer term RRIM reforms for subsequent cycles through a new rulemaking.

Our adopted reforms address certain process dysfunctions in the current mechanism, and promote a more transparent and streamlined incentive process. We established the RRIM in 2007 to function through a ministerial process, incorporating independently evaluated performance results. Instead, the process has been engulfed in continual controversy, involving protracted disputes over fairness and transparency of data and calculations used to determine incentives. Calculations of net benefits have proven extremely contentious, involving large data sets of highly technical parameters and debates about measurement protocols and due process.

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1 In Decision (D.) 09-09-047, we approved an energy efficiency portfolio of $3.129 billion for the 2010-2012 cycle. We originally planned on a 2009-2011 cycle. Due to various factors, including adoption of the Strategic Plan and the need for revision to the original portfolio applications, we deferred the start of the cycle and adopted bridge funding to ensure that viable 2006-2008 programs continued through 2009 (see D.08-10-027).

The reforms adopted herein continue to provide the utilities with incentives to achieve the maximum socially-desirable level of energy efficiency programs and services, while protecting ratepayers' interests through appropriate cost containment mechanisms. We modify and streamline the process for measuring incentive amounts, however, in order to enable the incentive process to function in the manner as originally intended.

Providing incentives strengthens the commitment to California's Energy Action Plan II,[2] treating energy efficiency as the first resource to meet California's energy demand.

In D.07-09-043, we concluded that IOUs have an inherent bias toward supply-side procurement under cost-of-service regulation. In view of this bias, we continue to offer incentive earnings to ensure that IOU investors and managers view energy efficiency as a core part of regulated operations. We recognize, however, that an earnings mechanism is just one factor in providing incentives and direction. Other Commission, legislative and regulatory directives outside of the Commission also drive IOU decisions and actions. These factors are all important to the overall framework guiding IOU decisions and actions to achieve Commission and public goals.

The Commission has extensively evaluated possible alternative incentive mechanisms in recent years and concluded that a "shared-savings" mechanism

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2 California's principal energy agencies, including this Commission, joined to create the Energy Action Plan in 2003. The Energy Action Plan identifies specific goals and actions to ensure adequate, reliable and reasonably-priced electrical power and natural gas supplies through cost-effective and environmentally sound strategies. The Energy Action Plan is posted on the Commission's website at: http://www.cpuc.ca.gov/static/energy/electric/energy+action+plan/index.htm. *See also*, D.05-09-043, *mimeo,* at 15; Energy Efficiency Policy Manual Version 3 (Policy Rules), Rule II.2 (Attachment 3 to D.05-04-051).

offers the best prospect for maximizing net benefits from the utilities' portfolios. We retain the shared savings mechanism in today's adopted reforms.

Under the current mechanism, the IOU must meet minimum performance thresholds to qualify for incentive earnings based on a specified percentage of net benefits in relation to the thresholds. In view of the difficulties this methodology has caused, we discontinue the linkage of incentive earnings to specific goal thresholds. Instead, earnings will accrue simply as a flat percentage of any positive net benefits calculated under the incentive formula. We likewise discontinue the calculation of penalties linked to such thresholds.

We also modify the calculation of performance values used to derive incentive amounts. During the 2006-2008 cycle, significant controversy involved the ex post evaluations of energy efficiency net benefits, including updates to the Database of Energy Efficiency Resources (DEER) utilized to evaluate net benefits used to compute RRIM earnings. Ex post calculations have been particularly controversial because they impact earnings so significantly. At the same time, ex post updates often involve metrics largely outside of program administrator and implementer control. Also, updates may be identified too late for timely adjustment of current program design. An incentive mechanism motivates desired results, however, where a cause-and-effect relationship exists between changes in the incentive award and the resulting management behavior.

Accordingly, for the 2010-2012 cycle, we modify the RRIM earnings methodology for calculating net benefits by applying the same ex ante assumptions utilized for program planning purposes. We recognize that the 2010-2012 energy savings ex ante values have not yet been determined. In D.09-09-057, the Commission concluded that:

> Measure ex ante values established for use in planning and reporting accomplishments for 2010-2012 should be frozen,

> based upon the best available information at the time the 2010-2012 activity is starting. [Conclusion of Law 26, at 356.]

The IOUs jointly filed a Petition for Modification of D.09-09-057, however, on September 17, 2010; noting unresolved issues regarding the determination of 2010-2012 ex ante values. We defer to our disposition of the Petition for Modification of D.09-09-057 (in Application (A.) 08-07-021 et al.) as to how, when, and by what amounts, the relevant frozen ex ante values used in planning and reporting 2010-2012 programs will be determined. Once these ex ante values for per-measure savings are determined in A.08-07-021 et al., those values will remain frozen through the 2010-2012 cycle, and applied to actual verified installed measures to derive the earnings basis for incentive payments. The net benefits final true-up calculation will still be based upon verified actual expenditures incurred for the applicable cycle. In this manner, ratepayers will still be protected from funding incentive rewards for measures that have not actually been installed or for excessive measure costs.

While the focus of much of the discussion on the energy efficiency programs is directed at increasing energy savings, costs of implementing the programs also have a direct bearing on the cost-effectiveness of these programs and the amount of dollar savings which may be shared with utilities. We would like parties to spend some effort on evaluating means to reduce costs of implementing these programs while still meeting all the goals and policies established by the Commission. Utilities are directed and other parties encouraged to propose means to reduce costs of program implementation. Such proposals should be presented in workshops in 2011; in A.08-07-021 et al., which may be consolidated with upcoming workshops to be conducted by the Commission's Energy Division on other aspects of the energy efficiency programs.

In making these modifications for purposes of the RRIM, we in no way minimize the importance of independent ex post evaluations of savings for other purposes, including evaluating and planning prospective energy efficiency portfolio designs. As noted in D.09-09-047, holding ex ante values constant for calculating incentive payments during the 2010-2012 cycle does not preclude the use of DEER and non-DEER measure updating for other purposes.

We also consider allocating a share of incentive earnings to encourage market transformation through the achievement of non-resource programs. These are energy efficiency program activities that do not focus on the displacement of supply-side resources at the time they are implemented (but may lead to displacement over the longer-term, or enhance program participation overall). In D.09-09-047, we directed Energy Division to provide recommendations on specific market transformation ultimate and proximate indicators, as well as data collection and tracking processes, for a subset of portfolio programs or measures that have the most impact in terms of their importance, their savings potential or dollars spent. We will utilize the metrics being developed through that process as the basis for considering an incentive mechanism for non-resource programs to be addressed further in a new rulemaking.

Finally, we reduce the applicable RRIM earnings potential to a shared savings rate based on the Division of Ratepayer Advocates' proposal which, on an illustration basis, reduced the rate down to 5.4% with a revised cap of $189 million (subject to a separate removal of non-resource program costs) to reflect the reduced risks of the modified RRIM design and reductions in expected 2010-2012 net resource benefits in comparison to the prior portfolio. These reductions in earnings potential are necessary to protect ratepayers against excessive payment of incentive earnings while maintaining a strong motivation for utility commitment to energy efficiency goals.

2. Procedural Background

On January 29, 2009, the Commission opened this proceeding as the successor to Rulemaking (R.) 06-04-010, our inquiry into post-2005 energy efficiency policies, programs, evaluation, measurement and verification, and related issues. We issued various decisions in R.06-04-010 on topics ranging from energy efficiency goals (e.g., Decision (D.) 08-07-047) to the design of an incentive mechanism to promote energy efficiency.

A prehearing conference was held on April 7, 2009. By Assigned Commissioner's and Administrative Law Judge's Ruling dated April 14, 2009, a schedule and scoping memo was issued.

This rulemaking was limited to addressing issues relating to the design, operation, and reform of the incentive mechanism. The proceeding was bifurcated into two tracks: (1) finalizing remaining incentive earnings claims for the 2006-2008 cycle; and (2) developing prospective policies to improve the risk/reward incentive mechanism (RRIM) prospectively. In opening this OIR, the Commission concurrently suspended the schedule for review of remaining 2006-2008 energy efficiency incentive earnings claims with the intent of adopting a new framework resolving interim payments for 2008 no later than December 2009 and final payments no later than December 2010.

The instant decision adopts prospective changes to the RRIM for resource programs for the 2010-2012 cycle. This decision closes the proceeding. We will consider a separate mechanism for non-resource programs in a separate rulemaking. A separate phase addressed the disposition of outstanding RRIM claims for the 2006-2008 cycle.

In Application (A.) 08-07-021 et al., we took up consideration of policy rules most essential to formulation of cost-effective portfolios consistent with the Strategic Plan. Certain issues initially identified in A.08-07-021 et al. were transferred for consideration to this proceeding. However, this proceeding considers these issues only in the context of designing incentives, not in the context of measuring cost-effectiveness or design of portfolios.

On April 1, 2009, the Energy Division served a "White Paper on Proposed Energy Efficiency Risk-Reward Incentive Mechanism and [Evaluation, Measurement, and Verification] EM&V Activities." (White Paper)[3] By joint ruling issued April 16, 2009, the White Paper was incorporated into the record. On April 29, 2009, parties filed comments in response to the issues identified in the White Paper, and on May 11, 2009, filed reply comments.

Comments were filed by the investor-owned utilities (IOU), Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E), and Southern California Gas Company. Comments were also filed by the Division of Ratepayer Advocates (DRA), The Utility Reform Network (TURN), the Natural Resources Defense Council (NRDC), and Women's Energy Matters (WEM).

On May 22, 2009, parties filed proposals for prospective changes in the RRIM. Responses were filed on June 12, 2009. A workshop was convened on July 15, 2009, to discuss the respective proposals, and to seek consensus. On behalf of all active parties, PG&E filed a matrix summarizing positions of parties. Post-workshop comments were filed on August 7, 2009, in which parties

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[3] The White Paper was served jointly on parties in this proceeding and in A.08-07-021 et al.

incorporated further amendments to their positions in view of the workshop discussions. No evidentiary hearings were conducted.

Our adoption of changes in the RRIM in this proceeding recognizes the importance of close coordination with Application (A.) 08-07-021 et al. In D.09-09-047 (in A.08-07-021 et al.), the Commission adopted energy efficiency portfolio plans for the major utilities for the 2010-2012 period.[4] In D.10-04-029, the Commission addressed how evaluation, measurement and verification (EM&V) processes will apply for the 2010-2012 cycle.

3. Overview of the Current Incentive Mechanism

As a starting point for addressing reforms to the incentive mechanism, we review the principles underlying the existing RRIM. The RRIM provides incentives awarding investors with a share of the quantifiable net energy and resource savings from implementing energy efficiency measures. The Energy Action Plan[5] and past Commission decisions have concluded that there is an inherent utility bias towards supply-side procurement under cost-of-service regulation. Investor-owned utilities generate earnings when they invest in "steel-in-the-ground" supply-side resources, but not when the utilities are successful in procuring cost-effective energy efficiency.

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4 D.09-09-047 addressed threshold EM&V issues for the 2010-2012 portfolios, including: 1) the preliminary budget for 2010-2012 EM&V; 2) Commission core objectives for EM&V; and 3) a process for adopting detailed EM&V projects, refined EM&V budgets. Remaining EM&V policy issues will be addressed in a subsequent EM&V Decision.

5 This plan identifies specific goals and actions to ensure that adequate, reliable and reasonably-priced electrical power and natural gas supplies are achieved and provided through cost-effective and environmentally sound strategies. A copy of the Energy Action Plan is posted on the Commission's website at: http://www.cpuc.ca.gov/static/energy/electric/energy+action+plan/index.htm.

In D.07-09-043, we concluded that ensuring sustained and successful commitment to energy efficiency is best accomplished by moving away from a cost-of-service compliance framework, to a "win-win" alignment of shareholder and ratepayer interests. The RRIM, adopted in D.07-09-043, designed incentives so that utility investors and managers would view energy efficiency as a core part of utility regulated operations that can generate meaningful earnings. At the same time the RRIM was designed to protect ratepayers' financial investment, ensuring that program savings reported as the basis for incentives are real and verified, with penalties for substandard performance.

We articulated the following key assumptions and goals as a basis for the design and implementation of the RRIM as adopted in D.07-09-043:[6]

- The level of potential earnings under the adopted incentive mechanism represents <u>a meaningful opportunity to earn</u> for utility shareholders based on consideration of supply-side comparability and other factors.
- However, earnings to shareholders accrue <u>only</u> when utility portfolio managers <u>produce positive net benefits</u> (savings minus costs) for ratepayers.
- These earnings begin to accrue <u>only</u> as the utilities <u>reach to meet and surpass</u> the Commission's kWh, kW and therm <u>savings goals</u>.
- Earnings are greatest when savings <u>performance is superior</u>, not just "expected."
- All calculations of the net benefits and kW, kWh and therm achievements are <u>independently verified</u> by the Commission's Energy Division and its evaluation, measurement and verification (EM&V) contractors, based on adopted EM&V protocols.

6 See D.07-09-043 at 4-5.

- Ratepayers receive the vast majority of economic benefits, since they pay for all the energy efficiency portfolio costs.
- The shareholder "reward" side of the incentive mechanism is balanced by the risk of financial penalties for substandard performance in achieving the Commission's per kW, kWh and therm savings goals.
- Ratepayers are protected against financial losses on their investment in energy efficiency. If portfolio costs exceed the verified savings from that portfolio, shareholders are obligated to pay ratepayers back dollar-for-dollar for those negative net benefits.
- The overall level of potential earnings and penalties is capped in a manner that symmetrically limits both ratepayers' and shareholders' exposure to risks, while still encouraging superior performance.

The RRIM as adopted in D.07-09-043, enabled the IOUs to earn incentives as a percentage of the total net benefits achieved in meeting or exceeding adopted energy efficiency goals, derived as a function of: (a) the minimum performance standard (MPS) and (b) the Performance Earnings Basis (PEB). The MPS represents the minimum level of energy efficiency goals that must be achieved to qualify for a given shared savings percentage of net benefits. The PEB represents the avoided cost value of life-cycle energy efficiency savings, net of program costs.

Incentive payments or penalties are determined as a shared percentage of energy resource savings, net of the costs of implementing the energy efficiency portfolio.[7] Shareholder incentive earnings represent a specified percentage ("earnings rate" or "shared-savings rate") of the "net benefits," that is, the

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[7] For the Commission's past determinations on PEB-related issues, see D.05-04-051, *mimeo*, at 38-43 and 60-64. See also *Administrative Law Judge's Ruling on EM&V Protocol Issues*, September 2, 2005 in R.01-08-028, at 2-6 and 14-15.

avoided costs achieved by the energy efficiency portfolio. The net benefits are defined as the PEB. We refer to "net benefits" and PEB interchangeably in this decision.

Performance is evaluated on a cumulative basis in determining whether, or by how much, goals were met or exceeded. (D.07-09-043 at 116.) D.08-12-059 required review of the Energy Division Verification Report on energy efficiency activities through a Commission Resolution.

In D.09-05-037, the Commission acknowledged certain inconsistencies between the savings assumptions underlying adopted goals and assumptions applied in measuring utility accomplishments against adopted goals. D.09-05-037 addressed the most consequential of these discrepancies by adjusting the natural gas savings components of PG&E and SDG&E's goals (measured in therms) to account for interactive effects when evaluating utility performance against adopted goals. D.09-05-037 also acknowledged that there may also be a need to further consider changes to our existing goals to better match the most recent savings parameters of the DEER.

The RRIM was designed to send a strong message to the utility to pursue cost-effective energy savings as quickly and as aggressively as possible throughout the program cycle. (D.07-09-043 at 115.) The RRIM process adopted in D.07-09-043 has not, however, worked as effectively or efficiently at meeting the above-identified goals, as originally envisioned. Pursuant to the mandate of this proceeding to reform the mechanism, we evaluate parties' proposals below.

4. Overview of Parties' Proposals for Reform

Parties presented a range of proposals for RRIM reform, including changes in how to measure performance for assessing incentives. Some of the more significant elements involved in parties' proposals for redesign include relating incentives more directly to elements which program administrators can control or to elements which can be reasonably measured. Parties also differ on what relative balance should apply between the potential risk of penalties for poor performance versus the magnitude of earnings for successful achievement of efficiency savings.

The proposals involve tradeoffs in how performance is to be measured in relation to the risks and incentive rewards that potentially apply.

Various parties believe that a fundamental flaw in the RRIM is the continually moving nature of the inputs by which IOU performance has been measured. Southern California Edison Company (SCE) believes that the assumptions used to plan the portfolio should remain constant throughout the entire program cycle, including the evaluation period during which incentives are earned. SCE also proposes simplifying the calculation of net benefits. The current RRIM formula incorporates millions of unique data points disaggregated by multiple climate zones and building types. SCE proposes that the data currently utilized be simplified in order to reduce the costs and complexities of reviewing, reporting, and calculating incentive earnings. SCE argues that in this manner, uncertainty is reduced as to the subjective nature of the evaluation and measurement process, thus allowing the IOUs to focus on installing energy efficiency measures and managing their costs.

Parties express a range of views on how IOU savings accomplishments should be reported and evaluated for purposes of incentive payments (or penalties). The IOUs and NRDC all argue that EM&V results based upon updated DEER assumptions have not been synchronized with adopted energy savings goals. Since first adopting long-term energy savings goals for the utilities in 2004, however, the Commission intended for the goals to be updated every three years in advance of each three year program cycle (See D.04-09-060, at Ordering Paragraph 3). NRDC proposes that the Commission commit to fulfilling this objective, with updates to be completed well in advance of the start of each program cycle to allow time for program planning. With regular goal updates, the goals could be more in line with the EM&V results about achievement of savings in relation to assumptions.

The utilities and NRDC proposed to essentially eliminate any mid-cycle updating of ex ante parameters, so that goals savings are calculated using the same ex ante inputs as program proposals. PG&E argues that the adopted process should allow for more timely completion of incentives related to a program cycle instead of two full years after the program cycle ends.

PG&E proposes that the linkage between incentive earnings and goal achievement be entirely eliminated in view of the contentious and costly process involved in frequently updating goals to recognize periodic changes in underlying assumptions used for EM&V and program design. To ensure that EM&V results and programs are linked, however, PG&E states that EM&V results could be used to develop ex ante values in an open, transparent process based on final impact studies. PG&E proposes that EM&V studies continue and that results from final studies apply prospectively to the next program year, assuming the final studies have been publicly vetted and adopted by the Commission prior to June of the following year. PG&E believes that this approach enables the IOUs to plan for changes in EM&V values, and to keep those metrics constant for reporting and earnings purposes, while preserving the technical integrity and accuracy of the most recent savings values in final, publicly vetted studies.

NRDC believes that ex post updates have been a problem in past cycles because certain updates were largely out of the program administrator and implementers' control, or were produced too late for feed back into program design. NRDC believes that ex post updates of net-to-gross ratios and effective useful levels, in particular, inject significant uncertainty into the incentive results without providing feedback early enough for adjustments in program design. NRDC argues that net-to-gross ratios should not be trued-up for purposes of assessing performance under the incentive mechanism, but that the ex ante assumptions utilized for program planning should be utilized. NRDC likewise believes that effective useful life assumptions should not be trued-up, but that ex ante assumptions should apply, as these assumptions are outside of utility control and/or take too long to use in program feedback.

NRDC believes that scrutiny of EM&V results is desirable and that the Commission should not place undue emphasis on avoiding disputes over EM&V by "decoupling" EM&V from the incentive mechanism. NRDC supports continued ex-post true ups for program costs and measures installed through the EM&V Reports. NRDC thus proposes that unit energy savings be trued up on an ex post basis, except for measures for which there is a high degree of confidence in the underlying assumptions.

NRDC argues that a clear process is needed to identify assumptions to be trued up based on ex-post EM&V for purposes of calculating incentive awards, versus those assumptions not to be trued up. NRDC believes, however, that a dispute resolution process is needed to produce rigorous performance results within a reasonable time. NRDC expresses concern that completely de-linking EM&V from the RRIM could unduly relegate EM&V to a lower priority.

TURN also believes that savings and incentives could be based on original inputs with no minimum performance standards or penalty provisions, provided that incentive earnings rates are reduced accordingly to account for less risk to the utility and less guarantee of actual performance. TURN and the DRA proposed either a wholly different mechanism or new portions of an incentive mechanism that provide incentives for spurring customer investments and reducing actual energy consumption.

DRA proposes various modifications to the existing RRIM to simplify the mechanism, but argues that any action that decreases utility risk or increases ratepayer risk should reduce the reward rate and incentive cap. In the interests of timeliness, DRA proposes only limited reforms now, anticipating further proceedings to achieve proper alignment of programs with incentives beginning in 2012.

The Energy Division, in its White Paper, summarized key problems with the current incentive mechanism. Given the multitude of complex and interrelated problems burdening the existing incentive structure, Energy Division believes the current incentive mechanism based on MPS savings goals and

PEB-based net benefits offers little hope of quick improvement and a return to the Commission's policy objectives via small fixes or tweaks.

Energy Division suggested replacing the existing RRIM with a greatly simplified structure to provide predictable and regularly scheduled opportunities for prescribed *minimum* levels of incentive earnings for meeting adequate performance standards. The White Paper proposed that simplified and straightforward EM&V protocols be developed for this purpose, with potential bonuses for superior performance of selected non-resource programs, market transformation programs, and strategic initiatives. To qualify for bonuses, the utility would be required to satisfy more rigorous performance standards.

Energy Division believes such a structure balances the streamlining benefits of a simplified incentive structure with the performance enhancing benefits that require more rigorous EM&V, and has a better chance of being aligned with Commission policy priorities and fostering cooperation and constructive interactions between stakeholders and the Commission.

Energy Division proposed that a base level of incentives be based upon simplified and more broadly defined performance standards which can be adequately measured and reported within a relatively short period of time. Energy Division suggested alternative options. One option is to calculate base incentive earnings using the Energy Division administered ex-ante DEER and approved non-DEER parameter values, adjusted for verified installations and audited administrative costs in a final true-up. This option allows greater planning certainty, provides base earnings or penalties founded on familiar measures of portfolio performance, and requires little modification to the existing mechanism.

A second option is to base earnings achievement of consumption-based targets. The consumption targets would be consistent with the Assembly Bill 32 greenhouse gas emissions statutory greenhouse gas reduction goals and would likely need to be segmented by classes of customers, building type, building use, etc. The targets could be based on absolute consumption per segment or per capita consumption by segment, and could be expressed as energy intensity indicators (i.e., per household, per square foot, per unit of output, etc).

5. Adopted Reforms to the RRIM

5.1. Starting Point for Implementing Modified RRIM Measures

A threshold issue concerns the starting point for implementing the RRIM reforms adopted herein. In particular, one question is whether, or in what manner, incentives should be considered or applied for 2009 program activity. We originally anticipated that the next energy efficiency program three-year cycle after 2006-2008 would cover the 2009-2011 period. Due to various factors including the adoption of the Strategic Plan and the need for significant revision to the original utility portfolio applications, however, we deferred starting the new program cycle by one year, and adopted bridge funding (in D.08-10-027) to ensure that viable programs would continue through 2009.

In D.10-04-029, the Commission determined to use results from the final 2006-2008 evaluation reports as inputs for calculating the energy impacts of 2009 programs, for those measures and programs that were evaluated during the 2006-2008 period and also extended during 2009. The energy impacts of the 2009 programs were to be reported by Energy Division before the end of 2010, or as otherwise required by R.09-11-014, R.09-01-019, or other applicable energy efficiency dockets.

DRA believes that the significant postponement in energy efficiency program implementation that resulted from delays was caused by the utilities. DRA thus recommends the Commission eliminate the possibility of earning any shareholder rewards for 2009 energy savings. DRA argues that third party implementers, as well as the statewide energy efficiency infrastructure have been harmed by uncertain program authorization and funding. DRA claims that this delay has been primarily caused by IOU failures to incorporate the Commission's strategic objectives into the energy efficiency portfolios and programs, and due to their attempts to establish policy rules to maximize earnings from RRIM. Of the eight policy changes requested by the IOUs in A.08-07-021 et al., D.09-05-037 approved only one request, denied three outright, and deferred two from that docket (A.08-07-021 et al.) to this rulemaking. The decision also effectively denied two other requests, but modified rules and goals in response to issues the IOUs raised. Given the significant postponement in energy efficiency program implementation that resulted from these delays caused by the IOUs, DRA recommends that the Commission eliminate the possibility of earning shareholder rewards for 2009 energy savings.

Under the current mechanism, each utility is eligible for incentives in annual installments covering each three-year program cycle, with two interim payments, and a final true-up. In December 2008, each of the IOUs was awarded a first installment of RRIM earnings for 2006-2007 mid-cycle performance. In December 2009, a second interim installment of RRIM earnings was awarded for the 2006-2008 program cycle. A final true-up for the 2006-2008 cycle was due by the end of 2010.

On a going forward basis, we continue to provide for annual rounds of incentive payments, tied to the corresponding three-year energy efficiency portfolio cycle. This means that the next round of incentive payments should apply to the results of the 2010-2012 program cycle. The IOUs will thus be eligible for their next round of incentive earnings in calendar year 2011, covering activity for calendar year 2010.

Since the IOUs are already eligible for a final true up incentive payment for 2010, our going-forward mechanism providing for 2011 incentive payments will maintain the opportunity for regular annual earnings envisioned when we adopted the RRIM in D.07-09-043. Consequently, we find no necessity to undertake the time and resources that would be necessary to adjudicate additional incentive issues relating to 2009 bridge funding activities.

We therefore, assess neither penalties nor awards for 2009 program activities. The IOUs will begin with a clean slate for purposes of implementing the RRIM design changes adopted in this decision. These changes shall apply to portfolio activities undertaken beginning during calendar year 2010, for RRIM payments to be awarded during calendar year 2011. We discuss the process schedule in more detail in Section 5.8 below. We next turn our attention to the prospective changes in the design of the RRIM for purposes of determining incentive earnings payments applicable beginning in 2011.

5.2. Use of Ex Post Evaluated Data in Incentive Determination

5.2.1. Background

One of the major issues warranting reform involves the simplification and streamlining of the metrics used in calculating utilities' incentive claims in a manner that promotes transparency while protecting ratepayers' interests.

Controversies concerning incentive earnings claims during the 2006-2008 cycle illustrate that the methodologies to measure, evaluate, and verify earnings claims have proven to be very complex and not as easily or as timely resolved as originally contemplated. Many energy savings measures or parameters are subject to annual variations due to market or product changes, and installation methods. The portfolio MPS and PEB values have significant levels of uncertainty as well as annual variation which make their use problematic within an incentive calculation framework. Results can vary across the range of uncertainty and annual variation for each parameter. Thus, the MPS and PEB calculations have proven to be unduly contentious, particularly since large dollar payments or penalties depend on such calculations.

EM&V has been perceived by some parties as being disconnected from the goals process. Various parties believe that the incentive mechanism should be decoupled from some or all EM&V measures to simplify the process and create a more transparent, fair, and efficient mechanism. As a result, implementation of the RRIM has become a diversion consuming too much valuable and limited time and resources.

In response to controversies surrounding EM&V, the utilities filed a Petition for Modification of D.07-09-043 and D.08-01-042, claiming that the

EM&V process was a "black box" with little input from stakeholders. SCE, in particular, claimed that the EM&V Reports were not initiated through a collaborative forum with stakeholder input as a basis for the 2008 DEER updates.

The utilities claimed that EM&V has not been a reliable tool to evaluate utility energy efficiency achievements for purposes of incentives. The controversies surrounding the existing mechanism—which relies heavily upon the EM&V process—were illustrated in the review of utility claims for incentives during the 2006-2008 cycle. For example, as noted in D.09-12-045:

> The four utilities and NRDC all object to relying on the Energy Division Second Verification Report, arguing that the Report has not been vetted, contains errors, and does not constitute a reliable basis to determine interim RRIM payments. SCE presented the most extensive objections to relying upon the Report, which are representative of the views of other utilities on the issue. In its prepared testimony, SCE focused criticisms on the first Verification Report, released in final form on February 5, 2009, claiming it did not address or correct the flaws that SCE had previously identified. SCE subsequently filed comments objecting to the Draft Resolution to adopt the Second Verification Report. In its comments on the Second Verification Report, SCE continues to make similar criticisms. (D.09-12-045 at 18.)

The Commission found that while the EM&V vetting process necessarily involves considerable technical complexity and detail, Energy Division adhered to Commission-adopted protocols for stakeholder input and vetting.

5.2.2. Discussion

In this decision, we modify how ex ante assumptions are utilized as a basis for RRIM earnings. Undue attention on the detailed calculations of ex post energy savings as the basis for incentive awards has diverted the focus away from the overarching goal of delivering exceptional programs that reduce energy consumption and carbon emissions, helping to foster fundamental changes in how Californians use energy.

The factors needed to calculate the PEB are immense. For example, in 2006-2008, SCE alone provided nearly 2.4 million rows of customer installation data, each with an energy and demand saving factor, and associated incremental measure cost, effective useful life, and net-to-gross ratio, all applied to hourly avoided costs. Each input is subject to interpretation and debate, thereby increasing the prospects for disagreement.

A significant measure of dispute over RRIM earnings determinations can be neutralized by modifying the process for measuring performance metrics used to determine incentive awards. Instead of making incentive earnings dependent on detailed ex post calculations, we modify the incentive calculation by measuring performance by applying the same ex ante assumptions utilized in developing the adopted 2010-2012 energy efficiency portfolio. We determined in D.09-09-047 that for measuring portfolio performance against goals over the 2010-2012 program cycle, the 2008 DEER and non-DEER ex ante measure values were to remain frozen for the duration of the cycle.

As noted above, the determination of ex ante values for 2010-2012 savings measures currently remains unresolved. The determination of ex ante values is pending the disposition of certain clarifying issues in the IOUs' Petition for Modification of D.09-09-057. The IOUs in their Petition seek clarification around the measurement of energy savings values in each of the three categories that comprise the 2010-2012 portfolios: (1) Database for Energy Efficient Resources (DEER); (2) non-DEER workpapers; and (3) customized projects.

Subject to determination of the 2010-2012 ex ante values in A.08-07-021 et al., the relevant ex ante values shall remain frozen for the duration of the 2010-2012 cycle for purposes of RRIM award calculations. We anticipate that the frozen ex ante values, with the exception of customized projects, will have been determined by the time that the first interim RRIM earnings claim for the 2010 period is due to be filed.

Customized projects, by their nature, require unique calculations for each project, as they do not rely on fixed DEER or workpaper values. While custom project values themselves cannot be "frozen," the Joint IOUs believe it reasonable to freeze the approach to calculating customized projects for the 2010-2012 program cycle. Further, the Joint IOUs propose that the values determined at the time of installation of a customized project be frozen for purposes of determining whether the Joint IOUs have met their goals.

In D.09-09-047, we approved a portfolio of approximately $3.129 billion of ratepayer-funded energy efficiency programs for 2010-2012 in step with California's energy policies and greenhouse gas emissions mitigation strategies. The DEER holds the collective savings assumptions applied in planning and updated through evaluation, and is periodically updated as required by the Commission to ensure the most accurate estimates of actual load impacts resulting from ratepayer investments in energy efficiency. In D.09-09-047, we stated that the frozen ex ante values may or may not be used for purposes of determining incentive earnings that are the subject of this proceeding.

We thus determine herein that the frozen DEER and non-DEER ex ante values, yet to be determined in A.08-07-021 et al. shall apply in calculating incentive payments during the 2010-2012 cycle. We will thus calculate base incentive earnings for 2010-2012 using these frozen ex-ante DEER and approved non-DEER parameter values once they are adopted, adjusted only for verified installations and audited administrative costs in a final true-up. Otherwise, ex ante assumptions, including the net-to-gross ratios and effective useful life assumptions will not be trued-up for purposes of calculating incentive earnings.

The net benefits used to calculate incentive payments shall still remain subject to adjustment for Energy Division's independent ex post verification of actual installations and audit of measure costs in the true-up. In adopting this modification for incentive purposes, we do not minimize the continuing importance of EM&V to the success of energy efficiency programs in California. Designing the incentive mechanism in this manner partially accomplishes the goal of separating the determination of incentive earnings from the reporting of real energy and demand impacts and attribution.

Holding ex ante values constant in measuring performance against goals for this limited purpose, however, does not mean that updating of DEER and non-DEER measures in other contexts will cease. We will continue to strive for the best estimates of actual load impacts of adopted energy efficiency programs. As noted in D.09-09-047, EM&V activity will continue to be used to develop ex post verified measure, program and portfolio impacts to inform future energy efficiency and procurement planning activities. The frequency and scope of DEER updates going forward is discussed in the EM&V section of D.09-09-047.

We focus on EM&V herein only in the limited context of the RRIM design and determination of earnings awards. We recognize, however, that there are broader purposes for EM&V activities beyond the scope of the RRIM. We uphold the vital importance of independent EM&V as a continuing underlying foundation in achieving energy efficiency goals. Independent EM&V has been long recognized as an important tool to ensure that self-reported utility performance reflects real energy savings. In D.05-01-055, we mandated that the Energy Division take over the responsibility for managing and contracting for all EM&V studies.

In D.10-04-029, we approved a Joint Plan submitted by the utilities and Energy Division which laid out a roadmap for the EM&V studies to be performed on the 2010-2012 energy efficiency portfolios approved in D.09-09-047. We also adopted a streamlined process to resolve disputes regarding various EM&V issues. We clarified the roles and relationships among the Commission's Energy Division, the IOUs, and stakeholders regarding EM&V for 2010-2012. The roles and responsibilities previously laid out in D.05-01-055 were clarified, with new standards set to improve transparency of EM&V activities, minimize conflicts of interest, and reduce duplication of effort and undue expenditure of ratepayer funds for the 2010-2012 time period.

5.3. Inclusion of Program Participant Expenditures to Calculate Incentive Earnings

We decline to modify the calculation of the PEB, as proposed by certain parties, to exclude program participant expenditures in the determination of net benefits for incentive purposes.

5.3.1. Background

Incentives are based upon avoided cost net benefits, defined by the PEB, weighted 2/3 by the Total Resource Cost (TRC) and 1/3 by the Program Administrator Cost (PAC). We conclude that the existing weightings of the TRC and PAC provide appropriate recognition of PEB-based net benefits in the RRIM calculation and should continue.

The TRC and PAC both evaluate the costs versus benefits of energy efficiency programs by converting energy and demand savings into monetized avoided cost benefits to produce benefit/cost ratios.[8] The TRC measures net resource benefits from the perspective of all ratepayers by combining the net

[8] The TRC and PAC tests are calculated in a customized Excel spreadsheet known as the "E3 Calculator."

avoided costs of the supply-side resources avoided or deferred. The TRC recognizes the measures/equipment installed and the operating costs incurred by the program administrator. The PAC test measures program benefits same as under the TRC test, except to exclude the costs incurred by participating customers. The TRC and PAC both include program administrative costs, but the TRC additionally includes the costs incurred by program participants.

PG&E proposes that for calculating incentives, the PEB be modified to include only the PAC, but to exclude the TRC. PG&E argues that this modification would better meet the goals of evaluating performance in relation to factors over which the utilities can control. SCE also supports removing the TRC from the PEB calculation. SCE argues that the utilities would thereby have the incentive to manage ratepayer costs more effectively since the IOUs would be responsible for costs they control, as opposed to less predictable costs caused by participating customers. The PAC focuses on controlling funds approved by the Commission, not on controlling customer expenditures.

SCE opposes basing incentive claims on participant expenditures, arguing that such an approach would perpetuate the sort of contention and uncertainty that this proceeding was intended to rectify. SCE argues that measuring goals related to participant expenditures would rely upon subjective reports subject to protracted dispute, and based upon activities outside of utility control.

NRDC believes, however, that if the RRIM excludes the costs that customers alone bear, the result will be an inappropriate calculation of net benefits.[9] NRDC supports the Commission's definition of PEB, as discussed in D.05-04-041.[10]

DRA recommends that incentives continue to be based on the existing PEB formula, consisting of 2/3 TRC net benefits and 1/3 PAC net benefits. While DRA supports the concept of rewarding utilities to shift the funding of energy efficiency measures from ratepayers to participants (which is market transformation), DRA argues that there are barriers to implementing this as a basis for the current RRIM cycle. Target levels of participant spending, or for *increased* participant spending, are not available. Data from the 2006-2008 programs indicates wide variation in the level of participant investment in relation to overall spending. Given this variation, DRA believes that establishing meaningful targets may not be straightforward.

DRA supports continued use of participant investment as a basis for payment of incentives. One measure of participant investment can be obtained from the E3 Calculator or IOU quarterly reports (by subtracting TRC net benefits from PAC net benefits). DRA recommends rewarding a limited scope of participant expenditures for the current portfolio and considering the future inclusion of other participant expenditures through workshops.

5.3.2. Discussion

The use of the TRC test encourages utilities to move toward less costly energy efficiency measures since the test will reduce the measured net benefits and thus, earnings. The PAC test, on the other hand, encourages the IOUs to minimize costs, including those for incentives, and encourage participating

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9 Transcript of July 15, 2009 workshop, at 31, line 16.

10 *Id.*, at 32-42.

customers to maximize their contribution in energy efficiency investments, regardless of the expected benefits. Both of these tests are important in measuring net benefits and shall continue to be included in the RRIM formula.

The TRC, representing program participant costs, is relevant as part of a comprehensive measure of net benefits. Basing incentives on participant expenditures could help motivate market transformation and support resource acquisition, assuming participant expenditures are a proxy for correctly installed energy efficiency measures. Utilities may be able to impact participant spending through targeting program design and implementation, even if not with the same degree of control as would be true of administration costs.

5.4. Reforms Relating to the use of Minimum Performance Standards

Under the current RRIM, utilities earn incentives only for savings achieved above a prescribed minimum performance standard (MPS). Before any incentive earnings accrue, the portfolio must achieve a minimum threshold of gigawatt-hour (GWh), megawatt (MW) and million therm (MTherm) savings tied to the Commission's savings goals for energy efficiency. The same framework determines penalties if performance falls below a specified MPS. We conclude that the RRIM formula should be simplified, as various parties propose, to apply a flat earnings rate uniformly to any positive level of calculated net benefits, without linking different shared savings percentage rates (or penalties) to tiered thresholds of goal achievement.

5.4.1. Background

Under the existing mechanism, the utility is at risk for no incentive earnings (or for penalties) if performance falls below a tiered threshold MPS, even though customers may still be receiving benefits. The tiered MPS structure creates a potential "cliff" effect whereby a single kilowatt-hour could result in a difference of tens of millions of dollars in RRIM rewards or penalties. The MPS, as currently applied in the incentive calculation, has fostered excessive controversy.

5.4.2. Parties' Positions

Various parties view the existing tiered MPS structure as unduly complex.

PG&E, SCE, SDG&E, and TURN propose to replace the MPS tiered structure with a uniform flat earnings rate for computing incentive payments. Instead of tying incentive rewards to some minimum percentage of energy savings in an all-or- nothing manner, shareholders would accrue incentives as long as some net customer benefits exist.

PG&E argues that incentive earnings should not be linked to goal achievement since the goals may not align with the current market reality and the underlying assumptions are constantly moving. PG&E argues that even an update to the goals would not necessarily resolve the uncertainty caused by the continuous changing of underlying assumptions.

SCE does not believe a penalty provision should be included in the RRIM, arguing that a penalty acts as a disincentive to instituting energy efficiency programs, and conflicts with the vision of placing energy efficiency on an equal footing with supply-side investments that entail little risk.

DRA also recommends that RRIM earnings simply start at the point where the PEB is greater than zero. Given the increased program costs for the 2010-2012 programs, initiation of positive net benefits occurs at a much higher level of performance.

NRDC recommends that the Commission adopt a simple average of a utility's performance for each of the three existing metrics, with the caveat that no reward be paid unless the utility achieves above 70% in all three metrics individually. NRDC proposes that the penalty threshold be applied to each metric individually, so a utility would pay per-unit penalties for each metric that falls below 65%.

NRDC proposes that utilities begin earning rewards for performance above 70% of goals and begin paying penalties below 65% attainment, or when net benefits are negative. NRDC recommends a linear increase in the shared savings rate from 70% to 110% of goal achievement, but remains open to other approaches for shared savings levels, such as a flat rate above an MPS or a linear earnings curve that extends to higher levels of goal achievement. If the Commission moves further towards using ex-ante values to assess performance than NRDC recommends, NRDC would revise its recommended shared savings rate levels. NRDC recommends that the entire *package* of components of any adopted incentive mechanism meet the balance of considerations described in D.07-09-043.

5.4.3. Discussion

We conclude that incentive earnings should no longer be based upon a tiered MPS structure that applies different percentages of net benefits or penalties to shareholders based upon discrete thresholds of performance tied to the MPS. Incentive earnings should be derived as a uniform percentage of shared savings over the entire range of performance outcomes.

Accordingly, we will no longer link incentive awards to a predetermined minimum performance standard in relation to adopted goals. By de-linking the savings rate in relation to a minimum performance standard, we eliminate potential controversies and unintended consequences relating to "cliff" effects whereby relative small differences in evaluated savings could have a large effect on whether, or how much RRIM earnings accrue. At the extreme, a difference in measurement by a single kilowatt-hour could change RRIM earnings by tens of millions of dollars, depending on the resulting MPS effects. This modification will simplify the incentive formula while preserving the essential linkage of incentive payments to achievements as measured by actual installations of measures as adjusted for audited incremental measure costs.

The RRIM thus will generate rewards simply as a function of net benefits. We thereby remove the penalty provision for performance below predefined MPS levels. We address below how the level of the incentive earnings rate should be adjusted to recognize reduced risks, from the elimination of MPS tiered earnings thresholds and penalty provisions.

5.5. Gross versus Net Savings Goals for Use in Measuring Incentive Awards

5.5.1. Background

In D.09-09-047, the Commission adopted the use of gross savings goals for the prospective energy efficiency portfolio. Gross energy program impacts represent the amount of change in energy consumption and/or demand that results directly from measures installed in the program without adjustments for attribution. Net Energy program impacts represent the amount of energy attributable to a program after adjustments for free-ridership. Net-to-gross ratios refer to the ratio or percentage of net program impacts divided by gross or total impacts. Net-to-gross ratios are used to estimate and describe the free-riders that may be occurring within energy efficiency programs (Energy Efficiency Policy Manual).

We deferred to this proceeding the issue of whether goal measurement should be stated on a gross or net basis for purposes of determining incentives under the RRIM. We noted, however, that the change from net to gross goals only affects the calculation of the MPS as adopted in D.07-09-043 but does not impact the calculation of the PEB as adopted in that decision. The PEB continues to be calculated using net benefits. We stated that it was possible that the change from net to gross energy savings goals for 2009-2011, while necessary to reflect realistic changes in the measurement of energy efficiency potential, may result in an imbalance of risks and rewards for utilities if other corresponding adjustments are not made, so that earnings are too easily achieved.[11]

We expressed our intention to reconsider aspects of the RRIM in this proceeding, and to reconcile changes in goal measurement with the way incentives are calculated, to ensure both ratepayer and utility administrator interests are fairly met.

In D.08-07-047, the Commission determined that savings goals from D.04-09-060 for 2009-2011 should be considered on a gross basis. Our adopted energy efficiency savings goals for 2010-2012 were set forth in Table 2 of D.09-09-047, starting from the goals adopted in D.04-09-060 and incorporating the changes from D.09-05-037 and D.09-09-047.

DRA recommends that savings directly comparable to Commission adopted goals, including definitions of cumulative and net vs. gross, be used for the purpose of incentives. For example, if goals are considered cumulative beginning with 2006, and net goals were used for 2006-2008 and gross goals used for 2009-2011, DRA believes the savings compared to these goals should be defined in exactly the same way.

PG&E proposes that the incentive earnings rate be calculated as differing percentages of the PEB, giving some recognition to both gross and net savings.

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11 We also observed that the utilities possibly would have been unreasonably at risk to not achieve earnings or to incur penalties had we not changed the energy savings goals from net to gross.

SCE proposes modifying the PEB to be calculated on a gross benefits basis. SCE believes that removing the net-to-gross adjustment from the PEB would better align Commission goals of gross savings with the incentive mechanism.

SCE argues that with use of gross PEB savings to calculate incentive awards, the utility will not need to focus on "attribution of savings" but can focus on programs that maximize energy savings. SCE complains that currently, successful energy efficiency programs that increase customer awareness are penalized with after-the-fact changes to attribution. SCE proposes that incentive earnings be derived using a flat shared savings percentage rate calculated on a gross PEB. SCE argues that removing the highly contentious net-to-gross ratios from the PEB calculation would reduce controversy, increase transparency, and align the Commission's goals for gross energy savings with the incentive mechanism. SCE likewise believes that the MPS is based on arbitrary levels of performance, and that instead, investors should share in the benefits of energy efficiency along with ratepayers.

TURN argues that the use of gross savings as the basis for incentive awards will motivate the utility not to pursue innovative programs, but rather to pursue those programs where free-ridership is highest. TURN believes that basing incentive awards on gross savings goals would motivate the utility merely to focus on programs where customer awareness is high (i.e., where the market is already transformed) and customers participate due to pre-existing motivations, not due to utility programs. TURN argues that such an approach will maximize utility earnings and "paper savings," but will not create new incremental savings.

TURN did not offer specific metrics for use in determining goal achievement, but provided suggestions illustrating possible metrics to assess strategic goal performance.

At the July 15, 2009 workshop, TURN offered an alternative proposal that shareholder incentive earnings be calculated as a percentage of total spending adjusted by two multipliers to ensure that the IOUs achieve savings goals and spend authorized budgets. One multiplier would measure goal accomplishment on a net basis using ex ante values approved by the Commission.

TURN's proposal would require calculation of total energy savings (goal accomplishment) but would not require a PEB calculation of avoided net benefits. Therefore, there would be no need to convert savings into net benefits using avoided cost calculations, or to calculate incremental measure costs. The calculation would be based on ex ante values so as to preclude the controversy from applying final ex post EM&V values to determine incentives for historical performance. This approach would give the IOU an incentive to spend more money to achieve the same savings levels. TURN believes, however, that the IOUs might also be motivated to fund more expensive programs that provide greater long-term benefits rather than focusing only on programs that are most cost-effective in the short term.

5.5.2. Discussion

As noted in D.09-09-047, the Commission's change in measurement approach from net to gross goals only potentially affects the calculation of the minimum performance standard of the RRIM as adopted in D.07-09-043, but does not impact the calculation of the PEB. The PEB continues to be calculated using net benefits, as discussed above. Since we are herein simplifying the RRIM calculation to remove any separate calculation of specific MPS in relation to goal achievement, the Commission's change to the use of gross goals will no longer impact the RRIM calculation. Accordingly, no further issues relating to the use of gross versus net goals require resolution for our purposes here of the prospective design of the RRIM.

5.6. Separate Incentive Mechanism for Non-Resource Program; and Customized Projects

5.6.1. Background

A shortcoming of the existing mechanism is that the utility is encouraged to focus on programs that produce short-lived near-term savings, with less priority devoted to pursuing non-resource programs which may yield longer term benefits, but with little or no near term savings, and which entail greater innovation and more risk. Under a mechanism with incentive earnings based primarily on net benefits from near-term resource savings, the IOUs have a direct signal to go after the low hanging fruit rather than going after measures that are less cost-effective in the near term or are more comprehensive measures. For this reason, the Commission excluded the Emerging Technology Program costs from the net-benefits calculation in 2005. Emerging technologies and new and innovative programs with very high savings potential, but with low market penetration and low near-term cost effectiveness, are examples of the efforts the Commission has encouraged in order to help increase penetration, bring cost down through increased volume, and foster rapid technology improvements.

Non-resource programs represent energy efficiency activities that do not focus on the displacement of supply-side resources at the time they are implemented (but may lead to that displacement over the longer-term, or enhance program participation).[12] Therefore, it is difficult, and in some instances impossible, to reasonably estimate and verify resource savings attributable to those programs.

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[12] Non-Resource programs include Emerging Technologies Programs, Flex Your Power and other statewide marketing activities, general education, training, outreach and demonstration programs.

The utilities and NRDC recommend removing certain non-resource program costs from the RRIM as a first step toward removing disincentives for utilities to pursue pure non-resource programs.[13] DRA supports NRDC's recommendation that the Commission hold a workshop on how to best incentivize investments in and effective management of these programs.[14]

SCE proposed a broad variety of programs for its 2010-2012 portfolio to implement Strategic Plan activities, although these programs are mostly non-resource and non-cost-effective. SCE believes such programs should be excluded from the RRIM. The utilities specified particular program costs to be excluded from PEB in a joint filing on July 23, 2009. SCE acknowledged that this would increase PEB and would support a "zero sum game" in which rewards were reduced correspondingly.

DRA also recommends that a non-resource shareholder incentive program be implemented, but did not offer a complete proposal for such a mechanism. Once non-resource programs are segregated to the degree possible, DRA believes that a separate mechanism is required to promote them or else these objectives will get second-tier treatment and have no accountability. DRA believes that additional record development is required to establish successful incentives for non-resource programs.

DRA notes that the Strategic Plan lists near-term milestones to support longer term goals. Some of these milestones relate to market transformation and could be further developed as market transformation strategies are fully developed. Assignment of specific rewards to each milestone would depend on

13 NRDC, at 17.

14 NRDC, at 19.

the number of milestones included in the scorecard, and the difficulty in reaching them.

DRA recommends that non-resource or market transformation incentives factor into annual incentive payments, and account for 35% of the total potential incentive earnings. DRA seeks to ensure that non-resource programs are not ignored because of greater potential incentives from resource programs.

NRDC recommends that the Commission adopt a uniform definition for "non-resource programs" as programs that:

- do not, will not, and are not intended to have measurable savings evaluated by Energy Division and counted towards the utilities' goal and threshold achievement for the current or following portfolio cycle (with the exception of pilots);
- do not drive savings to other resource programs; and
- do not include portfolio administration costs.

NRDC recommends that the Commission clearly identify which programs approved in the utilities' portfolios are categorized as "non-resource" programs. NRDC listed its areas of agreement and disagreement with the programs the utilities recommend be designated as "non-resource."

5.6.2. Discussion

The current incentive mechanism rewards earnings as a function of short-term savings achieved, but does not offer incentives for implementation of non-resource programs even though such programs may have beneficial longer term effects with respect to market transformation. We take steps to rectify this problem.

We shall adopt parties' recommendations to establish a separate incentive earnings category of non-resource programs. With adoption of the California Energy Efficiency Strategic Plan, the Commission has specified that the success of energy efficiency portfolios depends not only on attainment of savings goals, but also on progress towards market transformation and strategic goals such as zero net energy buildings. Failure to provide adequate incentives to achieve non-resource objectives will ensure they are not viewed as a priority by utility management, with performance towards non-resource objectives thereby lagging behind that of resource programs.[15]

In D.09-09-047 we directed IOUs to develop Program Performance Metrics (PPMs) to serve as objective, quantitative indicators of the progress of a program toward the Strategic Plan's short and long-term market transformation goals and objectives. The development of those metrics is ongoing. On May 28, 2010 the IOUs submitted a joint advice letter proposing various PPMs. Those PPMs are currently under review by Commission staff. Given the extensive effort that has been invested by IOUs and Commission staff to develop the PPMs, we are confident that process will result in metrics that can be efficiently brought to bear to assess our progress toward the market transformation objectives detailed in the Strategic Plan. We are separately planning on convening a series of workshops in R.09-11-014 to develop going-forward EM&V programs. We look to the results of those workshops for the development of useful metrics that could apply as an incentive earnings tool for non-resource energy efficiency programs geared toward market transformation.

Given the need for project-by-project calculations of customized projects' savings, as discussed previously, we conclude that customized projects likewise do not lend themselves to the RRIM formula. Accordingly, we shall also exclude

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15 The assumption that increased management attention will lead to increased energy savings and customer benefits is an unproven assertion by the utilities.

customized projects from the RRIM and consider developing a different basis for awarding incentives on customized projects. We shall consider the possible incentive treatment of custom projects, along with non-resource programs, through a separate rulemaking.

Because additional analysis is required to determine the nature, design, and extent of any incentive mechanism for non-resource programs and/or customized programs, we defer to that subsequent rulemaking questions of when, or subject to what time table, an incentive mechanism for non-resource programs or customized projects would be implemented.

We provide for further consideration of the design and implementation timing of incentives that should apply to non-resource programs through a new rulemaking. We clarify that Metrics adopted through the PPM advice letter process, pursuant to D.09-09-047, shall not prejudge the Commission's consideration of the design of specific metrics that should apply to non-resource programs.

5.7. Level of Incentive Earnings

5.7.1. Background

In R.07-09-043, RRIM earnings potential was quantified in relation to the risk exposure and potential rewards of energy efficiency programs. For the 2006-2008 cycle, for achieving between 85% and 100% of adopted goals, utility investors earned a 9% share of total net benefits. For exceeding 100% of adopted goals, investors can earn 12%. For savings within 65% to 85% of goals, no incentive earnings or penalties accrue. If the utility falls below 65% of its goals, an earnings penalty applies.

We capped RRIM earnings potential at $450 million for the 2006-2008 program cycle.[16] The $450 million corresponded to the investors' share of net benefits at a 12% rate assuming up to 125% of savings goals were achieved. The RRIM shared savings percentages and the earnings/penalty cap were based upon comparable earnings on supply-side "steel-in-the-ground" resources avoided by 2006-2008 energy efficiency programs.

This cap was intended to be high enough to encourage superior performance relative to savings potential, but conservative enough to limit ratepayers' exposure to forecasting uncertainty or unanticipated loss relative to actual savings. Limiting penalties to $450 million provided a symmetrical boundary to risk exposure.

The previously adopted limits on incentive earnings adopted in D.07-09-043 took into account the relative risks versus rewards inherent in the RRIM design, and the comparable supply side resources avoided through deployment of energy efficiency—referred to as a "comparable performance" analysis. (D.07-09-043 at 101-103.) In D.07-09-043, we determined that the 2006-2008 portfolio of energy efficiency measures corresponded to avoided supply-side pre-tax earnings between $450 million and $700 million.[17] We determined that, on balance, incentive payments should be based on the lower end of this range.[18] This assessment took into account risks involved in

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16 See Table 1 of D.07-09-043 for a tabulation of the range of maximum shareholders earnings or penalties in relation to the percentage of savings goals achieved and verified based on the 2006-2008 portfolio.

17 D.07-09-043 at 102. The $450 million low-end estimate of supply-side earnings excluded the effects of imputed debt equivalence and replaced 24% of the assumed supply-side capacity with lower-cost combustion turbines.

18 See D.07-09-043 at 101.

supply-side investments versus spending on energy efficiency programs. We concluded that a conservative estimate of comparable supply-side earnings provided a relevant benchmark for establishing the upper bound of earnings potential at superior levels of performance. (D.07-09-043, Findings of Fact 94-95.)

Our previously adopted shared savings percentages were tied to the RRIM formulas adopted in D.07-09-043 predicated upon perceived risk and reward opportunities inherent in ex post performance updates and potential for penalties. Because we are adopting material changes in how the IOUs qualify for RRIM rewards or risk penalties, we cannot continue to apply the previous cap and shared savings rates. We must revise downward the percentages of shared savings and maximum earnings caps. Likewise, incentive earnings levels must be reduced as a result of lower energy efficiency savings levels expected from the 2010-2012 portfolio relative to the prior cycle.

Establishing appropriate limits on earnings for a shareholder incentive mechanism is ultimately a matter of judgment, and not a precise science. In making this judgment, we consider:

(a) The level of earnings that balances potential penalties and offsets existing financial and regulatory biases in favor of supply-side procurement.

(b) The level of earnings potential that will provide a clear signal to utility investors and shareholders that achieving and exceeding the Commission's savings goals (and maximizing ratepayer net benefits in the process) will create meaningful and sustainable shareholder value.

(c) Differences in the risk/reward profiles of utility resource choices in applying the comparable earnings benchmark to the incentive mechanism.

(d) The level of performance expected in return for higher and higher earnings potential.

(e) What is "fair" to ratepayers in terms of the return on their investment in energy efficiency.

5.7.2. Parties' Proposals

Parties presented various proposals for incentive earnings cap updates to apply prospectively.[19] The IOUs and NRDC agree that incentive sharing rates should continue to correspond to "supply-side equivalent" earnings.

NRDC initially recommended a cap equal to 23% of investments for the prospective portfolio cycle to establish a more durable formula that could be used in future cycles. (NRDC proposal at 17.) An earnings cap equal to 23% of investments is analogous to the level in the 2006-2008 incentive mechanism. NRDC subsequently revised its proposal, however, upon further analysis of the amended utility applications, the expected level of net customer benefits, and the appropriate level of earnings opportunities. NRDC revised its position to state that a cap based on 23% of investments for the 2009-2011 cycle would be too high.

NRDC estimates that a methodology based on comparable supply side performance (as was applied in D.07-09-043) would yield a three-year cap for the prospective cycle of around $425 million for all four utilities combined. NRDC believes that the cap will only serve to reduce surprises to customers and shareholders if it is set in coordination with likely earnings or penalty levels. NRDC recommends that a cap be designed that ensures potential rewards/penalties remain within reasonable expectations.

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19 Parties originally assumed a program cycle of 2009-2011. The Commission subsequently modified the energy efficiency program funding cycle to cover the period 2010-2012, with bridge funding for 2009. Accordingly, we apply a cap on RRIM earnings/penalties for purposes of the 2010-2012 cycle.

If a maximum shared savings rate of 12% were to be maintained, NRDC calculates that it would result in utility earnings opportunity at 100% of goal achievement of around $30 million for three years.[20] Even if the utilities double the expected cost-effectiveness of their portfolio, the earnings opportunity at 100% of goal would still be 32% less than the 2006-2008 earnings opportunity at that level. (See August 7, 2009, NRDC Comments at 8.)

SCE agrees that it may be appropriate to lower the earnings cap, suggesting a reduction from $200 million to $175 million over a three year cycle. SCE proposes a flat shared-savings rate of 6%. SCE believes that a flat earnings rate will eliminate the "cliff" effect whereby a small change in measured savings can cause a precipitous drop in earnings. Sempra proposes a 10% rate applied to a net PEB, subject to modification based on achievement of gross Commission goals.

PG&E proposed a cap of 23% of resource program costs DRA argues that using the total energy efficiency budgets as the basis of a cap has no valid precedent. DRA contends that basing a cap on 23% of budget would equal incentive earnings of nearly $840 million based on the July 2, 2009 portfolio filings, an 89% increase from 2006-2008, even though both net benefits and goals are lower. DRA contends that this cap may never be achieved, but nevertheless could encourage gaming.

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[20] See NRDC Comments dated August 7, 2009 at 8. NRDC notes that the 2009-2011 portfolios are significantly different from the previous cycle's, as the increased emphasis on achieving the goals of the Strategic Plan has required pursuing some less cost-effective programs, and updated EM&V values and Commission policies have reduced the cost-effectiveness of the portfolios as well. As a result of the low cost-effectiveness, the 2009-11 portfolios are expected to generate significantly lower potential earnings at the 12% shared savings rate, even though the portfolios are still expected to generate substantial energy savings.

PG&E proposes incentive earnings rates as follows:

A 9% earnings rate applied to the gross PEB;

A 3% "kicker" rate applied to the net PEB; and

A 5% "kicker" rate applied to long-life measures.

DRA recommends the $450 million cap established for the 2006-2008 cycle serve as a starting point for adjusting for reduced risk and savings goals to derive a cap for the prospective cycle. In adopting the RRIM in D.07-09-043, the Commission accounted for the risks created by the various RRIM components. DRA believes that its proposed RRIM revisions summarized below would warrant a reduction in the level of incentives going forward:

- Eliminating contentious annual filings, assuming minimal compliance and cooperation;
- Gross savings goals only 22% higher than 2006-2008 net goals;
- No adjustments for free-ridership;
- Ex post evaluation of only 35% of incentives;
- No ex post true up or "clawback"; and
- Removal of discontinuities in the earnings curve for performance toward goals.

DRA recommends an earnings cap such that the present value of all annual payments is approximately equal to the present value of each of the two end-of-cycle incentives. DRA calculates that an annual cap of 30% of the total cap, using a discount rate of 8.75%, achieves this result. DRA proposes the incentive earnings be determined based on a reduced shared savings percentage rate of 5.4%.[21]

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21 Derivation of this rate is provided in Attachment A of DRA's August 7, 2009 filing.

TURN proposes a flat rate of 3% on a net PEB with earnings calculated on any positive net benefits, with no penalties or deadbands. TURN also recommends additional 3% "bonus earnings" (also applied to a net PEB) for IOU accomplishments of some of the goals and mandates adopted by the Commission in its Strategic Plan.

5.7.3. Discussion

The revised shared savings percentages and cap recommendations must incorporate differences in expected energy efficiency savings applicable to the 2010-2012 portfolio relative to the 2006-2008 portfolio. While taking into account relevant modified RRIM design since originally adopted in 2007, we consider the principles regarding comparable supply-side earnings, as discussed in D.09-07-043.[22]

As a starting point for revising the incentive earnings limits, we consider what incremental earnings on supply-side investments would apply absent energy efficiency savings as set forth in Table 2 of D.09-09-047 (equal to 125% of goals). The $450 million cap for the 2006-2008 cycle corresponded to estimated energy efficiency savings of $3.919 billion (or 125% of adopted savings goals).[23] For the 2010-2012 cycle, a comparable starting point would be based on the assumed energy efficiency savings utilizing the portfolio of programs for 2010-2012.

As noted above, the quantification of ex ante net benefit values for the 2010-2012 cycle is yet to be determined in A.08-07-021 et al. We can, however,

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22 See Section 6, "Earnings Curve and Associated Shared-Savings Rate," in D.09-07-043.

23 See Table 1, at 9, of D.07-09-043.

utilize the IOUs' preliminary calculations of ex ante values to provide an illustrative example of how the revised RRIM earnings cap and shared savings percentages will be adjusted once final values are determined. For the 2010-2012 cycle, net benefits for achieving 125% of adopted savings based on the IOUs calculations, are estimated at $1.642 billion.[24] A revised cap can thus be calculated on an illustrative basis in proportion to the ratio of net benefits from the 2006-2008 cycle relative to the 2010-2012 cycle. The resulting ratio is 0.42 (= $1.642/$3.919). We thus calculate a revised cap of $189 million on an illustrative basis, derived as a function of the ratio of the IOUs estimated net benefits for 2010-2012 divided by the net benefits for 2006-2008. (i.e., $189 million=$450 million * 0.42.)

The reduction in quantifiable estimated net benefits for 2010-2012 relative to 2006-2008 is due to increased emphasis on strategic and non-resource goals relative to the 2006-2008 cycle. This cap amount should be reduced by the budgeted amount for 2010-2012 non-resource programs. As discussed above, we intend to establish a separate incentive mechanism for nonresource programs.

Likewise, we shall reduce the applicable shared savings percentage to recognize reduced risks relative to the RRIM that applied during the 2006-2008 cycle. The existing 9%/12% shared savings rates were predicated upon a design

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24 The calculation of $1.642 billion is based upon the IOUs' E3 Calculator compliance filings utilizing DEER values where applicable. Non-DEER measure values are based on IOU submitted engineering workpapers. These figures exclude custom application/projects in which there are no workpapers until there is a project. Energy Division, in cooperation with the utilities, developed a separate custom application ex ante review process, intended to be a parallel process with the utilities' own review process for custom application/projects. Energy Division is about to begin the non-DEER measures review process.

that assumed rigorous ex post evaluation and verification of actual savings. The modifications that we adopt significantly reduce the precision and measurement certainty of savings achieved. Consequently, the related shared savings percentages must be reduced accordingly. There is a trade-off between reductions in risk and the associated magnitude of earnings to provide a reasonable incentive for the IOU to pursue energy efficiency investments as a core business activity. The quantification of this trade-off cannot be reduced to a precise mechanical formula, but we still must make a reasoned judgment as to an appropriate adjustment to the potential RRIM award amount to recognize this reduced risk. We conclude that the magnitude of reduction calculated by DRA offers a reasonable approximation of the appropriate adjustment given the reductions in risk resulting from our adopted modifications.

DRA adjusted the shared savings incentive earnings rate by starting with the estimated incentive earnings from the 2006-2008 portfolio, assuming each IOU achieved 100% of savings goals (see Table 1 in D.07-09-043). DRA then reduced this amount, equal to $323 million, down to $163 million to reflect the lower level of net benefits expected from a 2009-2011 portfolio compared to the 2006-2008 portfolio.[25] The comparable net benefits are estimated by DRA to be $1.365 million for 2006-2008 versus $2.689 million ($163 million = $323 million * (1.365/2.689)).

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25 The lower level of net benefits estimated for the 2010-2012 cycle is primarily because program costs have increased significantly. Even if non-resource program costs are removed, these programs require over a billion dollars more to attain the same level of savings and benefits. Also, due to the higher level of projected costs for the 2010-2012 portfolios, the probability of penalties through a performance guarantee would be much greater as compared with the prior cycle.

DRA further reduced the expected earnings to reflect reduced risk from anticipated changes in the RRIM design. DRA demonstrated that if the incentive reward level is reduced only 5% to reflect the reduced risk for each discrete change being proposed in the RRIM design, the cumulative effect on the RRIM reward becomes significant. DRA does not imply that each design change reduces risk specifically by 5%, but rather that each design change causes a tangible decrease in risk. DRA thus calculated a reduction in earnings down to $108.333 million, by applying the cumulative reduction for each change in RRIM design. DRA believes these adjustments provide a conservative estimate of risk reduction, and thus rounded the resulting earnings figure to $100 million.

Based on an IOU-estimated statewide PEB of $1.365 million, a reward level of $100 million would be achieved with a sharing rate of 7.3% (= $100/$1,365). However, based on the IOU request to remove $496 million of non-resource program costs from the calculation, the PEB would increase to $1.862 billion (= $1,365 million + $496 million). With these costs excluded, DRA calculates an adjusted sharing rate of 5.4% to obtain the same earnings rate for meeting the adopted savings goals (5.4% = $100/$1,862).

TURN agrees with the approach used by DRA to quantify the effects of reduced risk on the applicable sharing rate.

We conclude that the methodology applied by DRA represents a reasonable approach to approximating the risk-reducing effects on the appropriate earnings potential from the incentive mechanism. Although the figures relied upon by DRA were preliminary and will be superseded by different amounts subsequently adopted, in A.08-07-021 et al. the underlying ratios calculated by DRA are still within a reasonable range for illustrative purposes. We shall thus adopt a reduced sharing rate for purposes of the incentive earnings to be applied to the PEB, utilizing the DRA methodology, for the 2010-2012 cycle. As part of their applications for interim RRIM awards to be filed in 2011, we shall direct the IOUs to provide a calculation of the revised shared savings rate, utilizing the 2010-2012 net benefits values to be adopted in A.08-07-021 et al., using the methodology in DRA's proposal, as illustrated above. Based upon the shared savings rates so derived, the IOUs shall calculate the amount of RRIM earnings they are due for calendar year 2010 programs.

We consider the revised level of incentive earnings potential to be determined utilizing this approach to appropriately promote the goals of encouraging the IOUs to aggressively pursue energy efficiency savings opportunities as a top priority, consistent with the changes in the portfolio of programs budgeted for the 2010-2012 cycle. At the same time, the reductions we impose on earnings potential preserve discipline to help ensure that ratepayers receive value for their investment in energy efficiency consistent with the reduced risks inherent in the modified RRIM design.

5.8. RRIM Earnings Claim and Recovery Process

5.8.1. Background

D.07-09-043 established an incentive earnings claim and recovery process, with the opportunity for interim earnings based on estimated performance achieved in the first and second years of a three-year program cycle. We recognized "that an effective incentive mechanism must include provisions for earnings (or penalties) at interim points during the three-year program cycle, as opposed to waiting nearly five years after portfolio implementation for any financial feedback to utility managers and investors."[26]

[26] D.08-01-042, citing D.07-09-043 Conclusion of Law 7, at 212.

The two interim claims were to be based on Energy Division's Verification Reports reflecting measure installations and costs, combined with ex ante performance estimates followed by a final "true-up" claim to include Energy Division's ex post evaluation of energy savings.

In D.07-09-043, we directed that both the MPS (tied to the energy savings goals) and the PEB (monetized net benefits) be trued up at the final claim, subjecting the utilities to the possibility of paying back interim claims if the final true-up based on ex post studies indicated that the utility fell below the MPS threshold. Although the possibility of refunding earnings already claimed presented certain problems with respect to the IOUs' financial reporting, we concluded that these problems could be addressed by (1) limiting payout of initial claims to 70% (with a 30% hold-back) and (2) deducting any over-collections from future earnings claims.[27]

The 30% hold-back was subject to a true-up based on an ex post review of performance after the close of the three-year cycle. The true-up was to help ensure that energy efficiency produced "sizable GWh [gigawatt hour], MW [megawatt] and Mtherm [megatherm] savings that resource planners can depend upon now and in the future"[28] and that the final incentive award reflected only verified savings.

Under previous rules adopted in D.07-09-043, the IOUs could be required to return interim incentive payments if the subsequent ex post review indicated that the interim payments were too high. Similarly, if ex post review indicated that the interim claims understated the incentives due, final payments would be

[27] D.07-09-043 at 121-124.

[28] D.07-09-043 at 119.

adjusted accordingly to collect the difference. The Commission also established a schedule for review and payout of incentive claims.

In D.08-01-042, the Commission modified this process, however, to reduce uncertainty associated with interim incentive payments. As concluded in D.08-01-042, for an incentive system to be effective in motivating pursuit of energy efficiency goals, the incentive earnings must be included as a basis for the IOU's financial valuation. To achieve this result, the IOU must be able to book incentive earnings on a regular basis in a manner that can be expected and anticipated by the investment community. Otherwise, earnings from energy efficiency programs are not truly on par with earnings from generation resources in the minds of investors. Incentive earnings that are not booked at regular intervals would result in a one time adjustment that would likely be excluded from operating earnings used as the basis for a utility's financial valuation. This uncertainty could result in a higher cost of financing. As a consequence, the utilities would not receive the full benefit of these shareholder incentives from the financial markets.

Consequently, the Commission modified the RRIM in D.08-01-043 to allow the IOUs to permanently retain interim incentives received except where ex post review indicated that IOU performance fell within the penalty band. Under such circumstances, interim incentive payments would have to be rebated to customers in addition to any penalties owed. D.08-01-042 also established that if the ex post review indicated that performance fell within the "deadband," the IOU would still earn at the 9% shared savings rate, applied to the ex post PEB.[29]

[29] D.08-01-042, Ordering Paragraph 2.

Because these modifications reduced the share of IOU incentive claims subject to ex post review and true-up, the risk of incentive overpayment increased. To mitigate this risk, the holdback amount was increased from 30% to 35%, and the ex ante assumptions used to calculate interim claims were required to be updated with 2008 and 2009 DEER measure savings parameters. The intent of these changes was to minimize potentially large disparities between the interim and final earnings claims, thereby promoting greater stability and predictability in the mechanism.

For the 2006-2008 program cycle, the ex post true-up provisions were amended such that if a utility's performance fell within the deadband (i.e., achieving less than 80% of goal for any individual savings metric or less than 85% for the average savings threshold but greater than 65% of the Commission's goal for each individual metric energy savings and demand reductions), the utility would not receive any additional incentive rewards beyond the interim payments.

5.8.2. Parties' Proposals

NRDC proposes that the sequence and frequency of incentive payments established in D.07-09-043 be maintained, with two interim assessments and a final true-up for each three-year cycle.

NRDC recommends that the holdback percentages be increased to mitigate the risk of potential overpayment to the utilities in interim claims. NRDC recommends that the holdback percentages be increased to 50%, and that interim assessments be based on only verification of installation and costs. The EM&V load impact ex post adjustments would be left to the final true-up claims.

DRA generally agrees with the data sources to be subject to true up recommended by NRDC with one potential exception. A white paper by one of the California program evaluators suggests that for custom energy efficiency programs, ex post adjustment of the net-to-gross ratio may be both fair and necessary.[30] DRA recommends that multiple program evaluators under contract to the Energy Division provide additional input regarding whether net-to-gross for customized programs should be trued-up.

DRA recommends annual earnings claims continue to be based on Energy Division verification of installations and costs. Since the essence of DRA's proposal is to provide certain annual earnings claims, with a corresponding reduction in reward level, EM&V reports must be released according to a predefined and reasonable schedule. DRA recommends the EM&V program account for rigid deadlines for annual verification reports.

DRA recommends that earnings claims should be resolved either by application or advice letter subject GO 96-B approval by Commission resolution. DRA recommends the following process for each program year:

1. Utilities add participant costs and market transformation metrics to monthly and quarterly reports;
2. The Commission's Audit Division establishes an annual audit process for participant costs, with a report due by March 15 of each year;
3. Utilities file earnings claims by March 15 of each year;
4. Parties respond to earnings claims as to any lack of transparency and cooperation;
5. Energy Division reports on utility compliance in its draft resolution of earnings claims; and
6. Parties comment on the proposed resolution prior to a Commission award of incentive payments.

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30 "Evaluation and Performance Incentives: Seeking Paths to (Relatively) Peaceful Coexistence," Michael W. Rufo, Itron Inc., International Energy Program Evaluation Conference (IEPEC) 2009, at 5-6.

DRA recommends holding back 30% of annual earnings per D.07-09-043, with an opportunity for utilities to claim the withheld earnings after impact studies are completed. While timeliness is the primary goal of annual earnings opportunities, DRA believes that accuracy should be the paramount goal of the true-up claims, such that this final payment should be treated as "extraordinary earnings," and not included in earnings projections to the investment community. DRA recommends that the true-up process focus on High Impact Measures, but that Energy Division should plan for and provide random checks of other measure savings to provide a policing action to the utilities. PG&E proposes quarterly submissions and review for incentive payments. SCE believes that quarterly submissions will overly burden Energy Division and utility staff, and is not necessary for timely payment for performance. SCE proposes a schedule for incentive payments annually, if prescribed criteria were met.

DRA proposes a framework that consists of the following claim cycles:

1. Annual claims based primarily on *participant investment;*
2. End-of-cycle claims based on progress payments *toward market transformation; and*
3. End-of-cycle claims based on meeting and exceeding *gross savings goals.*

The first part of the mechanism would provide substantial and regular earnings if the IOUs meet minimum standards of compliance and transparency.

PG&E, SCE, Sempra, and TURN all propose that the incentive mechanism not contain a true-up requirement. They argue that ex post updates to impact evaluations generate significant uncertainty. SCE proposes limited ex post updates to verification of installations and program costs.

5.8.3. Discussion

For seeking approval of RRIM earnings claims for the 2010-2012 cycle, we direct each of the IOUs to file annual applications, adjusted to reflect the modified RRIM protocols we adopt going forward. Applications shall be filed by September 15th of each year following the calendar year for which the RRIM earnings claim applies. The IOUs will thus each submit a formal application as the vehicle to request recovery of their 2010 RRIM earnings claims by September 15, 2011.

The annual RRIM earnings application filings for each year of the three-year cycle shall be based upon the IOU reports of measure installations completed and incremental costs incurred for each calendar year at issue. Energy Division will not perform any review or analysis in response to the installations or costs claimed for first and second year rounds of applications. The third round of annual application filings, however, shall be subject to a true up based upon Energy Division evaluations of installed measures and incremental costs incurred. As noted previously, there will be no true up for ex ante unit savings or per-measure values. As explained above, in view of the modified and streamlined calculation protocols being adopted, we expect the awards of incentive earnings claims to be noncontroversial. In any event, we expect that disposition of the utilities' applications for 2010 program earnings would be completed before the end of calendar year 2011, so that the applicable RRIM awards may be booked by the utility as calendar year 2011 earnings.

We limit the true-up to verification of energy efficiency installations and audit of incremental measure costs. As discussed previously, ex ante assumptions used to develop the 2010-2012 program budgets will be used to compute the PEB avoided cost savings for purposes of each annual RRIM award, including the true up. This modification should limit controversy and address concerns over the transparency and due process relating to incentive claims awards. We will apply a 50% hold back of RRIM earnings applicable to the first and second annual interim awards, as proposed by NRDC, to mitigate the risk of overcompensating the IOUs.

6. Comments on Proposed Decision

The proposed decision of ALJ Pulsifer in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed on ________________, and reply comments were filed on _________________ by ___________________.

7. Assignment of Proceeding

John A. Bohn is the assigned Commissioner, and Thomas R. Pulsifer is the assigned ALJ for this proceeding.

Findings of Fact

1. The Commission determined in previous decisions that shareholder incentives for energy efficiency should be provided so that energy efficiency programs are pursued vigorously by utility management as a core business strategy.

2. Awards or penalties under the incentive mechanism for energy efficiency programs adopted in D.07-09-043 was originally expected to be subject to ministerial action, without litigation, protracted controversy or delay regarding performance metrics.

3. Based on experiences encountered with RRIM implementation during the 2006-2008 program cycle, the process for submission, review, and approval of incentive earnings claims has not functioned as intended, but has proven highly contentious, consuming excessive time and resources.

4. Evaluated ex post updates have been controversial particularly because they impact the magnitude of incentive earnings so significantly. At the same, the ex post updates often involve metrics whose measurement require considerable subjective judgment and debates as to the meaning and use of raw data.

5. Ex post measures are often largely determined by factors outside of a program administrator and implementer's control. Awarding or penalizing for factors outside of management control fails to achieve the objective of linking incentive award levels with management behavior.

6. A significant measure of dispute over 2010-2012 RRIM earnings determinations could be neutralized by modifying the process for measuring net benefit performance metrics used to determine incentive awards based upon ex ante values.

7. The RRIM places the utility at risk for no incentive earnings (or penalties) if measured performance is below the threshold MPS, even if customers still may be receiving benefits.

8. To be eligible for earnings, the RRIM currently required the utility to meet specified minimum performance standards (MPS) for the energy efficiency portfolio as a whole:

   i. Achieve a minimum of 85% of the Commission-adopted savings goals, based on a simple average of the percentage of each individual gigawatt-hour (GWh), megawatt (MW) and, as applicable, million therm (MTherm) goal they achieve; *and also*

   ii. Meet a minimum of 80% of the goal for each individual savings metric.

9. Basing incentives on a tiered MPS structure creates a potential "cliff" effect whereby a single kilowatt hour could result in a difference of tens of millions of dollars in rewards or penalties.

10. The MPS, as currently applied in the incentive calculations, has fostered excessive controversy, and is unduly complex.

11. By de-linking the savings rate from a minimum performance standard would eliminate potential controversies relating to the "cliff" effect whereby relative small differences in evaluated savings could have a large effect on whether, or how much incentive earnings accrue.

12. In D.09-09-047, the Commission concluded that both 2008 DEER and non-DEER ex ante measure values should remain frozen through the 2010-2012 cycle for purposes of establishing savings goals and portfolio performance over the 2010-2012 program cycle.

13. The determination of ex ante values for 2010-2012 savings measures currently remains unresolved, but is pending the disposition of certain clarifying issues in the IOUs' Petition for Modification of D.09-09-057.

14. The incentive mechanism measurement process can be effectively modified by calculating the PEB utilizing frozen DEER and non-DEER ex ante values, subject to Commission determinations pending in A.08-07-021 et al., without applying ex post updates to compute net benefits.

15. The purpose of a comparable earnings analysis is to provide a numerical benchmark for addressing these biases that favor supply-side resources, and not to prove or disprove the tautology of zero foregone shareholder earnings posed by DRA and TURN in this proceeding.

16. A comparable earnings benchmark recognizes that utilities as decision makers make day-to-day decisions on how to direct their resources and personnel that regulators cannot directly control or mandate.

17. Without an energy efficiency incentive, given the focus of investors and utility management on increasing shareholder value, utilities will on balance be more inclined to devote scarce resources to procurements on which they will

earn a return, and not on meeting or exceeding the Commission's energy efficiency goals, or maximizing ratepayer net benefits in the process.

18. Knowing how much investors would have earned on supply-side procurements, if not for energy efficiency, is useful information: It helps the Commission to consider, among other factors, what level of earnings potential will be sufficient to overcome the biases in favor of supply-side resource procurement and achieve the policy objectives for energy efficiency.

19. Comparisons of the risk/reward profile for demand-side and supply-side resources are difficult to make, given the differing performance, earnings and investment characteristics of these resources. In addition to who funds the initial investment, there are multiple dimensions to the relative risk between supply- and demand-side resources (and that are changing over time), including (1) how shareholder earnings vary with project performance and (2) who bears the risk of non-cost effective investments.

20. The RRIM earnings rates of 9% and 12%, and the cap of $450 million, as adopted in D.07-09-043, were based upon assumed energy efficiency savings attributable to the 2006-2008 portfolio of measures in comparison to earnings on supply-side "steel-in-the-ground" resources otherwise foregone by pursuing energy efficiency programs.

21. There is a trade-off between reductions in risk and the associated magnitude of earnings to provide a reasonable incentive for the IOU to pursue energy efficiency investments as a core business activity. The precise quantification cannot be reduced to a precise mechanical formula, but requires a reasoned judgment as to an appropriate adjustment to the potential RRIM award amount to recognize this reduced risk.

22. A reasonable approach to revising the RRIM earnings cap for 2010-2012 is to compare the ratio of net benefit estimates from the 2006-2008 cycle relative to

corresponding estimates for the 2010-2012 cycle. Although the 2010-2012 net benefit estimates have not been determined by the Commission an illustrative calculation can be made using IOU estimates. The resulting ratio of 0.42 (= $1.642/$3.919) yields a revised cap value of $189 million on an illustrative basis derived as a function of the ratio of the net benefits for the 2010-2012 period divided by the net benefits for the 2006-2008 period, applied to the previous cap of $450 million.

23. The DRA calculation of a revised RRIM shared savings rate of 5.4% results from adjusting for the reduced level of DRA-estimated net benefits for the 2010-2012 cycle, and further adjusting for DRA's assessment of reduced investor risk associated with prospective changes in the design of the RRIM formula.

24. The DRA methodology provides a reasonable approach to calculating a risk-adjusted reduced shared savings percentage, subject to further adjustment by applying the Commission's subsequent determination of 2010-2012 ex ante values in A.08-07-021 et al.

25. A reasonable approach to adjusting the 2010-2012 RRIM earnings cap is to apply the ratio of net benefits from the 2006-2008 cycle to the ratio of net benefits from the 2010-2012 cycle, multiplied by the earnings cap that applied for the 2006-2008 cycle. Based upon the transfer of non-resource programs and customized measures to a separate incentive mechanism, it is reasonable to exclude non-resource programs and customized programs in calculating the revised RRIM earnings cap.

26. As a means of mitigating the risk of overcompensation of RRIM earnings, it is reasonable to increase the hold-back percentage of RRIM earnings to 50% calculated for the first and second interim years, subject to a third-year true up based on Energy Division's evaluations of installations and incremental measure costs.

27. An annual application filing is a reasonable procedural vehicle whereby each of the IOUs may request recovery of their RRIM earnings claims pursuant to the modified protocols adopted in this decision.

Conclusions of Law

1. The protocols and processes for administering and implementing the RRIM should be modified in order to correct identified deficiencies, and to better align the mechanism with the Commission's goals and objectives relating to the achievement of energy efficiency in a manner that is cost effective to ratepayers.

2. The adopted revisions as set forth in the order below should be adopted to take effect immediately for purposes of determining incentive awards for the 2010-2012 program cycle in accordance with the processing schedule adopted below.

3. In the interests of moving forward with a new mechanism in a timely manner, no RRIM awards or penalties should be pursued for calendar year 2009 bridge funding programs.

4. A separate incentive mechanism for non-resource programs should be pursued through a new rulemaking. The prospective RRIM for the 2010-2012 cycle should accordingly be limited to resource programs only.

5. Metrics adopted through the PPMs advice letter process, pursuant to D.09-09-047, shall not prejudge the Commission's consideration of specific metrics that should apply to an incentive mechanism for non-resource programs.

6. Any further revisions in the RRIM that may be appropriate to implement beyond the 2010-2012 cycle should be taken up in a new rulemaking.

7. In order to recognize the reduced level of expected resource savings relative to the 2006-2008 cycle, and to recognize the reduced risks associated with the revised RRIM design measures adopted herein, the earnings cap and shared savings rate should be reduced accordingly. The DRA calculation of a shared

savings rate of 5.4% provides an illustrative calculation of a reasonable methodology for revising the shared savings rate.

8. A three-year earnings cap of $189 million reasonably illustrates an appropriate adjustment to the $450 million cap for the difference in estimated net benefits between the 2006-2008 and 2010-2012 cycles, subject to exclusion of customized projects.

O R D E R

IT IS ORDERED that:

1. The Risk/Reward Incentive Mechanism is hereby amended to incorporate the following revisions to take effect for purposes of determining incentives for the 2010-2012 performance cycle. Except as explicitly noted below, the previously adopted Risk/Reward Incentive Mechanism provisions remain effective for the 2010-2012 cycle.

2. No penalties or incentive earnings shall be assessed for calendar year 2009 energy efficiency bridge funding program activities.

3. The revisions to the mechanism adopted in this decision shall become effective for program activities for the 2010-2012 program cycle. Incentive claims for calendar year 2010 activities shall be processed in accordance with schedule adopted below.

4. For purposes of computing the Performance Earnings Basis used to derive 2010-2012 RRIM earnings, the Database of Energy Efficiency Resources and non- Database of Energy Efficiency Resources ex ante assumptions of per-measure efficiency savings underlying the savings goals yet to be adopted in A.08-07-021 et al. shall subsequently remain frozen for the duration of the 2010-2012 cycle. The Performance Earnings Basis shall be trued-up only to

recognize actual energy efficiency measures installed and to reflect actual incremental measure costs incurred at the end of the cycle.

5. The shared-savings percentage rate applied to derive incentive earnings shall no longer be linked to a specific minimum performance standard. Incentive earnings shall accrue as a uniform flat rate percentage of the Performance Earnings Basis. No penalty provision shall apply.

6. The Performance Earnings Basis shall exclude the budgeted costs of non-resource energy efficiency programs and customized projects adopted for the 2010-2012 cycle. Subsequent inquiry shall be conducted to determine an appropriate allocation of incentive earnings for non-resource programs and customized projects through a separate rulemaking.

7. The incentive earnings potential for the 2010-2012 cycle shall be adjusted to recognize the reduced investor risks relating to the redesigned elements adopted in this decision, and also to recognize the reduced levels of energy efficiency avoided cost savings in comparison to corresponding levels for the 2006-2008 cycle utilizing the methodology proposed by Division of Ratepayer Advocates.

8. The incentive earnings cap for the 2010-2012 cycle shall be reduced by from the level that applied for the 2006-2008 cycle to reflect the lower level of resource savings relative to the prior cycle. This cap amount shall exclude the budgeted amounts for 2010-2012 non-resource. An allocation of 1/3 of the cap shall apply to each year of the 2010-2012 cycle.

9. The IOUs shall apply a reduced shared savings percentage to reflect the reduced investor risks and lower potential resource savings for the 2010-2012 cycle relative to the 2006-2008 cycle. The methodology proposed by DRA is adopted for purposes of quantifying the reduction in shared-savings earnings adjusted for risk.

10. In accordance with the schedule in Attachment 6 of D.07-09-043, each investor-owned utility shall submit its Measure and Cost Report covering calendar year 2010 to Energy Division by February 29, 2011. The IOUs will submit formal applications as the vehicle to request recovery of their 2010 RRIM earnings claims by September 15, 2011.

11. As part of their applications for interim RRIM awards to be filed in 2011, each of the IOUs shall provide a calculation of the revised shared savings rate, utilizing the 2010-2012 net benefits values to be adopted in A.08-07-021 et al., using the methodology in DRA's proposal, as illustrated above. Based upon the shared savings rates so derived, the IOUs shall calculate the amount of RRIM earnings they are due for calendar year 2010 programs.

12. The Energy Division will not be required to review the first and second year RRIM interim claims of installations and costs, but shall be required to evaluate and verify installations and costs as part of the third-year true-up.

13. This decision provides final resolution of issues pending in this rulemaking. Any subsequent changes in the incentive mechanism or separate implementation of an incentive mechanism for non-resource programs shall be addressed through a separate rulemaking.

14. Any further issues necessary to design and implement a separate mechanism for incentives to promote the development of non-resource program and customized project incentive goals shall be addressed in a new rulemaking.

15. Rulemaking 09-01-019 is closed.

This order is effective today.

Dated _____________________________, at San Francisco, California.

INFORMATION REGARDING SERVICE

I have provided notification of filing to the electronic mail addresses on the attached service list.

Upon confirmation of this document's acceptance for filing, I will cause a Notice of Availability of the filed document to be served upon the service list to this proceeding by U.S. mail. The service list I will use to serve the Notice of Availability of the filed document is current as of today's date.

Dated November 15, 2010, at San Francisco, California.

/s/ OYIN MILON

Oyin Milon

N O T I C E

Parties should notify the Process Office, Public Utilities Commission, 505 Van Ness Avenue, Room 2000, San Francisco, CA 94102, of any change of address to ensure that they continue to receive documents. You must indicate the proceeding number on the service list on which your name appears.

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The Commission's policy is to schedule hearings (meetings, workshops, etc.) in locations that are accessible to people with disabilities. To verify that a particular location is accessible, call: Calendar Clerk (415) 703-1203.

If specialized accommodations for the disabled are needed, e.g., sign language interpreters, those making the arrangements must call the Public Advisor at (415) 703-2074 or TDD# (415) 703-2032 five working days in advance of the event.