Decision **PROPOSED DECISION OF ALJ PULSIFER** (Mailed 7/26/2013)

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Reform the Commission's Energy Efficiency Risk/Reward Incentive Mechanism.	Rulemaking 12-01-005 (Filed January 12, 2012)

DECISION ADOPTING EFFICIENCY SAVINGS AND PERFORMANCE INCENTIVE MECHANISM

TABLE OF CONTENTS

Title **Page**

DECISION ADOPTING EFFICIENCY SAVINGS AND PERFORMANCE INCENTIVE MECHANISM 1
1. Introduction 2
2. Procedural Background 5
3. Framework for an Incentive Mechanism to Promote EE Goals 8
   3.1. Discussion 11
4. Proposals for a 2013-2014 Incentive Mechanism 14
   4.1. Position of the IOUs and NRDC 14
   4.2. TURN's Position 16
   4.3. WEM 17
5. Adopted 2013-2014 Incentive Mechanism Overview 18
6. Setting ESPI Earnings Potential 20
   6.1. Parties' Positions on 2013-2014 Incentive Earnings Potential 20
      6.1.1. Discussion 24
7. Resource Program Savings Incentive 31
   7.1. Scaling Incentive Earnings Potential for Resource Savings Programs Based on Lifecycle Goals 33
      7.1.1. Parties' Positions 37
      7.1.2. Discussion 39
   7.2. Measuring EE Resource Savings Results for Incentive Awards 40
      7.2.1. Parties' Positions 43
      7.2.2. Discussion 47
   7.3. Ex Ante Savings Incentive 50
   7.4. Ex Post Savings Incentive 52
      7.4.1. Reducing Potential Variances between Ex Ante and Ex Post Earnings 54
      7.4.2. Reducing Contentiousness of Ex Post Determinations 56
      7.4.3. Process to Implement Ex Post Evaluations 58
      7.4.4. Resolving Disputes Regarding Ex Post Evaluations 60
   7.5. Cost-Effectiveness Multiplier 65
      7.5.1. Parties' Positions 65
      7.5.2. Discussion 68
8. EAR Incentive Mechanism 68
   8.1. Parties' Positions 69
   8.2. Discussion 70

TABLE OF CONTENTS
(Cont'd)

Title **Page**

9. Incentives for C&S Advocacy 75
9.1. Parties' Positions 76
9.2. Discussion 77
10. Incentive Earnings for Non-Resource Programs 78
10.1. Party Positions 79
10.2. Discussion 80
11. Processes for Submission, Review and Approval of Incentive Claims 82
12. Comments on Proposed Decision 85
13. Assignment of Proceeding 86
Findings of Fact 86
Conclusions of Law 91
ORDER 93

ATTACHMENT 1: Formulas to Derive Resource Savings Elements of ESPI Mechanism
ATTACHMENT 2: Protocols for Ex Post Evaluations of Portfolio Performance Parameters
ATTACHMENT 3: List of Deemed Measures Subject to Ex Post Evaluation for Program Year 2013
ATTACHMENT 4: Dispute Resolution Process for Ex Post Evaluation Matters
ATTACHMENT 5: Annual Ex Ante Review (EAR) Performance Scoring Process
ATTACHMENT 6: Annual Process for Submission, Review and Resolution of Incentive Award Claims
ATTACHMENT 7: Ex Ante Implementation Scoring Metrics

DECISION ADOPTING EFFICIENCY SAVINGS AND PERFORMANCE INCENTIVE MECHANISM

1. Introduction

This decision adopts a new Efficiency Savings and Performance Incentive (ESPI) mechanism to promote achievement of energy efficiency (EE) goals through programs. This new mechanism supersedes the Risk/Reward Incentive Mechanism (RRIM).[1] Consistent with the Energy Action Plan (EAP) the adopted mechanism reinforces our commitment to EE as the highest energy resource priority to meet California's energy demand.

Relevant statute,[2] California's EAP,[3] and past Commission decisions[4] all prioritize EE as the first priority in the loading order of energy resources. Our adopted incentive mechanism is also designed to motivate utilities to prioritize EE goals, while protecting ratepayers through necessary cost containment mechanisms.

---

[1] The RRIM was originally adopted in Decision (D.) 07-09-043 and subsequently modified through a series of later decisions.

[2] Public Utilities Code Section 454.5(b)(9)(c) states: "The electrical corporation will first meet its unmet resource needs through all available energy efficiency and demand reduction resources that are cost effective, reliable, and feasible."

[3] The EAP identifies goals and actions to ensure adequate, reliable and reasonably-priced electrical power and natural gas supplies through cost-effective and environmentally sound strategies. The EAP is posted on the Commission's website at http://docs.cpuc.ca.gov/word_pdf/REPORT/28715.pdf.

[4] In D.04-09-060, the Commission stated its goal to pursue all cost-effective EE opportunities in support of the EAP commitment first priority in the loading order of energy resources.

As authorized herein, the investor-owned energy utilities (IOUs), Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E), and Southern California Gas Company (SoCalGas) collectively (the IOUs) will earn incentive awards by meeting or exceeding designated EE goals.

The adopted ESPI mechanism is based generally on the proposal previously outlined in the Assigned Commissioner's Ruling (ACR) issued on April 4, 2013, with certain refinements in response to comments.[5]

An effective incentive mechanism should incorporate: (1) clear performance goals; (2) a clear understanding of how performance will be measured in relation to those goals; (3) a timely and transparent process for independent measurement and verification of performance results; and (4) incentive earnings opportunities sufficient to motivate IOU performance, while providing cost-effective value to ratepayers. Our adopted mechanism is designed with these objectives in view.

The ESPI mechanism will offer incentive awards in four performance categories, namely, (1) EE resource savings; (2) ex ante review performance; (3) building codes and standards EE programs; and (4) non-resource programs. Recognizing the primary importance of EE resource savings, we offer the largest incentives in that category. By offering incentives over a broader range of policy

[5] *See* the April 4, 2013, Assigned Commissioner's Ruling Regarding Energy Efficiency Savings and Performance Incentive Design for Energy Efficiency 2013-2014 Portfolio. Unless otherwise specified, all subsequent references herein to the "ACR" refer to the ACR issued on April 4, 2013.

goals compared with prior cycles, we provide a more comprehensive scope for successful results, and diversify the risks involved.

Our new incentive mechanism shall apply starting with the 2013-2014 program cycle,[6] and continue in effect for subsequent cycles until further notice.[7]

The potential for ESPI earnings available over the 2013-2014 cycle is capped at $178 million for the 2013-2014 cycle. Assuming current portfolio make-up and "business as usual" program implementation, however, the 2013-2014 ESPI earnings would approximate $119 million.[8]

We also adopt a process and schedule for submission of incentive claims and for assessment of awards on a regular and timely basis as set forth herein. Pursuant to D.12-12-032, the IOUs are currently scheduled to receive EE incentive awards by the end of 2013 for 2011 program activities, and by the end of 2014 for 2012 program activities, respectively.

The ESPI mechanism will apply to EE program activities that began effective January 1, 2013. To provide continuity and regularity in opportunities for earnings, ESPI awards for 2013 program activity will be reviewed and awarded in two installments, one in calendar year 2014 and one in calendar year 2015, in accordance with the schedules and protocols adopted herein (this sequential set of payments would also be made in each successive year that the

---

[6] *See* D.12-11-015, approving 2013-2014 EE Programs and Budgets.

[7] Since several ESPI metrics rely on specific data relating to 2013-2014 programs, we may consider updating some ESPI formulas in subsequent program cycles, either as part of the review of new EE budget applications or through a separate rulemaking.

[8] Supporting formulas and data detailing the calculations of ESPI earnings potential were previously set forth in the ACR dated April 4, 2013. The values have been updated to reflect the IOUs' Compliance Filing budgets. The formulas utilized to derive ESPI earnings are detailed in Attachment 1 of this decision.

ESPI is in place). Since the IOUs are also scheduled to file advice letters in calendar year 2014 for program year 2012 incentive earnings, we authorize the IOUs to consolidate their incentive claims covering 2012 and the first installment of the 2013 claim into a single advice letter filing.

2. Procedural Background

The record supporting this decision consists of comments in this proceeding and its predecessor Rulemaking (R.) 09-01-019. The Commission opened R.09-01-019 in January 2009 for the purpose of instituting reforms to the Risk/Reward Incentive Mechanism (RRIM), previously adopted in Decision (D.) 07-09-043. By December 2008, however, significant controversy had developed regarding how RRIM awards should be determined. In response, the Commission opened R. 09-01-019 to consider RRIM reforms, stating:

> We believe it is necessary to consider a more transparent, more streamlined and less controversial RRIM program. This may require making small but significant changes to the existing RRIM, or may require wholesale adoption of a new incentive mechanism. Any new or revised RRIM must continue to provide incentives to utilities to provide the maximum verifiable and socially-desirable level of energy efficiency programs and services, while protecting ratepayers through necessary cost containment mechanisms.
> (OIR 09-01-019 at 4-5)

From 2008 through 2012, the Commission modified the incentive mechanism through a series of decisions, in connection with determining incentive awards for the 2006-2008 cycle and the 2009 bridge year, and most

recently, the 2010-2012 cycle.[9] These modifications, however, continued to be controversial, and warranted further study of incentive reforms going forward.

Proposals for incentive mechanism reforms were presented in staff's April 1, 2009, "White Paper on Proposed Energy Efficiency Risk-Reward Incentive Mechanism and [Evaluation, Measurement, and Verification] EM&V Activities" (White Paper).[10] On April 29, 2009, parties commented on the White Paper, with reply comments filed on May 11, 2009. On May 22, 2009, parties filed incentive reform proposals, with responses on June 12, 2009. A workshop was convened on July 15, 2009. Post-workshop comments were filed on August 7, 2009.

From September 2009 through 2011, R.09-01-019 focused on disposition of incentive earnings claims covering 2006-2009, and on incentive reforms for the 2010-2012 cycle. On November 15, 2010, the assigned Administrative Law Judge (ALJ) issued a Proposed Decision (PD) for a revised incentive mechanism for the 2010-2012 cycle. The PD was subsequently withdrawn.

A ruling was issued on August 30, 2011, for comments on incentive reform.[11] Comments were filed on September 23, 2011, and reply comments

---

[9] Due to various factors, however, including adoption of the Strategic Plan and the need for significant revisions to utility portfolio applications, bridge funding applied for 2009 (as adopted in D.08-10-027) to enable 2006-2008 programs to continue through 2009.

[10] The White Paper was served jointly on parties in this proceeding and in A.08-07-021 et. al. (applications for 2009-2011 Energy Efficiency (EE) Programs)

[11] Commissioner John Bohn was originally the assigned Commissioner in R.09-01-019. On January 11, 2011, Commissioner Michael R. Peevey became the assigned Commissioner. On April 13, 2011, Commissioner Mark J. Ferron became the assigned Commissioner, and continued in that role in the successor proceeding, R.12-01-005.

were filed on October 7, 2011. A follow-up ruling was issued on December 16, 2011.

On January 12, 2012, the Commission opened the instant Order Instituting Rulemaking (OIR) 12-01-005).[12] Comments in the OIR were filed on February 2, 2012, incorporating comments on the December 16, 2011 ruling previously issued in R.09-01-019. Parties filed reply comments on February 16, 2012. Prehearing Conference Statements were filed March 19, 2012, and a prehearing conference was held March 23, 2012. The assigned Commissioner issued a scoping memo on May 16, 2012, dividing the proceeding to address incentive policies relating: (a) to the 2010-2012 cycle, and (b) to the 2013-2014 cycle and beyond. An incentive mechanism covering the 2010-2012 program cycle was adopted in D.12-12-032.

A workshop on incentive reforms was held on August 20, 2012. Post-workshop comments were filed on October 1, 2012. The assigned Commissioner issued a ruling on April 4, 2013, soliciting comments on a proposed incentive mechanism for the 2013-2014 cycle. Comments on the ruling were filed on April 26, 2013, with reply comments on May 3, 2013. The record underlying this decision thus incorporates relevant filings in R.09-01-019 and in R.12-01-005, as summarized above.

The adopted incentive mechanism is designed based on metrics adopted for the 2013-2014 EE budget cycle. In May 2012, the Commission adopted

---

[12] R.12-01-005 is the successor proceeding to R.09-01-019 which, in turn, succeeded R.06-04-010, (regarding post-2005 EE policies, programs, evaluation, measurement and verification, and related issues). In R.06-04-010, among other things, the Commission set energy efficiency goals (e.g., D.08-07-047) and adopted the "Risk/Reward Incentive Mechanism" to promote EE.

D.12-05-015, providing guidance regarding the portfolio of energy efficiency programs and budgets for the 2013-2014 cycle. In addition to requiring portfolio applications from the four large investor-owned utilities (IOUs), the Commission invited proposals for regional energy networks (RENs) from local government entities. In D.12-11-015, the Commission approved EE portfolio budgets for the IOUs for the 2013-2014 cycle.

Active parties participating in this proceeding include the investor-owned utilities (IOUs), (i.e., PG&E, SCE, SDG&E, and SoCalGas). Intervenors include the Commission's Division of Ratepayer Advocates (DRA), The Utility Reform Network (TURN), the Natural Resources Defense Council (NRDC), National Association of Energy Service Companies (NAESCO), California Energy Efficiency Industry Council (Efficiency Council), and Women's Energy Matters (WEM).

3. Framework for an Incentive Mechanism to Promote EE Goals

In past decisions and rulings, we have discussed at some length the difficulties and challenges in implementing an effective EE incentive mechanism. In view of these difficulties, various parties argue that the Commission should discontinue attempts to offer incentive earnings as a tool to promote EE goals. Other parties insist that an incentive mechanism remains an essential tool to elevate EE to a top priority in the loading order of energy resources.

NRDC and the IOUs, in particular, advocate continuation of energy efficiency incentives as a critical component of state energy policy. NRDC argues that an incentive mechanism should clearly define the Commission's overarching policy objectives and be carefully designed to spur the utilities to excel at meeting these objectives. NRDC agrees that reform in the incentive design is

needed and supports an increased focus on maximizing long-term energy savings in a cost-effective manner, consistent with statewide efforts to cut greenhouse gas (GHG) emissions.

NRDC argues that the utility business model should focus on providing *energy services* to customers in an affordable and reliable manner, rather than focusing on merely selling energy as a commodity. NRDC argues that taking an approach focused solely on selling energy as commodities would take the state back to the 1960s.

DRA, TURN, and WEM all oppose continuation of a shareholder incentive mechanism for energy efficiency. DRA questions the usefulness of shareholder incentives for energy efficiency when no incentive mechanisms exist for other programs to reduce load demand.

DRA argues there is no correlation between incentive earnings and performance of IOU-run EE programs. DRA claims there is a fundamental disconnect between the IOUs' role in procuring supply-side resources and EE goals, and an inherent contradiction between EE and IOUs' fiduciary investment responsibility.

Despite years of incentive mechanisms, DRA claims the IOUs still engage in over procurement of supply-side resources while underachieving EE savings and challenging independent evaluations of those savings. DRA claims the IOUs have not incorporated EE into their long-term procurement plans to the full extent of adopted goals. DRA claims that ratepayers have been forced to fund underperforming EE investments and to pay out incentives, while funding higher supply-side costs.

TURN similarly argues that a business model based on profit streams from simultaneously 1) selling a commodity, and 2) selling services to reduce the need for that commodity is not an efficient long term strategy. TURN believes that such a strategy increases ratepayer costs due to excessive utility profit streams, and encourages gaming based on short term supply/demand balances, and with added administrative overheads.

WEM similarly claims that EM&V is largely useless for determining the grid-reliability of EE, and that EM&V provides hardly any reports on the distribution of energy savings in relation to procurement and transmission/distribution planning needs. WEM argues there is an excessive lag between when an efficiency measure is installed versus when EM&V is performed, of as many as three or four years. WEM advocates removing EE funds from utility management and putting them in the hands of Community Choice Aggregators (CCAs), RENs, and other independent EE providers.

Marin Energy Authority (MEA) requests the Commission examine the issue of CCA participation in the ESPI mechanism.[13] MEA is the default electricity generation provider for the County of Marin and the City of Richmond. MEA argues that its exclusion from the ESPI mechanism would deprive the Commission of the opportunity to utilize ESPI funds in an innovative and groundbreaking fashion in order to further California's EE goals. In furtherance of state and Commission policy directives explored above, MEA

[13] CCAs are joint powers agencies formed by any group of cities and/or counties whose governing boards have elected to combine the loads of their programs. (P.U. Code § 331.1.) MEA is the only operating CCA in California, and is a not-for-profit Joint Powers Authority formed by the County of Marin and the City of Richmond.

seeks to be subject to the same ESPI mechanism as the IOUs. MEA has already launched its 2013-2014 EE programs within its service territory.

MEA claims that its exclusion from the ESPI mechanism would contravene the legislature's intent to establish and promote competitive neutrality pursuant to Senate Bill (SB) 790, which mandated that the Commission incorporate rules to foster fair competition for CCA programs. (P.U. Code §707(a)(4)(A).) MEA claims that providing incentives to an IOU but not to a CCA would result in an unequal playing field, and would indicate preferential treatment to IOUs and their shareholders—since CCAs by definition possess no shareholders.

3.1. Discussion

We recognize the challenges witnessed in crafting an effective incentive mechanism that is responsive and cost-effective in furthering Commission EE goals. We also recognize that more work is needed to integrate EE savings more effectively into IOU procurement plans, but believe such issues extend beyond the scope of this proceeding. We also note that proposals to transfer EE program funding to entities other than IOUs is outside the scope of this proceeding.

We find the proposal of MEA seeking to become a recipient of ESPI awards to be outside the scope of this proceeding. The intent of an EE incentive mechanism is to provide IOU shareholders a meaningful earnings opportunity on investing in EE rather than supply side resources. Local governments and CCAs previously argued that they should manage a share of the EE portfolios because, among other things, they are government entities. In its capacity as a CCA, MEA does not have shareholders, and thus does not require shareholder profits as a motivation to perform its responsibilities. MEA's argument that it would be placed at a competitive disadvantage without an incentive opportunity

is not supported. Accordingly, we find no basis to include MEA as a recipient of ESPI payments.

As noted in the Energy Action Plan[14] and past Commission decisions, there is an inherent utility bias towards supply-side procurement under cost-of-service regulation. IOUs generate earnings when they invest in supply-side resources, but not when promoting EE to reduce load demand. To address this disparity inherent in the different approaches to addressing energy load requirements, an incentive mechanism continues to offer an important tool to augment Commission policy goals.

The reformed incentive program adopted in this decision builds upon the lessons learned from prior program cycles, and offers a cost-effective means of encouraging the IOUs to continue to meet EE goals.

For the 2013-2014 cycle, we significantly revise the mechanism previously utilized during the 2006-2009 period to determine incentive earnings awards. We recognize that there are practical limitations regarding how precisely any incentive mechanism can match incentive earnings to actual performance within the control of the IOU. Nonetheless, the ESPI mechanism adopted herein incorporates significant improvements, and offers meaningful incentives to encourage IOU performance while protecting the interests of ratepayers.

---

[14] California's principal energy agencies, including this Commission, joined to create the EAP in 2003. The EAP 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. The EAP is posted on the Commission's website at http://docs.cpuc.ca.gov/word_pdf/REPORT/28715.pdf.

Although the methodology for determining incentive payments evolved over time, the original methodology based incentive earnings or penalties on ex post evaluations of resource savings, determined through the Commission's EM&V program. Incentive payments applied only if savings exceeded minimum performance standards based on a percentage of the Performance Earning Basis (PEB).[15]

The proceedings adopting the incentive awards for the 2006-2008 cycle and the 2009 bridge year proved highly contentious. For the final installment of 2006-2008 payments, the Commission based incentive payments on ex ante estimates rather than ex post evaluations of savings, as originally contemplated. The Commission also applied a shared savings rate of 7% of the PEB (reduced from the 9%/12% rates originally adopted). The 7% rate reflected reduced shareholder risk associated with basing final earnings on ex ante values, adjusted for actual installations. In view of the difficulties and delays in locking down ex ante values, as discussed below, the Commission chose not to rely on the PEB shared savings model for purposes of a 2010-2012 incentive mechanism.

We disagree with the view that as a result of past challenges in crafting an effective incentive mechanism, the preferred alternative is to abandon further attempts to devise an effective EE incentive program. Given the critical importance of EE resources as first in the loading order, we continue to believe that monetary incentives remain important as a means of elevating the importance of EE programs as a core element of the IOU business model.

---

[15] The PEB represented the monetized net resource benefits calculated based on the avoided costs due to energy savings. No incentive earnings or penalties applied if savings fell within a deadband (i.e., from 65% to 84% of savings goals).

As explained below, while we continue to recognize the importance of incentives, we conclude that the PEB shared savings model needs to be replaced with a different methodology. Also, the PEB shared savings model does not realistically reflect EE program savings of a natural gas distribution utility. EE programs that yield natural gas savings do not offset supply-side investment in gas plants, yet we previously allocated RRIM earnings to SoCalGas using the electric utility PEB model.

In designing an effective incentive mechanism, we separately consider the *structural design* of the mechanism (i.e., offering the right incentives to spur actions that the Commission wants to encourage) and the *magnitude* of potential earnings awarded sufficient to motivate management. We next review parties' proposals and then discuss our adopted mechanism.

4. Proposals for a 2013-2014 Incentive Mechanism

Over the course of consideration of reforms in the incentive mechanism over recent years, parties' positions have evolved. We focus on parties' most recent positions regarding a 2013-2014 incentive mechanism, rather than discussing all earlier versions of proposals in detail.

4.1. Position of the IOUs and NRDC

NRDC offers a proposal for a revised incentive mechanism that is generally supported by the IOUs. These parties differ on certain details, such as the use of net versus gross savings and the magnitude of earnings potential.

NRDC's proposal for 2013-2014 would replace the RRIM shared savings approach previously used, but still provide an opportunity to earn rewards for achieving energy efficiency savings and would incorporate the following general features:

(1) A fixed amount for incentive earnings per unit of savings (kW, kWh, Therms);

(2) A cost-effectiveness guarantee; and
(3) An earnings cap on the incentive payment.

The NRDC proposed mechanism would award earnings based on net resource savings using ex ante estimates, adjusted for verified installed measures and program expenditures. Earnings would be subject to annual assessments, with no holdbacks or true-ups, as previously applied to the RRIM. Earnings caps would apply to the full two-year cycle.

Incentive earnings would be scaled based on "lifecycle demand" savings, by multiplying annual demand savings goals by the 2013-2014 portfolio's average effective useful life (EUL) of the portfolio of measures. The focus on long-term savings would encourage the utilities to maximize lifetime efficiency savings, as opposed to just short-term net benefits, and better supports the Commission's goals to achieve deeper, lasting energy savings.

SCE supports the goal of rewarding long-lived energy savings, but with certain modifications. SCE believes a mechanism must be predictable, based on frozen ex ante assumptions, should accrue earnings when the portfolio is cost-effective based on the Program Administrator Cost test, and should carry no penalty.

NRDC's proposed methodology would incorporate the Commission's net goals. In their 2013-2014 portfolio applications, the utilities projected efficiency savings at 11% to 20% beyond the Commission's goals. NRDC recommended designing an incentive mechanism to reach an earnings target at 10% beyond IOU-forecasted performance, or about 20% to 30% above CPUC goals.

NRDC's proposed mechanism would incorporate a "cost-effectiveness guarantee." Once the portfolio is cost-effective, earnings would accrue as a linear function of ex ante estimates of lifetime resource savings. Earnings

potential would be capped. The IOUs could only reach the cap by exceeding the level of savings estimated in their 2013-2014 EE program applications.

NRDC further proposes to:

- Lock-down on an ex-ante basis any metric that can be locked down.[16]
- Fix all net-to-gross (NTG) ratios on an ex ante basis for purposes of incentive payments.
- Postpone consideration of recommendations to: (i) lift or eliminate the cap on effective useful lives, and (ii) change the accounting approach for codes and standards savings to the 2015 cycle.

SDG&E and SoCalGas (referred to hereinafter as the Joint Utilities) support the NRDC proposed approach over the traditional PEB shared-savings mechanism as it contains less moving parts, less complexity, and fewer opportunities for controversy, goals which the Commission should support.

4.2. TURN's Position

TURN argues that a "performance metric" incentive mechanism is superior to a "cost savings" mechanism. TURN believes the shared savings mechanism has created inordinate controversy because it places hundreds of millions of dollars at stake based on inherently uncertain load impact analyses, coupled with inherently imprecise avoided cost modeling, to quantify one supposedly accurate number.

---

[16] "Ex Ante Lock-down" refers to the finalization of staff review of ex ante estimates of savings for a given program or measure.

TURN argues that a more effective and efficient method for promoting EE programs would be to adopt an independent administrator(s) model. TURN's preferred solution is the creation of a competitive environment for alternative effective and efficient EE services outside of the IOU.

If, however, the Commission chooses to provide incentives to IOUs, TURN proposes an incentive for utility performance, analogous to incentive mechanisms adopted for safety, reliability and customer service. TURN believes that a management fee would be superior to a shared savings methodology. TURN argues that the IOUs should include EE goals in their employee bonus programs (for example, the "results sharing" programs which provides bonuses based on a variety of performance measures).

TURN previously proposed a performance metric designed to reward IOUs for targeting hot climate zones due to significantly higher cost effectiveness of programs in those areas. TURN believes that EE investments should be targeted by location based both on climate and transmission or distribution circuit constraints, and that such targeted EE is more consistent with utility supply-side investments. Nevertheless, on balance TURN does not propose a performance metric or incentive adder at this time to promote locational deployment of EE. TURN suggests that the combination of a management fee (for non-resource programs) and savings awards (for resource programs) is adequate for 2013-2014.

4.3. WEM

WEM joined with Rockwood Consulting (WEM/Rockwood) in proposing a "limited incentive mechanism for the use of energy efficiency as a distribution resource." The WEM proposal is limited to deferring distribution costs and takes an aggregate measurement approach. The proposal ties incentives to deferring

supply-side investments. However, the proposal focuses on peak capacity distribution benefits and only rewards EE investments that lower peak load on a subset of circuits within the utility service area. The reward would be tied to aggregate measurement of reduced load behind each designated substation and the potential deferred costs.

WEM's comments are focused on incentives for non-utility administration, which as discussed above is outside of the scope of this proceeding. Overall, WEM's comments are vague, generic and do not provide a basis for further consideration.

5. Adopted 2013-2014 Incentive Mechanism Overview

We have evaluated the proposals of the parties for a new incentive mechanism. Based on a comprehensive review of the record, we adopt the new ESPI mechanism as explained below. Our adopted mechanism is based on the proposal previously issued by the assigned Commissioner in his ruling dated April 4, 2013, with certain refinements in response to comments. We have incorporated certain features and concepts previously identified parties' comments.

The ESPI mechanism complements, integrates with, and promotes EE programs and policy goals as adopted in D.12-11-015 (in A.12-07-001 et. al). We also coordinate with the ongoing activities in R.09-11-014 to continue to improve EM&V. The following criteria inform our design of the incentive mechanism. The incentives offered must:

- **Be effective** in spurring the utilities to a commitment to capture all cost-effective energy savings as the first priority in the loading order by fostering innovation in approaches to capture energy savings.
- **Value longer-lasting and deeper savings**. The mechanism should value efforts that achieve deeper, more comprehensive, and

longer-lasting savings. The mechanism should maximize GHG reductions and encourage both market transformation and resource acquisition programs.

- **Rely on accurate, transparent, and timely** EM&V to ensure clear, fair, and timely implementation.
- **Prudently use customer funds to** ensure that customers are better off when utilities invest in efficiency instead of supply-side alternatives.

Our adopted ESPI mechanism is designed to address various problems encountered in administering incentive mechanisms utilized during previous cycles while still maintaining the core principles of having an incentive mechanism for EE, as outline above. We offer incentive earnings allocated among four major categories of performance, summarized as noted below.

A. EE Resource Savings:
An incentive is offered to encourage EE resource savings, paid as a combination of ex ante "locked down" and ex post verified savings results, according to the level of uncertainty of the measures' parameters. The methodology for measuring resource savings is modified from previous cycles to focus on lifecycle savings. Incentives for EE resource savings are capped at 9% of resource program expenditures, minus funding dedicated to administrative activities, codes and standards programs, EM&V, and CCA/RENs.

B. Ex Ante Review (EAR) Process Performance:
An incentive for successful implementation of ex ante lock down, as a function of the criteria relating to the Commission's review of ex ante parameters. Incentives are earned based on performance scores and paid as an award of up to 3% of resource program expenditures

C. Codes and Standards (C&S) Advocacy Programs:
An incentive to reward savings from building C&S programs, paid as a management fee equal to 12% of approved C&S program expenditures, not to exceed authorized expenditures, and excluding administrative costs.

> **D. Non-Resource Programs:**
> For non-resource programs (which support savings-based programs but in which there are no direct savings), a management fee is offered equal to 3% of non-resource program expenditures, not to exceed authorized expenditures for these programs, exclusive of administrative costs.

Given the primary importance of resource savings, we provide incentives in that category as a major emphasis. To address a broader set of EE goals and objectives, however, we also offer incentives for additional performance categories. We explain our adopted incentive component for resource savings in the next section. Following that, we address the incentive components for the other performance categories.

6. Setting ESPI Earnings Potential

In order to establish appropriate incentive levels, earnings opportunities should be sufficient to motivate IOU management to treat EE investments as a core element of regulated operations. There are various criteria and benchmarks to consider in setting the incentive earnings potential to meet this objective.

6.1. Parties' Positions on 2013-2014 Incentive Earnings Potential

NRDC proposes an incentive earnings cap of $188 million for the 2013-2014 cycle. To derive this figure, NRDC starts with the $450 million cap previously adopted for the three-year 2006-2008 cycle. Since the 2013-2014 cycle only covers two years, NRDC reduces the $450 million by 1/3 to reflect a 2-year instead of 3-year cycle. (i.e., $450 million *2/3 = $300 million). NRDC then adjusted for the ratio forecast energy savings for 2006-2008 versus 2013-2014,

yielding a figure of $235 million.[17] To reflect reduced risk compared to the original RRIM design, NRDC lowered this figure by 20% resulting in the $188 million earnings cap.

PG&E proposed a cumulative earnings cap of $250 million statewide for 2013-2014 resource savings up to 125% of Commission goals. PG&E claims that its proposed earnings cap is consistent with national averages for incentives on EE programs, and is below the supply-side equivalent earnings for 2013-2014.

If the Commission adopts a mechanism based on the elements in the ACR, PG&E believes that earnings potential should be set consistent with the national average for similar incentive mechanisms, which PG&E calculates as 13% of the EE portfolio budget. PG&E proposes that the 13% earnings cap be allocated 3% to EAR and 10% to resource savings. PG&E believes that administrative costs should not be removed from the mechanism, arguing that these costs are critical to portfolio management.

SCE believes the magnitude of incentive earnings suggested by NRDC and PG&E establish a reasonable range to capture management's attention.

The Joint Utilities (SDG&E and SoCalGas) proposed a two-year incentive earnings cap of $181.4 million (or $90.7 million per year for resource programs, including $15.84 million for C&S advocacy). The cap would be cumulative over the cycle so that an IOU could "catch up" in the second year to reflect any ramp up from program delay and cycle start-up.

---

[17] NRDC calculates the $235 million as follows: 3,857 GWh [2013-2014 net forecasted savings] / (2/3* 7,371 GWh) [2006-2008 savings from D.05-09-043, Attachment Table 2] =78.49%. $300 million *78.49% = $235 million. Net forecasted savings for 2013-2014 are from IOU responses to NRDC's data request.

The Joint Utilities agree that an overall earnings cap of $159 million, as calculated in the ACR, would provide a reasonable sharing of benefits between investors and customers and adequately recognize management's efforts in pursuing long-term cost-effective savings from EE programs. The $159 million cap recognizes the concerns regarding the elevated level of earnings to utilities from the past mechanisms. SDG&E presented a table showing the range of incentive earnings potential values proposed or evaluated by parties, from a low of $51 million to a high of $199 million.[18]

DRA argues that this is not the time to increase incentive earnings caps, given that many ratepayers are struggling economically. TURN recommends limiting the earnings cap to 5% of the EE budget. TURN believed that incentives equal to a 5% level should be sufficient to motivate upper management to prioritize EE divisions in company-wide planning and strategy.

If the Commission adopts an incentive mechanism for 2013-2014, TURN argues that incentive earnings potential should be significantly reduced from prior cycles and not be based on a "supply-side equivalence" model. TURN argues there is no theoretical or practical basis for basing EE shareholder incentives on avoided supply side investments and estimates of shared energy resource savings.

However, if the Commission chooses to continue with a shared savings model, TURN recommends that the earnings potential be reduced to account for the significantly reduced risks of assuming ex ante parameter values for the basis for incentive payments.

---

[18] *See* SDG&E Comments dated October 1, 2012, Table at 4.

TURN calculated that removing the requirement to use ex post values to calculate incentive earnings would warrant a risk-adjusted incentive earnings reduction of at least 55% relative to 2006-2009 levels. To account for reduced risk of using ex ante values, no per-unit penalties, and no claw-back, TURN believes the incentive earnings rate should be reduced to 5% of EE budget.

NRDC agrees with TURN on the primary risk factors that warrant a reduction in potential earnings, assuming an ex ante mechanism, but disagrees on the magnitude of the earnings potential. NRDC agrees that basing incentives on ex ante values for most metrics reduces the utilities' risk and warrants a reduction in incentive earnings potential.

However, NRDC disagrees with TURN's assertions that the risk adjustment for a change from ex post to ex ante metrics should reduce incentive earnings potential by 55%. TURN bases its calculation on the ratio of Commission staff's proposed ex post values for 2006-2008 relative to the ex-ante values. NRDC disagrees with this approach, arguing that staff's ex post values for 2006-2008 were not adopted.

TURN believes that the maximum annual incentive payout should not be significantly higher than the average 2006-2009 RRIM annual payment of $68 million. TURN recommends that if incentives are based on ex post savings, the resource component should be no more than 6% of authorized program budgets. This would result in a maximum potential (two-year) award of $90 million in this category, for a total maximum ESPI payment of almost $130 million, resulting in maximum annual awards of $65 million. TURN

presented a review of incentive earnings awards in other state jurisdictions and calculated that incentive awards averaged about 7.1% of adopted EE budgets.[19]

6.1.1. Discussion

Establishing an appropriate level of earnings potential for shareholder incentives requires careful deliberation of the factors and policies involved in determining the incentive earnings potential for 2013-2014.

There are various possible criteria to consider in establishing the appropriate potential for incentive earnings. Incentive earnings potential should be sufficient to motivate IOU investors and managers to view EE as a core part of regulated operations, and to foster creativity within IOU engineering and management. EE should be viewed through the same financial lens as supply-side investments. At the same time, incentive earnings potential must remain limited as necessary to protect ratepayers' interests and guard against excessive and/or unreasonable costs, and to ensure that ratepayers realize commensurate benefits as a result of any incentive earnings paid.

One benchmark in setting incentive earnings potential is its relative significance as a percentage of total utility earnings. From 2006-2011 the utilities' average annual income before taxes was $4 billion per year. Two percent of $4 billion is $80 million per year, or $160 million for the two-year 2013-2014 cycle. NRDC claims that an earnings impact of 1% is likely the minimum to simply be noticed.

---

[19] *See* TURN Comments dated October 1, 2012; as calculated in Table 3, at 6.

Another potential benchmark is a comparison of incentive earnings programs offered in other jurisdictions. According to the American Council for an Energy Efficiency Economy (ACEEE) nationwide survey of efficiency incentives in various states, incentive earnings range from 5% to 20% of program spending.[20] According to the ACEEE survey, the nationwide average level of incentive allowances was calculated as 10% to 11% of program spending. As calculated by TURN, however, by excluding certain data outliers from this calculation, a more comparable average incentive earnings levels for utility programs in other jurisdictions is about 7% of EE program costs.[21]

Most of the states surveyed award incentives based on performance at saving energy and lowering customer bills, and not based on how much money is spent. Incentives as a percent of spending, however, provide a consistent point of comparison across states. Such comparisons of incentive earnings in other jurisdictions offer only a rough indicator, however, in terms of its applicability to California IOUs. Other state jurisdictions are subject to different regulatory programs, risks, and opportunities. For example, not all state jurisdictions included in ACEEE survey offer revenue decoupling as California does.[22] States without decoupling may have to use portions of the incentive

---

[20] *See* ACEEE, Carrots for Utilities: Providing Financial Returns for Utility Investments in Energy Efficiency, U111, January 2011, at 10, as referenced in NRDC comments dated October 1, 2012.

[21] *See* TURN October 1, 2012 comments, at 5-6.

[22] Decoupling is a mechanism to track differences between actual and forecasted revenues collected. The retail rate is derived from authorized revenue requirements divided by forecasted sales. If actual sales fall below forecasted levels (due to energy efficiency installations, for example), the rates may not recover the utility's fixed costs. With decoupling of revenues from sales, under-collections of revenue are recovered in

Footnote continued on next page

awards to compensate for under-collection of revenue requirements. California IOUs are protected from risks of EE on their revenue requirement recovery. Since California has full revenue decoupling, California IOUs have no risk of under-collection of revenue requirements due to load reductions from EE penetration.

It is unclear as to what degree the regulatory and institutional structures of other states with EE incentives are analogous to California's in other respects. For example, some states have restructured electric markets, whereas others do not. Utilities in some states may have more responsibility for delivery of EE resources than in California. Efficiency reward mechanisms may include penalties in some states, but not others.

Incentive earnings potential is not a single amount, but is a range of values assessed in relation to the effort required to reach a designated goal, and the likelihood of achieving the goal. We agree with NRDC's observation that in general, the harder it is to reach an earnings limit, the larger the earnings limit should be. Similarly, a smaller earnings potential is warranted to the extent it is easier to reach. Incentive earnings should thus be sufficient to spur excellent performance at meeting the Commission's objectives. At the same time, earnings limits should remain within reasonable expectations.

Accordingly, to provide a broader perspective, we set the overall incentive earnings potential in relation to targeted goals at high levels of performance, while also calculating the estimated savings awards that the IOUs might expect if

---

subsequent rate adjustments. Over-collections are refunded to ratepayers. Without decoupling, the utility faces higher risk with a disincentive to implement energy efficiency programs that reduce load.

performance simply remains at present levels, referred to as "business as usual." We also assess incentive earnings potential in the context of all four categories of incentive performance offered through the ESPI mechanism.

Based on target performance goals, and the management fees described below, we conclude that the two-year ESPI incentive earnings potential equal to 10.85% of the EE portfolio budget is appropriate. We set this earnings level as a matter of judgment, taking into account the earnings potential and associated risks relating to incentives offered during prior cycles, and in comparison to earnings for incentive programs offered in other state jurisdictions, as discussed below.

Setting maximum earnings potential at nearly 11% of budgeted funds offers earnings within the range of earnings offered by other state jurisdictions.

We also consider the effects of this level of incentive earnings potential for performance based on "business as usual" estimates for the two non-management fee components of the mechanism (resource program savings and EAR performance), utilizing recent portfolio average experience. As previously calculated in the ACR on an estimated basis, the "business as usual" earnings scenario incorporates a realized EUL of 9 years for electric measures and 14 years for gas measures, a realized NTG ratio of 0.65, and EAR performance scores from the 2010 program year shareholder incentive mechanism decision. Savings estimates are also increased to account for estimated 5% spillover effects for the 2013-2014 portfolio in the business-as-usual tables, since spillover effects will increase savings totals.

Assuming the IOUs' performance for 2013-2014 approximates current levels, as calculated in the ACR, the adopted ESPI mechanism would produce earnings approximating $119 million. The overall level of ESPI earnings potential, allocated among the four general categories of performance, is as follows (variations in parameters among the IOUs are not reflected in this estimate):

Incentive Category	Range of 2013-2014 Maximum Potential	Earnings ($Millions)[23] Business as Usual
EE lifecycle resource savings	$126.85	$85.32
Ex Ante Review Performance	42.3	23.99
Codes and Standards Advocacy	2.98	2.98
Non-Resource Programs	6.3	6.3
Total	$178.42	$118.59

Note that the maximum potential earnings for each component is specific to that component. That is, if a utility does not earn up to the sub-cap for a component, those funds would not be available to earn through another category. We conclude that this level of earnings potential (equal to 10.85% of allocated budget, minus administrative funds and funding for RENs/CCA) is appropriate in relation to the goals and risks of ESPI mechanism, compared with the relative EE incentive earnings opportunities and levels of risk offered in prior cycles, and compared with earnings offered for somewhat similar programs in

[23] Earnings potential from these incentive elements represents two-year totals for all IOUs combined. A detailed tabulation of the components of the incentive earnings formulas by category and by IOU is set forth in Attachment 1. Values have been updated since the ACR to reflect budgets reported in the IOUs' Compliance Filings.

other jurisdictions. We also recognize that for the 2013-2014 portfolio, it may be difficult for the IOUs to adjust their portfolios sufficiently to achieve the target EULs and NTGs needed to achieve the net lifecycle savings associated with the incentive cap. However, we choose to establish these stretch EUL and NTG goals to guide longer term transitions in program design, and we are confident that through careful program design that reduces free ridership and focus on cost-effective, longer life measures, the IOU portfolios could achieve the higher portfolio savings associated with the target EULs and NTGs.

Comparisons between earnings opportunities from EE and supply-side resources are difficult to make, given the differing performance, earnings and investment characteristics involved with demand- and supply-side resources. Any such comparisons must take into account relevant differences such as the relative size of utilities, overall levels of earnings, the magnitude of EE program budgets, and resource savings potential from the EE programs.

On balance, however, we conclude that overall incentive earnings potential should be lower compared with the maximum potential originally offered through the RRIM. As adopted in D.07-09-043, we set RRIM maximum earnings potential at 12% of the estimated net resource benefits, at a three-year level of $450 million, or $150 million annually. This incentive level was at the low-end of the range of estimated earnings from supply-side resources corresponding to EE savings at 125% of goals.

Based on the IOUs' own calculations, unacceptably large incentive payments would have been required if supply-side earnings had been used as the benchmark for 2010-12 incentives.[24] NRDC notes that a conservative estimate of supply-side comparable earnings for the IOUs' 2013-2014 EE portfolio is approximately $370 million. No party's proposals for incentive earnings limits, however, ask to base 2013-2014 incentive earnings on calculations of supply-side equivalent investments.

We conclude that basing ESPI earnings potential based on supply-side equivalent resources, at best, would offer limited usefulness. The PEB shared savings methodology, previously used to set EE incentive earnings, does not realistically track supply-side investment behavior. Supply-side investments are "lumpy." That is, they do not occur evenly as a function of load growth, but increase in discrete steps as plants come on line as rate base. By contrast, EE investments are dispersed, occur more evenly, and are individually small.

Moreover, the accuracy of supply-side comparisons depends, in part, on how closely procurement planning accounts for EE value in the avoided cost model. Supply-side procurement is driven by resource adequacy, renewables integration, and local reliability needs, which are a function of local peak demand forecasts. It is not clear to what extent such assumptions are reflected in modeling to derive the PEB.

---

[24] The IOUs' calculations provided February 2, 2012, of shared savings rates for 2010-2012 to produce incentive earnings on par with supply-side investments were: PG&E: 43.2%; SCE: 77%; for SDG&E: 28%-3A 'shared savings' model assumes that the utilities could become indifferent as between supply and demand. TURN argues, however, that the fundamental purpose of incentives for energy efficiency is not to change fundamental corporate goals, but to make EE activity sufficiently profitable so that management focuses attention and resources5%; and for SoCalGas, 24%.

After accounting for the reduction in shareholder risk resulting from various modifications to the RRIM, actual incentive awards for 2006-2008 were approximately $211.85 million, or $70 million annually. Based on the EE budget for 2006-2008 of $2.2 billion, those rewards approximated 9.63% of EE expenditures. For 2009, we awarded a similar level of earnings.

In adopting an incentive mechanism for the 2010-2012 cycle, we set award incentive earnings as a percentage of program expenditures, capped at 6% of EE expenditures. This reduced earnings potential reflected the more simplified mechanism based on EE program expenditures, and without risk of failure to achieve threshold savings.

Taking into account the design of the ESPI mechanism, we observe that it offers significantly less risk to investors compared with the RRIM. Because investors value earnings as a function of risk, the ESPI earnings potential should reflect the reduced risk in comparison to prior cycles. While the $188 million earnings cap calculated by NRDC provides some recognition of reduced risk, we believe it is still too high in comparison to incentive earnings opportunities previously offered by the RRIM.

Rather than setting incentive earnings potential by attempting to match earnings from supply-sided resources, we set the earnings potential as a percentage of the EE portfolio budget. Based on the factors considered above, we conclude that capping earnings at 10.85% of budget offers an appropriate level of incentives consistent with the criteria we have established.

7. Resource Program Savings Incentive

Under the original RRIM, the IOU was at risk for no incentive earnings (or for penalties) if performance fell below a minimum performance standard (MPS), even though customers may still receive benefits. The MPS structure,

together with risk of penalties, created the unintended consequence of a potential "cliff" effect whereby a single kilowatt-hour could result in a difference of tens of millions of dollars in rewards or penalties. The risk of significant swings in earnings due to the cliff effect contributed to intense controversy over the accuracy of ex post evaluations.

The ESPI mechanism, by contrast, will apply a uniform earnings rate across all ranges of performance. ESPI resource program savings awards will be determined as a linear function that begins at zero, with no deadband below which IOUs receive no savings-based incentive earnings.

Savings incentive earnings will accrue as a function of: (a) a pre-determined level of earnings potential, and (b) designated efficiency savings goals. We allocate the most significant incentive earnings opportunities to encourage achievement of resource savings goals.

The incentive mechanism will provide savings earnings potential capped at 9% of the resource program budget, corresponding to $126.9 million, as detailed in Attachment 1. For this calculation, we exclude funding for administrative activities, non-resource programs, EM&V, C&S programs, and the REN/CCA programs not administered by the utilities.[25]

---

[25] Financing programs for the 2013-2014 cycle (on-bill repayment and credit enhancement) possess unique characteristics (use of revolving funds; "park" funds in escrow to help secure loans which are not used if loans are repaid in full; etc.) that likely require different incentive structures than traditional resource programs to promote optimal management. However, since these programs are in their nascent stages or still under development, funds associated with financing programs are included in the resource program cap calculation for the 2013-2014 cycle. For future cycles, we anticipate that incentives would include a uniquely designed component for utility finance programs.

Savings incentive earnings potential will be scaled in relation to lifecycle resource savings goals associated with 2013-2014 EE programs utilizing the methodology and formulas previously outlined in the ACR dated April 4, 2013. Based on the designated earnings potential and lifecycle savings goals, we derive an earnings rate per-unit of energy efficiency savings, as detailed in Attachment 1. We calculate these incentive earnings rates by solving for the coefficient (i.e., earnings per unit of resource savings) that correlates incentive earnings with EE lifecycle goals based on the following formula:

(Total incentive earnings potential)
divided by:
(Lifecycle units of resource savings)
= Incentive Earnings Per Unit of Savings

The per-unit earnings coefficient correlates incentive earnings with corresponding EE lifecycle savings goals and 2013-2014 program budget levels. As explained in the following section, we set the savings incentive earnings potential based upon lifecycle performance goals that correlate with 9% of the total 2013-2014 EE budget. We calculate separate portfolio-wide earning rates for each type of resource savings (i.e., electric usage, peak electric demand, and natural gas usage). Each IOU will earn savings incentive awards as a function of EE savings realized, calculated by multiplying: (a) the respective earnings rate coefficient by (b) units of energy savings.

7.1. Scaling Incentive Earnings Potential for Resource Savings Programs Based on Lifecycle Goals

For purposes of designing incentive performance metrics, we scale the incentive earnings potential in relation to the appropriate level of resource

savings goals. As stated in D.12-05-015, an unintended consequence of the RRIM was that IOUs were encouraged to emphasize measures with high annual savings levels even if the design lives were relatively short. The Commission's cost-effectiveness tests use a relatively high discount rate and cap EULs, which together significantly lower the net benefits, and therefore the PEB, of resource measures with longer lives.

Consequently, the IOUs shifted portfolio resources away from newer market transformation programs and more comprehensive measures designed to produce long-term savings (e.g., insulation of existing buildings, higher cost furnaces and air-conditioners, or ground-up building and industrial facility redesign for fundamental efficiency improvement). The IOUs favored programs and measures that produced shorter-term savings and that increased RRIM earnings (such as compact fluorescent lamps (CFLs) and refrigerator rebates).[26]

In 2008, in D.08-09-040, the Commission adopted the California Energy Efficiency Long-Term Strategic Plan (Strategic Plan), setting forth a statewide roadmap to maximize cost-effective EE through 2020 and beyond. The Strategic Plan envisions an energy efficient future for each customer segment and identifies market transformation strategies to help transform utility programs. The Strategic Plan calls for a transition away from measures which offer short-term EE savings (i.e., CFLs) in favor of more comprehensive, deeper savings over the long term.

---

[26] Most 2006-2009 portfolio savings (and a significant portion of 2010-2012 savings) derived from CFLs. While flooding the California lighting market with deeply discounted CFLs achieved significant short-term savings, that result was not the intention of the incentive mechanism.

In 2009, the Strategic Plan's emphasis on market transformation and long-term savings began to be incorporated into the IOUs' EE programs. In D.09-09-047, in approving the IOUs' 2010-2012 portfolios, we began implementing EE programs designed to achieve the objectives of AB 32 and the Strategic Plan.

In accordance with the Strategic Plan, our adopted ESPI mechanism differs from the prior approach by placing greater emphasis on capturing deeper, more comprehensive, and longer lasting energy savings. This objective reflects a shift from the previous priority to maximize net economic benefits. Maximizing net economic benefits yields higher current economic benefits, but reduces energy savings and lessens support for longer-term policy objectives. This policy guides away from any measure or program that is not cost-effective (even if it may be in the future). The choice is between maximizing energy savings while keeping a positive portfolio benefit-cost ratio, versus maximizing net economic benefits.

Consequently, consistent with the priorities stated in D.12-05-015, our adopted ESPI gives greater weight to programs designed for deeper savings, measures with higher up-front costs and longer design lives, and market transformation efforts (with correspondingly increased challenges associated with participation levels and achieving savings from these programs). Net economic benefits will be lower, however, because portfolio design will focus more towards achieving the longer-term policy vision results in a shift in the portfolio towards a higher percentage of future savings, which receive less value in today's dollars when present-valued using the utilities' cost of capital, per our adopted cost-effectiveness tests.

For purposes of establishing lifecycle performance goals covered under the ESPI mechanism for 2013-2014, we start with the savings goals established in D.12-11-015. These goals are stated on an annualized basis for program years 2013 and 2014. As explained above, however, we are designing the incentive mechanism to encourage longer lasting and deeper savings extending beyond the 2013-2014 cycle. We also intend to award incentive based on net savings goals, adjusted for the effects of "free riders" and "spillover."

Since the savings goals adopted in D.12-11-015 are on an annualized basis, for incentive purposes, we shall convert them to net lifecycle savings goals.[27] First, we multiply the annualized savings goals by the target portfolio average effective useful life (EUL) of the efficiency measures. Also, since the goals in D.12-11-015 are on a gross basis, we convert them to a net basis by applying target portfolio average NTG ratios[28] to take into account free riders, that is, customers receiving utility incentives for energy efficiency measures would have undertaken the programs anyway, even without utility incentives. By adjusting goals on a net basis, ratepayers only fund shareholder incentives for EE program efforts that exclude the effects of free riders.

---

[27] We adopted savings goals in D.12-11-015 only on an annualized basis, even though resource savings from measures installed or implemented during 2013-2014 are expected to continue into subsequent cycles.

[28] As an illustrative example, a measure that saves 5 kWh/year and lasts for 7 years, on average, creates 35 kWh of lifecycle savings (35=5*7).

Thus, for purposes of the incentive mechanism, the following formula derives net lifecycle goals (in units of energy savings):

Annualized Goals	* Target Effective Useful Life	* Target Net-to-Gross %	= Lifecycle Net Target Goals
(in kWh, MW, MMth)	(in years)	(in %)	

For the 2013-2014 ESPI earnings potential previously presented in the ACR, target EUL and NTG values were utilized to derive lifecycle goals. These target EUL (12 years for electric measures, 15 years for gas measures) and NTG (0.8 for both electric and gas measures) values are not representative of recent experience and may not be achievable in the 2013-2014 portfolio. We utilize these target EUL and NTG values, however, in calculating lifecycle goals to emphasize the importance of challenging the IOUs to stretch their capabilities to reach higher standards of performance over time.

As early as D.04-09-060, we emphasized that the IOUs must stretch their capabilities aggressively to achieve savings goals (D.04-09-060, at 22). Energy savings goals must be aggressive in order to stretch the IOUs' capabilities and efforts in program planning and implementation.

7.1.1. Parties' Positions

While parties generally support the concept of basing incentive payments on lifecycle goals, certain parties disagree with the target EUL and NTG values as presented in the ACR. Parties filed comments on the use of lifecycle savings goals, including the EUL and NTG stretch goals as set forth in the ACR.

NRDC supports setting a cap on earnings at a high level of performance at achieving the Commission's objectives. NRDC believes the use of "target" EULs and NTG is a logical way to set that high level of performance. NRDC asks the Commission to clarify that those targets would not be used as thresholds, but

instead solely used to calculate the "correlation coefficients." Therefore, any lifecycle savings that the utilities actually achieve would be eligible for earnings (regardless of how close the IOUs' portfolios get to the target EULs and NTG).

The IOUs argue that these target EULs are not based on reality, and that the average EULs presented in the IOUs' advice letters should be used for calculating incentive payments. If an ex post adjustment is applied, PG&E argues that the modified average EUL at the end of the cycle should be used. PG&E argues that its proposed EUL values are based on the reality of what is available today.

PG&E also proposes using cumulative savings beginning in 2010 for calculating the 2013-2014 portfolio goals. The Commission study on cumulative savings methodology has not yet been completed.

The Joint Utilities likewise argue that basing incentive formulas on a high NTG ratio will encourage emphasis on programs with higher ratios. The Joint Utilities argue, however, that the utility cannot impact the NTG values through action taken during the course of the 2013-2014 program cycle. The Joint Utilities also argue that the EUL targets presented in the ACR are not typically evaluated on an ex post basis, but are developed and frozen through the DEER. The Joint Utilities argue that there is no opportunity to increase the EULs for established measures during 2013-2014. The Joint Utilities argue that fund shifting, program design, and regulatory constrictions prohibit the IOU's ability to achieve increased averages from a program operations perspective.

TURN supports use of the target EULs and NTG values presented in the ACR for calculating the incentive formulas. TURN argues that use of the target EULs and NTG ratio is critical to promoting longer-lived energy savings and shifting to measures that have not been already adopted in the marketplace.

7.1.2. Discussion

We incorporate the above-referenced stretch values for the EUL and NTG for purposes of calculating lifecycle goals utilized in the 2013-2014 incentive formulas. Our adopted portfolio-wide coefficient values for each type of savings (electric, demand, and gas) are based on lifecycle savings, and not simply first-year goals for the 2013-2014 cycle. While recognize that it may not be possible for the IOUs to achieve these net lifecycle savings during 2013 or 2014, the incorporation of these stretch values in calculating incentive earnings factors is consistent with the focus on measures that provide deeper savings and programs that demonstrate efficiency impacts above and beyond savings that otherwise would have occurred. With well-designed and implemented resource programs, the utilities should ultimately be able to achieve the EUL and NTG values over time as they stretch to reach higher goals.

By incorporating these target values for EUL and NTG measures, we create further incentives for the utilities to achieve Commission goals over time, while recognizing they may be difficult to achieve in the current program cycle. Accordingly, the portfolio-wide incentive earnings correlation coefficients will be calculated using the target portfolio average EUL and NTG stretch values, authorized budgets divided into each savings type (attributed by each savings types relative contribution to estimated net portfolio benefits), and the portfolio-wide adopted first-year savings goals for each savings type, as calculated in Attachment 1. We thus apply target EUL values of 12 years for electric measures and 15 years for gas measures.

We also apply a NTG ratio of 0.8 to adjust expected lifecycle savings to be net of "free rider" effects (i.e., savings that are independent of EE program efforts).[29] The resulting formulas yield total units of savings for over the estimated lifecycle for measures approved for the 2013-2014 cycle, as set forth in Attachment 1. By using these more aggressive savings goals to derive an incentive earnings rate, the IOUs will have to exert greater effort to achieve a higher level of incentive earnings.

We decline to adjust the NTG ratio for gas measures down to 0.7, as proposed by the Joint Utilities. Experience suggests that a 0.7 NTG ratio is achievable for gas measures (in fact, the gas portion of PG&E's portfolio is currently estimated to be above this NTG value), and we are not inclined to establish utility-specific target values for calculating the savings coefficients.

7.2. Measuring EE Resource Savings Results for Incentive Awards

As the basis for awarding incentive payments, the ESPI mechanism must provide robust measures of EE resource savings results. Parties generally agree that incentive payments should be based on actual installations of EE measures. Parties disagree, however, concerning whether the EE savings relating to installed measures should be determined based on ex ante estimates or ex post evaluations.

---

[29] The term "free riders" refers to program participants who would have undertaken an energy efficiency activity in the absence of the program. Program savings exclude the effect of free riders because their participation would have happened anyway. Savings from free riders thus are not recognized as a benefit of the program.

As the basis to demonstrate cost-effectiveness in seeking approval of EE program budgets, the IOUs provide ex ante estimates of resource savings from proposed programs. For the 2013-2014 cycle, the Commission approved a budget of EE programs based on such ex ante estimates.

The RRIM, as originally designed in 2007, was to reward or penalize IOUs based on ex post evaluations of load impacts of EE programs. The Performance Earnings Basis (PEB) measured the monetary net benefits of the energy and/or capacity savings achieved. Field-based evaluations collect and analyze information about what was installed, where it was installed and why, as well as how the installed technology performs in energy use compared to a baseline energy use which would have occurred absent that installation.

Relying on ex post evaluations as the basis for incentive payments, however, proved controversial. Rather than inspiring innovation to reach aggressive goals and reap rewards, the incentive mechanism led the IOUs to focus on avoiding and/or managing risks inherent in the design of the incentive mechanism. Differences between ex ante and ex post measures impacted incentive earnings much more than originally anticipated.

In response, the Commission modified the RRIM in an attempt to address these controversies.[30] Among other things, D.10-12-049 modified the RRIM to

[30] The DEER holds the collective savings assumptions applied in planning and updated through evaluation. The DEER is periodically updated to ensure the accurate estimates of actual load impacts resulting from ratepayer investments in energy efficiency.

rely on ex ante savings estimates,[31] rather than ex post evaluations, to finalize 2006-2009 incentive earnings.[32]

An initial attempt was made to apply a similar approach for the 2010-2012 cycle. In November 2010, the assigned ALJ issued a proposed decision (PD) on incentive mechanism reform for the 2010-2012 cycle. Among other things, the PD sought to base incentive payments on ex ante assumptions applied to verified installations and audited administrative costs.[33] In view of protracted delays in locking down ex ante values and related controversies, however, the ALJ's PD was withdrawn. Disputes regarding ex ante values for 2010-2012 programs continued before the Commission until July 2011[34] (and continued throughout portfolio implementation between IOUs and Commission staff, as evidenced by recommendations made in the 2013-2014 "alternative portfolio" proposed by the IOUs). The Commission subsequently adopted a simplified 2010-2012 incentive mechanism tied to EE program expenditures, as adopted in D.12-12-032.

---

[31] Ex ante refers to energy savings associated with an energy efficiency measure or equipment based on estimates prior to installation. Ex ante savings estimates are used to assess whether an energy efficiency portfolio is cost-effective. (*See* D.05-04-051 at 35.)

[32] In D.10-12-049, the Commission modified the requirement for ex post evaluation of savings, and instead simply required that net benefits be shared to the extent that those net benefits actually materialize.

[33] The PD also incorporated other reforms such as elimination of the tiered MPS for incentive payments. Originally, the IOU was at risk for no incentive earnings (or penalties) for performance below a tiered MPS threshold. The tiered structure created a potential "cliff" effect whereby small changes could result in large swings in RRIM earnings.

[34] On November 25, 2009, R.09-11-014 was opened to address policies related to the post-2008 EE programs (as successor to R.06-04-010 (post-2005 rulemaking on Policies, Programs, EM&V, and Related Issues). R.09-11-014 sought to address EE savings goals updates.

Thus, despite the intent to lock down ex ante parameters at the start of the cycle, ex ante review and lockdown remained a work in progress throughout the 2010-2012 portfolio implementation period. Ex ante review of the 2013-2014 energy efficiency portfolio also continues to experience similar challenges.

As discussed in D.12-11-015, in approving EE budgets for 2013-2014, the Commission reviewed utility proposals from a cost-effectiveness perspective based on claimed savings. The "*ex ante review*" process adopted for the 2010-2012 cycle, including its dispute resolution provisions, is still in place for 2013-2014, as articulated in D.10-12-054 as subsequently modified by D.11-07-030 and D.12-05-015.

7.2.1. Parties' Positions

Parties disagree concerning whether the 2013-2014 ESPI mechanism should award earnings based on ex ante versus ex post measures of savings.

NRDC and the IOUs oppose use of ex post evaluations for calculating incentive payments, arguing that such a process will fall victim to similar difficulties as experienced with the 2006-2008 mechanism. NRDC argues that an ex-post approach for an incentive mechanism will not succeed until the Commission addresses the underlying problems with EM&V.

NRDC supports the policy rationale for an ex post approach, but argues it is premature to rely on ex post evaluations during the 2013-2014 cycle. NRDC argues that the 2013-2014 cycle should serve as a transition period to make significant changes to create a collaborative and transparent EM&V process that will increase the Commission's and all parties' confidence in the energy saving estimates and enable continuous updating of those estimates.

As causes of the problems with ex post evaluations, NRDC cites (a) lack of a clear approach to meaningfully discuss and resolve disputes over EM&V

methodologies and results, and (b) delays of final EM&V results which did not afford the utilities and implementers the opportunity to make mid-course changes to programs. NRDC contends these factors will plague ex post processes for the 2013-2014 cycle as they did before.

NRDC claims that parties will have no ability to meaningfully discuss or challenge ex post evaluations, thus resulting in the potential for endless controversy as experienced using a similar approach for 2006-2008. NRDC argues that the 2006-2008 experience consumed excessive amounts of the Commission's and stakeholders' time and resources and impeded progress on energy efficiency. NRDC claims that reliance on ex ante measures would require significantly less staff time allowing more time to be dedicated to EM&V activities that will lead to improvements in the next generation of programs.

NRDC thus advocates use of ex ante values for the 2013-2014 cycle with verification of actual installations and expenditures, while the Commission establishes a collaborative EM&V forum to enable continuous updating of EE estimates in future cycles.

NRDC recommends that the Commission conduct ex post EM&V on a continuous basis, and update ex ante values after they have been vetted and approved. NRDC does not believe ex ante values necessarily must be fixed for the entire program cycle, but does advocate that any updates be applied *prospectively,* rather than retrospectively, to enable utility administrators and program implementers' time to adjust portfolios and programs.

PG&E argues that reliance on ex post evaluations to update values such as baselines and NTG ratios after the conclusion of the cycle contravenes the Commission's objectives to promote market transformation by penalizing rather than rewarding successful market transformation efforts. PG&E claims that

relying on ex post assumptions to measure market baselines after IOU EE programs have been enacted will attribute success to naturally occurring market evolution rather than the existence of the programs.

PG&E proposes: (1) applying the Custom Project Review Process Gross Realization Rate for all non-reviewed custom projects; (2) using the workpaper values approved in D.11-07-030; (3) using the values approved in the Phase 2 workpaper approval process; and (4) using installation rates provided by the IOUs in response to a directive in D.11-07-030.

SCE argues that ex post results do not accurately portray IOU performance because the IOU plans and conducts activities under a different set of performance metrics (ex ante). SCE claims that ex ante metrics are produced with Commission staff direction and approved by Commission decision. SCE believes that awarding incentives based on ex post evaluations may disadvantage an IOU based on factors outside the IOU's control.

SCE proposes that in situations where resource savings estimates change mid-cycle, the Commission could direct the IOUs and the ED to make agreed upon ex ante adjustments to certain high impact measures when errors or new data are developed (recognizing that low impact measure updates typically have minimal impact on overall cost-effectiveness). If specific measures are identified and updated during the cycle, SCE argues that the corresponding savings goals be adjusted as well on a prospective basis. SCE recommends annual resetting of ex ante parameters and goals to allow for expedited incentive payments.

The Joint Utilities also support reliance on ex ante parameters, noting that the utilities are directed in D.12-05-015 Ordering Paragraph (OP) 9 to use the 2011 final DEER. Commission staff provided their lock down review of the 2013-2014 ex ante non-DEER estimates on March 1, 2013, which have been

incorporated into the utilities portfolios. The Joint Utilities further claim that all future custom projects and non-DEER workpapers will be reviewed and approved by Commission staff as described in the custom project and non-DEER workpaper EAR processes.

The Joint IOUs argue that the current ex ante process is more structured than in the past and provides a reliable basis for incentive earnings. The Joint Utilities claims that processes are in place to continuously evaluate ex ante estimates during the 2013-2014 program cycle. Commission staff conducts a custom project review process which evaluates projected results and institutes real-time calculation changes for future projects. Commission staff can review ex ante deemed workpapers throughout the cycle and approve adjustments prospectively. Also, the DEER will be updated mid-cycle to account for code changes.

The Joint Utilities also argue that even if some ex post measures are to be used, the NTG ratio should be applied on an ex ante basis only. The Joint Utilities note that NTG ex post evaluations rely primarily on self-reporting and are often conducted long after measures are installed. Furthermore, they argue that a declining NTG ratio is a strong indicator of the success of previous years' focus to promote adoption of EE measures. To minimize continued implementation of measures that have reached greater availability and acceptance in the marketplace, the Joint Utilities argue that the NTG studies should be done in time to inform the next cycle.

TURN originally supported the use of *ex* post measures as the basis for incentive payments, so that profits would only be paid for actual results. However, given the controversy in the resulting process to calculate the ex post values, TURN reluctantly agreed that incentives should be based on ex ante

values, provided that earnings potential was reduced to reflect lower risk. TURN believes that linking ex post analyses with utility profits introduced significant controversy and dispute over EM&V activities and results, to the detriment of program review and program design.

DRA believes that if the Commission is going to base incentive awards on savings or net benefits calculations, then those calculations should be done so on an ex post basis. DRA agrees with the reasons why verified ex post values are superior to ex ante values as discussed in the ACR.

7.2.2. Discussion

We find merit in parties' arguments on both sides of the ex ante versus ex post based savings issue.

We recognize that basing ESPI payments on ex post evaluations presents significant challenges, which is why we shifted to an ex ante approach in finalizing the 2006-2009 RRIM awards. In D.10-12-049, we explained our rationale for this approach, stating:

> It was/is unreasonable to expect the utilities to anticipate the very substantial changes in a number of the key parameters over the three year cycle that drive their energy efficiency program results. Furthermore, given the after-the-fact timing of Energy Division's updates to these parameters, we find that the IOUs did not have the opportunity to modify their portfolios on the basis of this updated information in a way that would allow them to substantially avoid the adverse impacts of those updated assumptions on estimated program performance. Irrespective of the accuracy of the updates adopted by Energy Division, we find that the incentive mechanism as implemented was/is unfair to the utilities, in that it bases its results on assumptions the utilities cannot be reasonably expected to anticipate; and further, when those changed assumptions come to light, cannot be reasonably expected to respond to in a way that enables them to

> substantially avoid the adverse impacts on the estimated performance of their programs (D.10-12-049 at 39).

Our thinking and views on the use of ex post evaluations in calculating incentive payments has evolved since issuing D.10-12-049, however, based on further reflection, changed circumstances, and our experiences with the 2010-2012 ex ante lock down. While ex post evaluations may become known only after the close of the period being evaluated, it is wrong to conclude that the IOUs' incentive to maximize EE portfolio savings is impeded as a result of such timing.

The IOUs do not require advance certainty as to ex post results in order to have an incentive to manage 2013-2014 EE program savings in an effective manner. In fact, uncertainty as to ex post results will keep the IOUs from becoming complacent in managing EE programs. By being subject to risks of ex post evaluations, an IOU cannot assume the amount of incentive earnings per measure is a foregone conclusion, without regard to actual savings realized. Instead, the IOU will be motivated to actively manage programs to maximize EE savings in order to maximize ESPI earnings. If the IOU achieves actual savings beyond ex ante estimates, incentive earnings will increase accordingly. If actual savings falls short of ex ante estimates, however, incentive earnings will be reduced.

Accordingly, the prospect for ex post evaluations does not diminish the IOUs' incentive to manage their 2013-2014 programs and make appropriate adjustments based on approved budgets, savings goals, and Commission policies. Differences between ex ante estimates and ex post evaluations do not change the goals applicable to the cycle being evaluated. In arguing otherwise, the IOUs conflate goal setting (as done at the start of programs based on ex ante

estimates) with evaluation of performance (as done at the end of a program cycle based on ex post experience).

Although 2013-2014 ex post evaluations may inform the setting of goals for subsequent cycles, ex post evaluations do not modify the goals in effect for the cycle being evaluated. We disagree with claims that ex post results will not accurately portray IOU performance because 2013-2014 activities are planned and conducted under ex ante performance metrics produced with Commission staff direction and approved by Commission decision.

We also disagree with the claim that ex ante results better represent an IOU's performance as a measure of what actually happened through program activities. A focus on ex ante data does not reveal what actually happened through program activities, but only represents estimates of savings made prior to undertaking program activities. By contrast, ex post data does represent savings that actually happen through program activities.

Likewise, labeling ex post evaluations as a "retroactive adjustment" is a mischaracterization. Retroactive adjustments change data after the fact. Ex post evaluations do not change what happened, but merely confirm what happened regarding savings actually realized during a given cycle, as compared to an a priori forecast of what might happen. In any event, utility management bears responsibility for managing the portfolio based on its best judgment at the time regarding estimated savings and cost-effectiveness of portfolio programs. The fact that ex post evaluations are finalized after the period being evaluated does not lessen management's responsibility, and does not lessen the usefulness of ex post evaluations for calculating incentive earnings based on real savings.

Consequently, in the case of savings estimates for which there is a significant amount of uncertainty, we find that the benefits of ex post verification

of savings claims outweigh the challenges that ex post verification creates, particularly if some of those challenges can be tempered.

On the other hand, we recognize that a significant portion of the portfolio consists of "deemed" measures with savings parameters for which there is a great deal of certainty, and it does not seem warranted to defer payment for these savings until all evaluation activities are completed.

To reconcile these two findings, we shall apply the following approach for measuring performance relating to the resource savings component of the ESPI mechanism. For custom projects and for specific "deemed" measures with ex ante parameters that we identify as highly uncertain, we shall require ex post evaluations as the basis for calculating savings incentive payments.[35] The savings award for the remaining "deemed" measures will be calculated based on the locked down ex ante parameter values, and only the claimed measure count will be subject to ex post adjustment for these measures. The specific processes for determining the ex ante and ex post portions of the savings incentive are described next.

7.3. Ex Ante Savings Incentive

By October 31 of each year prior to the program year, Commission staff will identify deemed measures, in the DEER or in an IOU-submitted non-DEER workpaper, for which one or more savings parameters are sufficiently uncertain

---

[35] Robust evaluation helps to ensure that the utility portfolios are cost effective and do not spend ratepayer dollars in an inappropriate manner. Robust evaluation activities are also needed to support the continuous modification and improvement of utility EE program offerings as technologies and markets evolve and the economic climate changes over time.

that the savings claim should be subject to ex post verification in order to be included in the incentive payment. For ESPI purposes, "sufficiently uncertain" measures are defined as those measures for which the Commission believes the net lifetime savings of the current DEER or non-DEER savings estimate may be as much as 50% or more under- or over-estimated. For example, three parameters with just over 20% uncertainty or two with 30% uncertainty can provide an overall uncertainty threshold of at least 50%. In addition, only parameters that are expected to be addressed by the Commission's evaluation activity during the current period are included in the sufficiently uncertain measure list. Commission staff shall similarly identity any uncertain parameters in mid-cycle (also referred to as "Phase 2") workpapers submitted by the IOUs in the workpaper dispositions developed during the portfolio implementation period. All other deemed measures will be awarded based on ex ante savings parameters.

For measures that are not on the "deemed but high uncertainty" measure list, only the measure count will be subject to verification in calculating ESPI earnings (as well as any errors in the ex ante parameter values and calculations included in the claim, of course). We refer to the ratio of ex post verified installations to utility ex ante claimed installations as the "installation rate." The installation rate represents the actual number of an EE measure (e.g., efficient lighting, advanced heating systems) put in place as compared to the claimed amount. We authorize Commission staff to adjust IOU claimed measure counts with verified installation rates for any EE measures in the portfolio, including those deemed measures not identified as highly uncertain.

For purposes of determining the ESPI award, units of resource savings from installed measures, calculated on a lifecycle basis, will be multiplied by the

applicable earnings rate (i.e., dollars per unit of savings) for each savings categories by IOU, as set forth in Attachment 1. For the ex ante portion of the savings incentive, this calculation will be based on the measure count submitted by the IOUs in their savings claims and will be included in the incentive payment in the year following the program year (i.e., PY+1). This savings claim applies as the preliminary savings award. However, at the time the ex post portion of the claim is awarded (i.e., two years after the program year, as described next), the preliminary payment for the ex ante savings portion of the claim will be trued up for measure count based on evaluation results (and/or any ex ante parameter input errors identified after the preliminary payment), and any resulting adjustments will be added to or deducted from the ex post portion of the claim.

7.4. Ex Post Savings Incentive

Although Commission staff makes a concerted effort to critically review the IOUs' ex ante claims for program measure savings parameters, time and resource constraints limit the extent to which ex ante claims can be exhaustively reviewed. Consequently, reliance on ex ante estimates for all resource savings measures would not provide assurance that ESPI earnings are based on independently verified data. To preserve the integrity of the incentive mechanism and ensure that ratepayers fund incentive payments based only reliable data, we will require ex post evaluations as the basis for calculating savings incentive payments for custom projects and for specific "deemed" measures with ex ante parameters that we identify as highly uncertain. Ex post evaluations will be based on adopted EM&V protocols as prescribed in Attachment 2.

Custom projects are EE efforts for which the customer financial incentive and ex ante energy savings estimates are determined using site-specific analysis of the customer's facility. Customized projects, by their nature, require unique calculations for each project, as they do not rely on fixed DEER or non-DEER workpaper values. For these custom measures and projects, the ex ante values cannot be frozen by the Commission in advance since the preliminary ex ante values are not created until the project is identified, and final ex ante estimates are not developed until the project design is completed and modeled. Given the high volume of custom projects in recent portfolios, most custom projects cannot be thoroughly reviewed by Commission staff at the time of project implementation. We note, though, that some custom projects are selected for Commission staff review and disposition. These are mostly large projects with substantial savings impacts, and we would not expect significant variation in the ex post results for this portion of the utilities' custom project savings.

For deemed measures, as noted earlier, Commission staff will identify by October 31 of each year deemed measures in the DEER or in an IOU-submitted non-DEER Workpaper, for which one or more savings parameters are sufficiently uncertain that the savings claim should be subject to verification in order to be included in the incentive payment. Commission staff shall similarly identity any uncertain parameters in mid-cycle (also referred to as "Phase 2") workpapers submitted by the IOUs in the workpaper dispositions developed during the portfolio implementation period. Because this decision is being implemented after the beginning of 2013, the list of uncertain measures for program year 2013, and thus subject to ex post evaluations, is set in Attachment 3.

Parties raised many concerns regarding the contention associated with ex post evaluation design of the original 2006-2009 RRIM. The extent of the overall incentive payment variation associated with ex post evaluation is reduced by providing separate components to the mechanism, and further reduced by the division of the savings component into ex ante and ex post portions. Next we discuss changes in the program since 2006-2009 that we believe will further reduce the likelihood – or at least level – of contention associated with the ex post evaluated portion of savings payment.

7.4.1. Reducing Potential Variances between Ex Ante and Ex Post Earnings

In the 2006-2008 cycle, another factor leading to reliance on ex ante estimates for incentive earnings was the significant differences between ex ante estimates and ex post evaluations. We do not expect variations of similar magnitude in connection with use of ex post evaluations for the 2013-2014 ESPI mechanism. Because of subsequent improvements in the EM&V program, together with significantly enhanced focus on improving the quality of ex ante review for the 2013-2014 portfolio, we expect the ex ante lockdown process to produce more robust ex ante estimates. Consequently, we anticipate a much narrower range of differences between the ex ante and ex post measures savings parameters.

The EAR incentive component, as discussed in Section 8 below, is designed to award the IOUs for exercising the highest standard of care in developing ex ante savings estimates. This incentive should help to produce ex ante values more closely aligned with ex post evaluations compared with what was witnessed in the 2006-2008 cycle.

In addition to the improvements in ex ante review, we also simplify and limit the range of variables subject to adjustment in ex post evaluation. We also simplify the complexities of the prior mechanism, which was based on detailed avoided cost calculations, by using uniform incentive earnings rates per unit of savings.

Unlike the 2006-2008 RRIM formula which incorporated potential penalties and a deadband where no earnings or penalties applied, our adopted mechanism applies uniform incentive earnings coefficient rates across all ranges of performance, with no penalties or deadband. These revised features mitigate the risks of earnings variations, and place any risks of variations within an acceptable range.

In particular, by reducing the potential for extreme variances between ex ante and ex post measures, incentive earnings expectations are not likely to be as volatile as during the 2006-2008 cycle. Without an incentive deadband or penalty potential, incentive payments dependent on ex post savings will be subject to less extreme swings. Also, since incentive earnings from savings constitute only one of four components of incentive awards, the intense focus on arguing over savings measure precision will be mitigated.

Even with some potential for ex ante versus ex post variances for the 2013-2014 cycle to affect the level of incentive earnings, those effects should remain sufficiently stable and predictable to encourage the IOU to aggressively implement savings, even if the precise magnitude of the earnings may be subject to some variation. An effective incentive mechanism doesn't eliminate all risk or uncertainty as to the magnitude of incentive earnings awards. Instead, an effective mechanism balances uncertainty against the benefits of robust ex post evaluation of savings. Any uncertainty as to ex post results affects not just

shareholders, but also ratepayers. While shareholders experience some risk of earnings variations, ratepayers receive protections by funding incentive awards based on independently evaluated savings.

7.4.2. Reducing Contentiousness of Ex Post Determinations

Some parties claim that relying on ex ante estimates for calculating incentive earnings somehow reduces delays and avoids controversies otherwise encountered with ex post evaluations. We find such claims unpersuasive. As long as the parameters used to calculate incentive earnings are subject to independent critical scrutiny by Commission staff and consultants, the potential exists for controversy and complexity, irrespective of whether they are based on ex ante estimates or ex post evaluations.

Based on experiences during the 2010-2012 cycle, attempting to lock down ex ante estimates proved as difficult and contentious as evaluating ex post results. The ex ante lock down did not expedite or simplify determination of 2010-2012 incentives, but merely shifted the debate over savings parameters from the back end to the front of the program cycle.

In approving EE budgets for the 2010-2012 cycle in D.09-09-047, we expressed the intention to freeze ex ante assumptions for purposes of tracking savings against goals. When the Commission initially approved 2010-2012 budgets, however, Commission staff had not completed review of the non-DEER measure ex ante estimates (D.09-09-047, at 302). A March 31, 2010 deadline was set for all ex ante estimates for 2010-2012 to be locked down.[36]

---

[36] *See* ALJ's Ruling in A.08-07-021 et al, Regarding Non-DEER Measure *Ex Ante* Values, dated November 18, 2009, at 4.

Commission staff was to develop a process to review and approve ex ante savings estimates relating to: (1) DEER updates; (2) non-DEER workpapers; and (3) custom projects. Staff, however, had to reject or require major changes to the non-DEER workpapers.

Further controversy arose when the utilities jointly filed a Petition for Modification of D.09-09-047 on September 17, 2010. The Petition stated:

> After much discussion and collaboration between the Joint IOUs and Energy Division and its consultants, the energy savings assumptions have not yet been frozen, despite this Commission objective. The result is that nine months into the program cycle, the energy savings assumptions continue to represent a "moving target" for the Joint IOUs. The Joint IOUs and the Energy Division agree the process is currently at a stalemate and that direction from the Commission is needed to move forward.

Final lock down of 2010-2012 ex ante values was delayed in order to resolve the Petition. Ex ante disputes over DEER measures were resolved in D.10-12-054. The Commission resolved non-DEER ex ante disputes in D.11-07-030. As a result, data required to calculate incentives based on locked down ex ante estimates for the 2010-2012 cycle was not available until July 2011 (nearly two thirds through the cycle).

Despite these experiences during 2010-2012, however, the IOUs claim that ex ante parameters can be easily developed and will not be controversial for the 2013-2014 cycle. Ex ante values cannot be easily locked down simply by calling for a compliance filing by the IOUs.

Ideally, ex ante savings should be reviewed and locked down by the time a program cycle is launched (except for custom projects and mid-cycle workpapers). However, due to the timeframe for portfolio approvals, the 2013-2014 cycle began without completing lock down of ex ante parameters. ON March 1, 2013, Commission staff completed lock down of ex ante parameters for selected Phase 1 workpapers (i.e., those workpapers submitted with IOU portfolio applications). Phase 1 workpapers that were not reviewed prior to March 1, 2013 are considered frozen, though Commission staff have the authority to perform a prospective review. Mid-cycle (i.e., Phase 2) workpaper and custom project review activities will be ongoing for the remainder of the 2013-2014 portfolio cycle. Commission staff have, and will continue to, spend significant time and resources collaborating with IOUs on their non-DEER workpaper and custom project values, which could involve disagreements over engineering approaches and calculations.

7.4.3. Process to Implement Ex Post Evaluations

In Attachments 2 and 6, we prescribe the process and timing for developing, vetting, and finalizing the ex post data necessary to calculate the incentive awards for resource savings. While potential for some controversy may continue, the improved processes for EM&V, as described below, offer the prospect for less contention and a more collaborative and workable approach in vetting ex post evaluations going forward.

The Commission has access to the experience and expertise of EM&V contractors throughout the processes for developing the research and data to evaluate incentive earnings claims. In recent years, the Commission has implemented several improvements to EM&V processes to enhance communications and vetting of evaluation scope, methods, and results with

IOUs and stakeholders. These improvements were directed via D.10-04-029 and reinforced in D.12-05-015 and D.12-11-015. We shall continue to build on these EM&V improvements in implementing ex post evaluations for the 2013-2014 ESPI mechanism. In view of these improved EM&V processes, the contentiousness encountered with the 2006-2008 ex post evaluations should be significantly mitigated for 2013-2014.

In order to set California on course to ensure an effective EM&V framework post-2012, in D.09-09-047, we directed Commission staff to initiate a comprehensive review of California's EM&V framework. Commission staff has worked diligently to conduct its comprehensive review of California's technical and institutional EM&V framework.

In D.10-04-029, the Commission authorized a joint Commission/IOU EM&V plan to evaluate the 2010-2012 programs to help bridge the gap between the past and future of energy efficiency. Evaluations were to measure savings from behavior-based programs, progress toward the market transformation objectives outlined in the Strategic Plan, and to quantify the demand side energy resources created as a result of portfolio investments. The momentum of EM&V improvements have continued into the 2013-2014 cycle.

On January 31, 2013, the first version of the 2013-2014 EM&V Plan was released. On February 5, 2013, the EM&V Plan was uploaded to the Commission's Public Documents Area. The plan details the research initiatives for 2013-2014 EM&V activities. These research roadmaps were collaboratively developed with stakeholder input through an open and transparent process. Additionally, quarterly EM&V Stakeholder meetings provide a forum for interested stakeholders to better understand ongoing EM&V activities and provide feedback on current or planned evaluations.

Commission staff and the IOUs have formalized coordination groups as a forum for sharing evaluation plans, discussing methodologies, and sharing results. Project Coordination Groups identified in D.10-04-029 have further evolved into a working structure described in section "Project Coordination Groups" of the 2013-2014 Joint Evaluation Plan.[37] These coordination groups are currently limited to Commission staff, IOU staff and consultants, but are open to other stakeholders for specific phases of sharing plans or for specific projects.

In order to mitigate potential controversy regarding ex post evaluations for the 2013-2014 ESPI awards, a team of staff and contractors will work with IOUs and stakeholders to design an overall ex post evaluation plan, draft research plans, and to produce any interim findings during the ex post evaluation. In Attachment 6, we set forth a detailed description of the process and timeline for implementing and finalizing ex post evaluations to calculate incentive awards.

7.4.4. Resolving Disputes Regarding Ex Post Evaluations

The 2013-2014 EM&V plan provides the option to use of the "Dispute Resolution Process" as adopted in D.10-04-029, Ordering Paragraph 7. Attachment 4 further explains the ex post evaluation dispute process. Open dialogue between Commission staff, the IOUs, and other stakeholders has enabled potential disputes to be resolved through better understanding and communication.

---

[37] *See* http://www.energydataweb.com/cpuc/home.aspx#.

NRDC argues that, if ex post evaluations are used to determine incentive earnings, a formal dispute resolution process should apply that would allow for cross-examination of EM&V results in the form of sworn testimony. PG&E makes a similar recommendation. DRA disagrees, however, arguing that such actions would only increase the time and resources needed to resolve disputes, making such an approach costly and unproductive. DRA argues that since Commission staff and the EM&V implementers are not parties to EE proceedings, they are not subject to cross-examination. If more focused and open vetting is needed, DRA believes interactive workshops would be more appropriate to provide opportunities for collaboration.

In D.05-01-055, we mandated that the Commission Staff bear responsibility for managing and contracting for EM&V studies. This mandate shifted this responsibility from the utilities to Commission Staff and helped ensure unbiased results by having a neutral entity overseeing the EM&V process. In D.10-04-029, we described staff's role and responsibilities for EM&V, stating:

> [Commission Staff] is not a formal party to our proceedings. This means that [Commission Staff] does not present witnesses, file formal comments, present sworn testimony or have other rights or obligations of parties. Yet, at this time, for EM&V [staff] serves in a dual role of independent evaluator and (in the case of a formal dispute) advocate to Commission decision-makers for its analysis and decisions.
>
> We do not wish to confer party status on [Commission Staff] for these purposes. To do so would be to compromise the ability of [staff] to perform its essential function of impartially and confidentially advising the Commission. It would be impractical to set up an "advocacy" portion of [staff] to engage in EM&V dispute resolution, apart from the overall "advisory" portion of [staff], if for no other reason than the

> same personnel would have to wear two hats (or additional staff would be required).
>
> To find our way through this issue, we look to previous efforts in the energy efficiency area. In recent years, [staff] proposals have at times been issued for comment by ALJ and/or assigned Commissioner Ruling. This has provided parties a formal opportunity to comment on such proposals (D.10-04-029, at 34).

In D.10-04-029, we adopted a "Dispute Resolution Process" to expeditiously deal with disputes over EM&V issues. As noted in D.10-04-029:

> Certainly, the determination of energy savings involves a variety of technical assumptions and calculations, with a high potential for differing opinions. It is reasonable for certain disputes regarding complex and controversial EM&V matters to be resolved by ALJs and/or Commissioners instead of by [Commission] staff.
>
> All parties, as well as ED, now agree there is a need for a new dispute resolution process with regard to EM&V studies. The first priority should be to minimize any formal disputes. The best way to do so is to ensure open and full communications between [Commission staff] and IOUs, as well as transparency for the public. Avoiding misunderstandings, developing trust, and providing transparency should go a long way toward avoiding or resolving potential issues before there is a need to escalate to a formal dispute resolution process (D.10-04-029 at 30-31).

We offer parties the option to invoke the dispute resolution process in D.10-04-029 when or if necessary to resolve disputes relating to ex post evaluations utilized for ESPI earnings calculations. D.10-04-029 states that the dispute resolution process does not apply to disputes over results of ED Verification Reports issued via draft resolution per D.08-12-059. During the preliminary stages of developing ex post findings, prior to issuance of final

reports, however, we shall permit use of the dispute resolution process in D.10-04-029.

While the Dispute Resolution Process provides for a possibility of limited evidentiary hearings under circumstances, we anticipate that most, if not all disputes regarding ex post results will be resolved through less formal processes. Our views as expressed in D.07-09-043 still apply, where we stated:

> PG&E seems to argue that nothing short of cross-examination provides sufficient opportunity or rigor to address potential disputes. We disagree with the proposition that only cross-examination allows thorough analysis of these kinds of issues. Cross-examination does not provide for the multi-party give and take available in a conference, which we think is better suited for the kinds of disputes likely to arise here. Furthermore, the procedures require response to all written comments, ensuring, as noted in the Ruling, that all comments will be considered and dealt with in a reasonable manner. The mechanism allowing for parties to interact with evaluation contractors, through conferences and written comments, helps to ensure the accuracy of the results (D.07-09-043 at 132).

More recently, in D.12-05-015, we made the following observations about staff's role in Commission determinations of savings and in resolving disputes relating thereto:

> We recognize that most values for DEER and non-DEER measures include underlying complexity in analysis methodology and require interpretation in the use of data that can come from evaluation studies as well as other related research activities. We expect disagreement regarding specific values based upon differences in professional judgment. However, the Commission cannot adjudicate every disagreement about the values contained in the ex ante data. For this reason the Commission has given our Staff the responsibility of performing the review and making

recommendations as to the values we should adopt (Decision at 326).

Our schedule for executing and implementing ex post evaluations for calculating incentives for the 2013 program year is summarized below. A similar process will be performed for the 2014 program year, and for every subsequent year for which there is an IOU EE program until the Commission rescinds or amends this ESPI mechanism.

Draft PY 2013 Evaluation Plans Posted	October 31, 2013
PY2013 Evaluation Plans are finalized	December 31, 2013
PY2013 Evaluation Plan are conducted	Calendar Year 2014
PY2013 Draft Evaluation Results posted	By December 31, 2014
PY2013 Evaluation Results Conference	By January 15, 2015
Deadline for Written Comments on Draft PY 2013 Evaluation Plans	January 31, 2015
Results of Public Comments Incorporated	February 28, 2015
Draft Savings Performance Statement Posted	March 31, 2015*
Draft Savings Performance Statement Webinar	April 15, 2015*
Written Comments on Performance Statement	April 30, 2015*
Final Savings Performance Statement Posted	May 31, 2015*
IOUs file advice letters based on ED Report	June 30, 2015*
CPUC Resolution approving IOU advice letters / Effective Date for 2013 Ex Post Savings Award	August 31, 2015*

* If the dispute resolution process is initiated, these dates will slip by up to 120 days.

7.5. Cost-Effectiveness Multiplier

In order to reward the utilities for achieving energy savings in a cost-effective manner, the ACR proposed to apply a multiplier to the resource program savings award, equal to the amount by which the ex post verified Total Resource Cost (TRC) ratio[38] of their combined resource programs exceeds the TRC ratio of these programs that results from the final adopted 2013-2014 portfolios (via portfolio compliance filings). This calculation includes the resource program pro-rated portion of overall portfolio administrative and EM&V costs.

Using this approach, if an IOU's ex ante resource program TRC ratio were 1.2 (after adding in the pro-rated portion of portfolio administrative and EM&V costs), and its ex post resource program TRC were 1.45, resulting in a TRC improvement of 0.25 for resource program implementation, then the resource program award would be multiplied by 1.25 (1 + 0.25). On the other hand, if the ex post resource program TRC were 1.1, the resource program award would be multiplied by 0.9 (1 - 0.1).

7.5.1. Parties' Positions

NRDC opposes the use of the cost-effectiveness multiplier, arguing that it adds unnecessary complexity and controversy. NRDC proposes a focus on maximizing energy savings while ensuring that the efficiency portfolio as a whole remains cost-effective (in other words, is a better investment for customers than the utilities' alternative resource investment to "keep the lights on"). NRDC

---

[38] TRC and Program Administrator Cost (PAC) cost-effectiveness tests are used to determine the cost-effectiveness of the EE portfolio as described in the California Standard Practice Manual. EE portfolios as a whole must have a TRC benefit-to-cost ratio greater than one (i.e., net benefits must be positive).

believes this can be achieved more simply by using a cost-effectiveness threshold and/or a cost-effectiveness guarantee.

NRDC argues that the portfolio (including earnings) should pass the PAC cost-effectiveness test or else earnings should be capped to ensure that the overall cost of the efficiency efforts will not exceed alternative resources. In addition, a cost-effectiveness guarantee could apply to require utilities to compensate customers if the ultimate cost of the portfolio exceeds the benefits.

PG&E also opposes the use of the cost-effectiveness multiplier to the savings attributable to the TRC ratio, arguing that it functions as an incentive to minimize investment in some of the transformational, but non-cost effective measures and programs, that are at the heart of the Commission's EE policy to achieve deeper and longer lived savings such as deep residential whole-home retrofits, HVAC measures, and LED lighting. This contravenes the Commission's goal for the IOUs' 2013-2014 portfolios.

PG&E proposes a cost-effectiveness constraint such that the IOUs would not earn an incentive unless the portfolio PAC test exceeds 1.0. The IOUs would not be entitled to any shareholder earnings in an amount that would reduce the PAC test result below 1.0. However, the IOUs would not be penalized if the PAC fell below 1.0.

SCE recommends removal of the TRC multiplier, arguing that it adds undue uncertainty with unclear benefit. SCE argues that cost-effectiveness is already strongly incented through the IOU's interest in maximizing energy savings through the resource component.

The Joint Utilities also argue that imposing a cost-effectiveness multiplier sends a conflicting message to program administrators; essentially reward planning program portfolios with larger portions of relatively lower cost-

effective programs, and then not dedicating resources to implementing that program. This could serve in contrast of Commission goals for programs that are rooted in achieving deeper, longer savings that may be less cost-effective. Administrative costs would be removed from the earnings calculation, yet they would be included in the cost-effectiveness multiplier. If ex post savings drop and administrative costs stay the same, the magnitude of the cost-effectiveness impact would be greater.

If the Commission utilizes a cost-effectiveness multiplier, however, the Joint Utilities believe that the multiplier should be based on the PAC rather than the TRC test, arguing that the PAC is a better gauge of how efficiently and effectively administrators spend funding to minimize ratepayer costs. On the other hand, the TRC includes incremental measure costs, which are subjective estimates, difficult to measure and track, and outside of utility control. When evaluating utility performance, costs incurred by participants are not an effective measure of the success of the utility programs.

TURN proposes, instead of using the TRC, that a cost-effectiveness adder be adopted based on non-incentive/total spending. In approving the budgets for 2013-2014 the Commission reiterated the reasonableness of having a target spending on "non-incentive" costs of 20% as compared to the total budgets. TURN recommends that each utility receive $500,000 for a 1/10th reduction from their compliance percentage to a 20% goal, with a maximum potential award of $5 million if the utility achieves the 20% goal during the two-year period. TURN proposes this as a utility-specific metric in order to reward utilities based on actual performance.

7.5.2. Discussion

While we support the concept of using the incentive mechanism to maximize cost-effectiveness, overall we agree with the parties that adding a cost effectiveness multiplier to the ESPI will add undue complexity at this time. Adoption of the ESPI makes significant changes, and it is not fully apparent how a cost-effectiveness multiplier will enhance ratepayer value in the disbursements of shareholder payments. We note that we adopt a series of 'stretch' goals for the IOUs in the ESPI, which sends a very similar signal as a cost-effectiveness multiplier and it is unclear what, if any, interactive effects there may be between the two similar components. Therefore, we decline to adopt a cost-effectiveness multiplier at this time but will consider adding it to the ESPI in future iterations.

8. EAR Incentive Mechanism

In D.12-12-032, we adopted an EAR incentive to apply for the 2010-2012 cycle. The EAR mechanism incorporated: (a) a list of performance metrics for which points would be scored; and (b) a numerical scoring scale to evaluate and assigned a score for each metric and for each IOU. The assigned score was converted into a percentage figure and applied to the total EE resource budget to derive an incentive award for 2010-2012.

For the 2013-2014 cycle, we include in our adopted ESPI mechanism a similar provision to recognize utilities' efforts in implementing ex ante review processes and for exhibiting high standards of care in developing ex ante estimates.

We established requirements for the lock down of ex ante parameters put in place before and during the 2010-2012 portfolio in response to the challenges that arose with the ex post true-up associated with the 2006-2008 incentive

mechanism and to ensure that the utilities were applying sufficient due diligence and engineering rigor in developing locked down ex ante savings values.

8.1. Parties' Positions

NRDC argues that the incentive mechanisms should reward top priority *outcomes* that demonstrate performance at achieving key policy objectives, using transparent and objective quantitative metrics. In contrast, NRDC claims that EAR scores would be based on ex ante administrative *processes*, not outcomes, and use highly subjective scores (based solely on the opinions of Commission staff and consultants) and opaque.

NRDC expresses concern that EAR incentive disputes could stress an already controversial process further by suppressing discussion and debate about important technical issues. NRDC believes the actual result will likely be to quash debate on legitimate issues since a portion of the utilities' scores and earnings seems to be based on agreement or disagreement with staff. If the EAR incentive mechanism is retained, NRDC advocates reducing the level of earnings that the ACR proposes. NRDC believes that earnings for processes rather than outcomes should be a very small portion of the total potential earnings, if used at all.

The Joint IOUs argue that the IOUs in conjunction with Commission staff should develop a set of uniform guidelines for workpaper development. These guidelines would include rules that dictate the level of comprehensiveness required for various workpaper types. For example, simply documenting a measure's DEER cost-effectiveness and load impact values could be accomplished with a table listing the DEER IDs. On the other hand, high impact measures (HIM) that use no direct DEER load impact values would require more comprehensive documentation. It should be recognized that non-HIM

workpapers should not require the same level of effort as those prepared for HIMs (e.g., literature research and/or measurement and verification expenditures). The workpaper guidelines would provide direction regarding the level of required comprehensiveness.

The Joint IOUs propose that less critical workpapers be evaluated using lower weighting than those considered HIMs. The Joint Utilities would recommend a two tier weighting scheme based on anticipated energy savings. A similar approach is recommended for custom measures/projects. The tiers could be as follows: Tier 1 workpaper ranking would apply to HIMs (1% of the portfolio savings); Tier 2 workpaper ranking would apply to non-HIMs (less than 1% of portfolio savings). Tier 2 workpapers would receive a weight of 50% of Tier 1 workpapers. For custom projects the tiers could be defined based upon the size of the expected savings and could vary between utilities.

The Joint Utilities believe that simplifying the EAR process in this way would greatly reduce the complexity and time requirements for both Commission staff and the IOUs. The Joint Utilities believe this will help fulfill a major goal of the incentive mechanism by increasing transparency and allowing the ex ante review process to move forward in a way that will benefit future measurement and evaluation with reduced controversy.

8.2. Discussion

We shall adopt an EAR incentive to be assessed on the basis of each utility's conformance with the ex ante review requirements for the 2013-2014 portfolio, as provided in the following decisions: (a) adopting the 2010-2012 EE portfolios (D.09-09-047), (b) outlining the non-DEER workpaper review process (D.10-04-029), (c) freezing ex ante values for the 2010-2012 EE portfolios (D.10-12-054), (d) adopting final ex ante values for non-DEER

measures and the custom project ex ante review process (D.11-07-030); and (e) adoption of DEER methods and values for use in non-DEER workpapers and custom projects, as well as clarifications on ex ante parameter development approaches and the workpaper and custom project review process (D.12-05-015).

As stated in D.12-12-032, we put in place requirements before and during the 2010-2012 portfolio to "lock down" ex ante savings parameters which form the basis for calculating cost-effectiveness from measures installed or implemented during each cycle. We placed enhanced focus on the ex ante lock down in response to the challenges that arose with the ex post true-up associated with the 2006-2008 incentive mechanism and to ensure that the utilities were applying sufficient due diligence and engineering rigor in developing "locked down" ex ante savings values. Consequently, we concluded in D.12-12-032 that utility conformance with our ex ante review requirements, as implemented by Commission Staff, would be correlated with portfolio performance.

We adopted a scoring system to evaluate the degree of conformance with the ex ante review process for the cost effectiveness of the 2010-2012 portfolio assessed on the basis of each utility's conformance. The ex ante review requirements were prescribed in the following decisions: adopting the 2010-2012 EE portfolios (D.09-09-047), outlining the non-DEER workpaper review process (D.10-04-029), freezing ex ante values for the 2010-2012 EE portfolios (D.10-12-054), and adopting final ex ante values for non-DEER measures and the custom project ex ante review process (D.11-07-030), and the guidance for 2013-2014 portfolio development (D.12-05-015).

For the 2013-2014 mechanism, we adopt a process for vetting IOU performance scores and a scoring scale applicable to each performance metric, as identified in Attachments 5 and 7 of this decision, respectively. We have

modified and simplified the EAR metrics previously presented in the ACR in response to parties' comments.

Commission Staff and consultants completed the ex ante review of selected workpapers on March 1, 2013. The EAR process will continue through the remainder of the 2013-2014 portfolio cycle. The EAR team will review and approve savings estimates on a prospective basis for mid-cycle (Phase 2) non-DEER workpapers, custom projects, and potentially for select non-DEER workpapers submitted with the applications that that the EAR team did not have time to review by March 1, 2013.

Using a similar approach as applied in the 2010-2012 mechanism, we shall utilize a rating scale from 1 to 5 to score utility performance with the ex ante review process, rated for each of the metrics detailed in Attachment 7. On this scale, 1 is a low score and 5 is a high score, distinguished as follows:

1. Consistent underperformer in meeting the basic Commission expectations;
2. Makes a minimal effort to meet Commission expectations but needs dramatic improvement;
3. Often meets or makes an effort to meet Commission expectations, however improvement is required;
4. Sometimes meets or exceeds Commission expectations while some improvement is expected; and
5. Consistently exceeds Commission expectations.

This scale shall apply to the performance metrics set forth in Attachment 7. Using this scale, the maximum achievable EAR score per utility per program year is 100 points. The appendix column labeled "weight" indicates the maximum numerical weighting of each EAR performance metric based on a total of 100 points. For each metric, the score will be determined as the product of the

relative weighting multiplied by the performance rating for that metric. For example, Metric 1a is worth up to 5 points. If IOU performance rating was 3 out of 5 points, the IOU would score 3/5, or 60% of the maximum possible points.

For the 2010-2012 incentive mechanism adopted in D.12-12-032, the EAR incentive was capped at 1% of budgeted expenditures. For the 2013-2014 ESPI mechanism, the EAR component of the mechanism will provide earnings opportunities up to 3% of resource program expenditures. The resource program expenditures will not include funding dedicated to administrative activities, codes and standards programs (since those will receive a separate incentive), EM&V, and CCA/RENs programs. While the incentive for the EAR component is capped at 3% of program expenditures, the actual incentive amount will depend upon the performance score earned.

Based on EE budgets, the incentive earnings potential from the EAR component of the ESPI mechanism is summarized below:

Ex Ante Review Incentive Mechanism Earnings Potential ($ Millions)[39]		
	Approved Resource EE Budget	Earnings Cap @ 3% of EE Budget
PG&E	$654	$19.6
SCE	455	13.7
SDG&E	161	4.8
SoCalGas	139	4.2
Total	$1,409	42.3

A designated team of EAR staff and contractors shall produce semi-annual ex ante scorecard updates that provide utilities with feedback and an opportunity to make mid-year and mid-cycle process improvements. The semi-

[39] 2013-2014 Adopted Budget Figures are updated from the ACR with values from the IOUs' Compliance Filings.

annual updates shall be provided to each IOU and other interested parties. Since we are initiating this mechanism during the second half of the 2013 program year, the initial scorecard for the 2013 program year will be provided by fall of 2013. The schedule for regular semi-annual ex ante scorecard updates will commence beginning with the 2014 program year.

The EAR staff shall provide final metric-specific ex ante performance scores and rationale for the score on an annual basis. After reviewing comments, the EAR staff shall finalize the metric-specific scores for the program year to be issued by Commission resolution.

The team of EAR staff and contractors may explain their scoring and rationale, but will not otherwise advise Commission decision-makers regarding EAR-related incentive award calculations in the same proceeding.

Low scores for metrics that assess specific and important quantities (e.g., if the utility only uploads a small percentage of custom projects and receives a low score for Metric 1a), will have a proportional impact on the total score the utility could receive for later metrics that measure the quality of custom project submittals. This will prevent potential gaming of metrics by submitting a very small number of high quality projects, receiving a low score on Metric 1a, but then receiving high scores for all other metrics based on a very small portion of the total number of projects in the portfolio.

For metrics measured by a frequency or "count," these counts will include a weighting that factors the size/amount of savings into the scoring. For example, doing an outstanding job on a large number of very low-impact, standardized projects will not make up for doing a poor job on a few projects that represent a major portion of portfolio dollars.

Finally, in comments to the proposed decision, SCE recommends that the Commission add a performance baseline and develop metric scores that clearly link to specific actions in order to clarify expectations and improve objectivity. We believe that this type of clarity would improve the objectivity of the scoring metrics and should be developed through the semi-annual ex ante scorecard updates.

9. Incentives for C&S Advocacy

In prior program cycles, we recognized resource savings resulting from the incorporation of EE measures into state building codes, and state and federal appliance standards (referred to as C&S advocacy). In D.05-09-043, IOUs were allowed to credit savings from C&S advocacy in measuring progress in achieving EE goals.

The utilities were given credit for 100% of the savings attributed to C&S advocacy work adjusted for compliance levels and naturally occurring market potential, beginning in the 2010-2012 cycle. The utilities' advocacy programs have supported adoption of new C&S to become effective during the 2013-2014 cycle.

The 2013-2014 EE portfolio funds utility C&S advocacy separate from other savings goals in the portfolio. The Commission also approved distinct savings goals for C&S. The C&S advocacy category represents the estimated energy savings forecasted for the Title 20 and 24 updates and federal appliance standards that can be attributed to the IOUs' C&S advocacy program.

C&S advocacy work is different from other resource based activities, however, because expenditures incurred during each cycle do not result in resource savings until after the cycle ends. Calculating savings associated with the these activities involves additional, complicating factors, including code

compliance estimates, attribution factors that estimate how much of the IOUs' efforts contributed to the code development, and estimates of measures captured by code that were naturally occurring market development.

9.1. Parties' Positions

NRDC opposes offering a separate incentive for C&S apart from the energy savings component of the ESPI mechanism. NRDC argues that such an approach would "de-value" C&S relative to the rest of the portfolio, and create perverse incentives that would discourage utilities from aggressively pursuing C&S upgrades.

NRDC claims the perverse incentive arises because new C&S increase the baseline against which program savings are estimated, thereby lowering program savings. NRDC argues that the CPUC sought to put programs and C&S on a more even footing by setting combined goals and allowing the utilities to count savings from C&S upgrades according to their "contribution" to those C&S.

NRDC argues that if the Commission decides to use a management fee for C&S programs, over NRDC's objections, then a higher earnings opportunity for the C&S efforts is warranted, proportional to the importance of the C&S savings in the portfolio. Since C&S savings are expected to account for approximately 10% to 30% of the portfolio's net lifecycle savings, NRDC argues that an amount in the range of $12 million to $36 million (instead of the $2.5 million in the ACR) would better reflect the importance of the C&S savings (and the utilities' contribution to achieving them) as part of meeting the goal of maximizing energy savings.

For the 2013–2014 incentive cycle, PG&E proposes to lock down the 2010-2012 C&S EM&V results as ex ante values for six variables excluding

market baseline. An update to the market baseline data will come from a study to be conducted by the Commission to update market baseline, expected to be conducted by mid-2014 to allow a final award processing for 2014. For 2014, PG&E proposes to use the results of the 2013–2014 C&S EM&V study, scheduled to be completed by mid-2015. To the extent that the 2013-2014 C&S EM&V study will not be completed by 2015 as scheduled, PG&E proposes to use the 2010–2012 C&S EM&V study results with updated market baseline data for 2014.

PG&E also proposes an incentive earnings sub-cap of $20 million annually (or $40 million cumulatively) for C&S advocacy to ensure balanced earnings between C&S and other resource acquisition programs.

TURN does not object to a 10% management fee given the level of spending in the C&S category, but cautions that if spending on CEC support activities (building codes, appliance standards) increases, this level of a fee may be inappropriate.

9.2. Discussion

Because of the complications associated with measuring savings from C&S advocacy as part of the resource savings calculations, we conclude that the use of a management fee approach as set forth in the ACR provides a practical solution for this program cycle. In view of the additional complications in measuring resource savings, as discussed above, ESPI earnings for C&S advocacy shall be rewarded as a function of program expenditures. We will reevaluate this issue in the future and consider changes to make it more savings based.

The incentive payment shall equal 12% of C&S program expenditures, less administrative costs, not to exceed authorized expenditures. Awarding C&S work on the basis of a 12% management fee recognizes the important role

utilities play in achieving significant, cost-effective EE savings through C&S advocacy. Based on our adopted management fee of 12% applied to the 2013-2014 C&S budget, less administrative fees, the earnings potential of $2.98 million, allocated by IOU, is illustrated below:

Incentive Earnings Potential for Codes and Standards Advocacy

($ in 000s)

Utility	2013-2014 Codes and Standards Budget (minus administrative funds)	Management Fee =12% C&S Budget
PG&E	$11,754	$1,410
SCE	9,661	1,160
SDG&E	1,898	228
SoCalGas	1,512	181
Total	$24,825	$ 2,979

In order to verify Codes and Standards program expenditures, we will rely upon public versions of the Commission's Utility Audit, Finance and Compliance Branch reports. Upon completion, the Commission's Utility, Audit, Finance and Compliance Branch shall serve on the service list in this proceeding (or its successor) a notice of availability of the public copy of its audit report detailing its review of annual expenditures for 2013 and 2014 Energy Efficiency programmatic activity.

10. Incentive Earnings for Non-Resource Programs

For the 2013-2014 cycle, we shall provide a separate opportunity for ESPI earnings for the IOUs to pursue critical non-resource programs. These programs represent energy efficiency activities that do not focus on displacement of supply-side resources at the time they are implemented, but may lead to

displacement over the longer-term, or may enhance program participation overall. Non-resource programs do not provide direct energy savings and only have costs, making them not cost-effective on their own. However, non-resource programs frequently provide necessary support to resource programs.

Therefore it is difficult, and in some instances impossible, to reasonably estimate and verify resource savings from these non-resource programs. Under the previous incentive framework, non-resource programs were reflected as increasing costs with no recognized benefits. Non-resource program accomplishments were harder to reward properly. In prior versions of the incentive mechanism, shareholders were not directly given an incentive for these activities. Accordingly, a different sort of metric is necessary to measure and provide incentives relating to these programs.

10.1. Party Positions

The IOUs propose and NRDC supports that non-resource programs be eligible for earnings based upon a percentage of program expenditures (described as a "management fee"). The IOUs propose a management fee of 3% of non-resource program expenditures as an incentive to encourage the IOUs to successfully execute programs designed to achieve the Commission's non-resource program goals.

Although TURN does not oppose the payment of a management fee for non-resource programs, TURN suggests that the IOUs do not require an incentive to spend this money when non-resource activities and programs are often managed by other entities. TURN believes that the IOUs are not the most appropriate entities to achieve non-resource market transformation. TURN believes a reasonable alternative would be to eliminate this category and allocate the proposed award to EAR compliance and/or the C&S management fee.

10.2. Discussion

We shall adopt a management fee to reward the utility for managing the non-resource programs. In D.12-12-032, we observed that a management fee offers a reward to shareholders for management of EE programs where savings goals cannot be readily attributed. In prior mechanisms, the incentive mechanism encouraged resource programs with direct savings, while non-resource activities were not adequately encouraged. A management fee for non-resource programs will encourage greater focus on achieving non-resource program goals while removing a disincentive from the previous mechanism to shift funds and resources away from non-resource programs.

An alternative mechanism that provides (nominal) bonus incentive opportunities (e.g., providing good tracking data in a timely fashion, meeting program performance metrics (PPMs) and/or market transformation indicators) could also be provided for superior, proactive performance in non-resource programs. Basing incentive payments on specific PPMs might, in theory, provide a more focused approach to encourage achievement of non-resource program goals. The PPM process, however, is not yet mature enough for use as an effective program evaluation tool. The IOUs have yet to submit 2010-2012 program cycle PPM results, which would still need to be assessed. This work would not occur in time for development of the 2013-2014 ESPI. Furthermore, reliance on PPMs would add a further layer of subjectivity and complexity into the earnings process.

As an element of the mechanism for 2013-2014, we offer shareholders an incentive, via a management fee, for successful utility administration of critical non-resource program activities where savings cannot be directly attributed.

These programs are important in promoting long term market transformation and supporting other portfolio activities.

We provide for payment of a management fee to reward shareholders for implementing non-resource programs. The management fee shall equal a fixed percentage of non-resource program expenditures, as verified by Commission audit reports. An incentive as a fixed percentage of program expenditures offers the advantage of administrative simplicity as compared with basing earnings on achievement of specific program performance metrics. The premise of the management fee is that recorded program expenditures represent a reasonable proxy of accomplishments in pursuing non-resource goals.

To reward shareholders for non-resource program activities in the 2013-2014 portfolio cycle, we adopt a fee of 3% of the total non-resource program expenditures. Based on a budget of $210 million adopted for non-resource programs for 2013-2014, the maximum possible annual award for non-resource programs would thus be approximately $6.3 million for the portfolio cycle. The resulting maximum non-resource management fee awards by utility are shown below:

Incentive Earnings Potential for Non-Resource Programs

($ in 000s)

Utility	2013-2014 Non-Resource Budget (minus administrative funds)	Management Fee Cap =3% * Budget
PG&E	$94,885,942	$2,846
SCE	90,847	2,725
SDG&E	15,683	471
SoCalGas	8,545	256
Total	$209,962	$6,299

In order to verify non-resource program expenditures, we will rely upon public versions of the Commission's Utility Audit, Finance and Compliance Branch reports. Upon completion, the Commission's Utility, Audit, Finance and Compliance Branch shall serve on the service list in this proceeding (or its successor) a notice of availability of the public copy of its audit report detailing its review of annual expenditures for 2013 and 2014 Energy Efficiency programmatic activity.

11. Processes for Submission, Review and Approval of Incentive Claims

We adopt a process for the submission, review and approval of incentive claims that provides for continuity of regular annual incentive payments. When the RRIM was established in 2007, we anticipated that incentive earnings claims would be non-controversial and processed through advice letter filings. Subsequent controversy, however, required Commission decisions as the basis for approving incentive awards. Because the basis for incentive awards for the 2010-2012 cycle was simplified, however, we again authorized filing of advice letters to process incentive claims covering 2011 and 2012 program year earnings. Under the incentive mechanism for the 2010-2012 cycle adopted in D.12-12-032, incentive payments for 2011 program activity are due to be awarded during calendar year 2013, and payments for 2012 program activity are due to be awarded during calendar year 2014.

As discussed in D.08-01-042, to be effective in motivating pursuit of energy efficiency goals, incentive earnings should be recognized as a basis for the IOUs' financial valuation. The IOU must be able to book incentive earnings on a regular basis in a manner that can be reasonably anticipated by the investment community. Earnings that are not booked at regular intervals could be viewed as a one-time adjustment and excluded as a basis for utility financial valuation, resulting in a higher cost of capital. Otherwise, earnings from EE programs

would not be on par with earnings from supply-side resources in the minds of investors, and the full potential value of shareholder incentives would not be realized.

PG&E proposes that the incentive mechanism be calculated and awards be authorized annually. If an IOU earns less than the annual cap in 2013, it would be permitted to earn over the annual limit in 2014, subject to the $250 million two-year cumulative cap. PG&E notes that there is typically a ramp up period from program adjustments and cycle start up.

PG&E proposes that all incentive payments for both resource and non-resource programs be authorized in 2015 for program year 2013 and in 2016 for program year 2014. If the mechanism includes an ex post adjustment, incentive awards should be awarded similarly with a 35% holdback for the lifecycle resource portion of the mechanism. PG&E argues that this change would allow meaningful and predictable annual earnings rather than minimal earnings in some years and more earnings in the years after studies are completed.

In order to be effective and to provide the greatest market value and benefit, incentive earnings need to be assessed and disbursed on a regular, predictable schedule. Accordingly, we adopt a schedule for the submission, review, adjudication of incentive claims to allow for timely issuance of incentive payments according to the schedule below, and as noted in Appendix 6. The adopted schedule will provide stability and continuity in payment of incentive awards.

Accordingly, to provide a seamless transition and continuity in the flow of regular annual incentive earnings for incentive payments covering the 2013-2014 cycle, the following process shall apply. The submission, review and award of

incentive payments for program year 2013 for non-resource programs, C&S programs, ex ante review activities, and for preliminary ex ante savings for deemed measures will occur during calendar year 2014. The submission, review and award of the ex post savings incentive component for program year 2013, however, will occur during calendar year 2015. This additional time is needed to complete the necessary work involved in an ex post savings evaluation and to allow for adequate vetting of the results with the parties.

This same sequence of payments will apply for the 2014 program year activities, resulting in a similar sequence of payments in calendar years 2015 and 2016, respectively, and beyond, if this proposed incentive structure were continued in the next portfolio cycle. The schedule for timely submission and review of incentive claims must commence early enough to allow for the award payment schedules as contemplated.

The following listing summarizes the schedule for processing incentive payment claims over a two-year cycle. Claims limited to the following incentive components will be processed in calendar year 2014 for program year 2013 activity:

- Non-Resource program management fee
- C&S program management fee
- Ex ante performance awards
- Preliminary ex ante locked down deemed measure savings award

Claims for the following incentive payment components will be processed in calendar year 2015 for program year 2013 activity:

- Custom projects
- Ex post verified deemed measure savings
- True up of preliminary ex ante savings payment based on verified counts.

It is expected that beginning in 2014, all relevant ESPI payments (and, in 2014, the remaining PY2012 RRIM payment) will be applied for in a single annual AL. So in their 2014 AL, the IOUs will apply for their PY2012 RRIM management fee and ESPI payments related to their 2013 activities identified in the first bullet point list above; in their 2015 AL, the IOUs will apply for ESPI payments related to their 2013 activities identified in the second bullet point list above and their 2014 activities identified the first bullet point list above; etc.

Note that payment claims will be capped at the respective sub-cap component calculated for each IOU in Attachment 1. That is, while the total award for each component is fungible temporally across the two years of the cycle, the individual component caps are not fungible between components. Further details regarding the process and schedule for incentive payment claims is set forth in Attachment 6.

A subsequent sequence shall apply for program cycles beginning in 2015 and thereafter until further notice, and the related total and component caps, savings claim coefficients, and any other adjustments to the mechanism adopted in this decision for future cycles will be addressed in a future proceeding.

12. Comments on Proposed Decision

The proposed decision of ALJ Pulsifer (Proposed Decision) 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 August 15, 2013 and reply comments were filed on August 20, 2013 by several parties. We have reviewed the comments and incorporated appropriate revisions. In particular, we have

adjusted the incentive earnings potential and have added various clarifications regarding how incentives will be administered.

13. Assignment of Proceeding

Mark J. Ferron is the assigned Commissioner and Thomas R. Pulsifer is the assigned Administrative Law Judge in this proceeding.

Findings of Fact

1. The Commission adopted shareholder incentives in D.07-09-043 so that EE programs will be pursued vigorously by utility management as a core business strategy.

2. Consistent with the Energy Action Plan, shareholder incentives for EE continue to be important as a tool to spur utility management to aggressively pursue EE goals as the first priority in the resource. Otherwise, utilities will be more inclined to devote scarce resources to supply-side procurement on which they earn a return, and not on meeting or exceeding the Commission's EE goals, or maximizing ratepayer net benefits in the process.

3. The Commission most recently adopted an incentive mechanism for the 2010-2012 cycle based on methodologies adopted in D.12-12-032, but left unresolved issues of how an incentive mechanism would apply for subsequent cycles.

4. The ESPI mechanism set forth in this decision offers incentives in four performance categories, namely, (1) EE resource savings; (2) EAR performance; (3) building codes and standards EE programs; and (4) non-resource programs. By offering incentives covering a broader range of policy goals compared with prior cycles, the ESPI mechanism provides a more comprehensive scope for successful results, and diversifies related risks involved.

5. Consistent with the Energy Action Plan, the largest component of a shareholder incentive mechanism focuses on realization of resource savings.

6. The ESPI provision to reward performance in complying with the Commission's EAR process helps to ensure that due diligence and engineering rigor is applied in developing locked-down ex ante values. Incentive earnings for the EAR component calculated based on the list of performance metrics set forth in Attachment 7 for which points are vetted and scored as prescribed in Attachment 5, offer a meaningful component of an overall incentive mechanism.

7. Based on the scoring protocols adopted in Attachment 5, as designed to offer earnings up to 3% of the budget spent for resource savings, the resulting EAR incentive earnings potential, in conjunction with the other ESPI components as prescribed in accordance with Ordering Paragraph 3, offers a reasonable level of incentives.

8. C&S advocacy is different from other resource based activities because expenditures incurred during each cycle do not result in resource savings until after the cycle ends. Calculating savings involves additional complicating factors, including code compliance estimates and attribution factors to estimate how much of a utility's efforts contributed to codes and standards development.

9. Given the complications involved in measuring savings, incentives paid as a management fee of 12% of expenditures for C&S advocacy provides a reasonable means of motivating and rewarding utility program accomplishments.

10. Non-resource programs represent energy efficiency activities that do not focus on displacement of supply-side resources at the time they are implemented, but may lead to displacement over a longer-term, or may enhance

program participation overall. Non-resource programs do not provide direct energy savings and only have costs, making them not cost-effective on their own.

11. A management fee of 3% of expenditures incurred for non-resource programs offers a reasonable means of motivating utility management focus on achieving non-resource program goals while removing disincentives to shift funds and resources away from non-resource programs.

12. Consistent with the priorities stated in D.12-05-015, an incentive mechanism should give greater weight to programs designed for deeper savings, measures with longer design lives, and market transformation efforts (with correspondingly increased challenges associated with participation levels and achieving savings from these programs).

13. Since the goals adopted in D.12-11-015 are stated on an annualized basis, the goals need to be converted to a lifecycle basis for purposes of designing an incentive mechanism that gives due weight to longer-lived and deeper savings programs.

14. Lifecycle goals for resource savings can be reasonably calculated by multiplying annualized goals by the portfolio-average EUL of savings from program measures.

15. The target EUL of 12 years for electric measures and 15 years for natural gas measures and NTG values of 0.8 are not representative of recent experience and may not be achievable in the 2013-2014 portfolio. The use of these target EUL and NTG values is appropriate, however, in calculating net lifecycle goals for ESPI purposes to emphasize the importance of challenging IOUs to stretch their capabilities to reach these higher standards of performance over time.

16. Based upon the stretch values for EUL and NTG, the net lifecycle goals set forth in Attachment 1 provide an appropriate basis for calculating incentive

earnings formulas, using an earnings cap for resource savings equal to 9% of the EE resource budget, as prescribed in Attachment 1.

17. Given the importance of EE resources as first in the loading order, monetary incentives should be sufficient to motivate management to treat the Commission's EE savings goals (and maximizing ratepayer net benefits in the process) as a core part of regulated operations. The overall ESPI earnings potential adopted in this decision is sufficient to meet this objective.

18. A reasonable approach to calculate incentive earnings is to develop per-unit earnings rates by solving for the coefficient (i.e., earnings per unit of resource savings) that correlates incentive earnings with (a) the EE approved budget, and (b) with lifecycle goals.

19. Correlating incentive earnings potential with up to a cap of 10.85% of the EE budget offers a reasonable scaling of earnings opportunities, taking into account similar earnings allowances offered in other jurisdictions, associated risks in relation to incentive earnings, and protection of ratepayer from funding unreasonable costs.

20. The ESPI mechanism, as adopted in accordance with the provisions of Attachment 1 through 7, results in maximum incentive earnings potential capped at $178.4 million for the 2013-2014 cycle, covering all four categories of incentive earnings.

21. Assuming current levels of utility activity, however, 2013-2014 ESPI earnings potential would approximate $118.6 million, as calculated using formulas in the ACR dated April 4, 2013 and updated with budget numbers from the IOUs' Compliance Filing and the revisions to the ACR earnings rates set forth in this decision.

22. To provide integrity and credibility incentive earnings for achievements in resource savings goals need to be based on independently reviewed and evaluated data, and verification of measures actually installed.

23. Attempting to shift from an ex post to an ex ante focus in determining incentive earnings did not expedite or simplify the determination of incentive payments during the 2010-2012 cycle, but only moved the debate from the back end (with ex post evaluations) to the front end of cycle (where ex ante values are determined).

24. Although the Commission expressed the intention to freeze ex ante assumptions used to develop the 2010-2012 portfolio for tracking savings against goals, contingent on compliance and consistency in utility data, controversies precluded finalization of ex ante values until July 2011.

25. While offering incentives for resource savings remains important, the shared savings model previously used for incentive earnings needs to be replaced with a different methodology that does a better job of achieving a transparent, streamlined, yet effective method for designing and implementing incentives.

26. Evaluated ex post updates were controversial during the 2006-2009 cycle particularly because they impacted the magnitude of incentive earnings so significantly.

27. The RRIM earnings rates and caps, as previously adopted, were based on conditions attributable to the 2006-2008 portfolio of measures in comparison to earnings on supply-side resources otherwise foregone by pursuing EE programs.

28. There is a trade-off between risk and the magnitude of earnings to provide a reasonable incentive to pursue EE investments as a core business activity. The

precise quantification cannot be reduced to a precise mechanical formula, but requires reasoned judgment based on analysis of relevant data.

29. In establishing the level of earnings potential for a shareholder incentive mechanism, consideration should be given to what level of earnings is sufficient to motivate utility investors and shareholders to treat EE programs as a core element of regulated operations.

30. Ratepayer interests are best served if the payout of earnings occurs based on verified installations and load impacts that have been evaluated by Commission Staff and its contractors.

31. Providing a preliminary payment for ex ante "deemed" resource savings incentive award, with a true-up payment in the following year when ex post evaluation results are complete, will guard against the potential of overpaying incentive claims resulting from IOU claim errors in measure counts and/or incorrectly applied ex ante parameter values.

32. The procedures for the submission, review and approval of ESPI earnings claims, set forth in Attachment 6 of this decision are reasonable.

33. The steps outlined in Attachment 4 provide parties the opportunity to participate in the ex post evaluation process, both procedurally and substantively, by setting forth a process to submit questions, concerns and comments to both Commission Staff and evaluation contractors, and also for dispute resolution.

Conclusions of Law

1. Pursuant to relevant statute, and past Commission policy directives, EE programs should be prioritized as the first resource to meet California's energy demand. Directives regarding incentive policy should be consistent with California's commitment to making EE the highest energy resource priority.

2. The ESPI mechanism, as set forth in accordance with the provisions in Attachment 1 through 7, should be adopted effective immediately in order to promote the Commission's goals to encourage promotion of EE goals as first in the loading order of resources.

3. The ESPI should apply to program activities beginning with the 2013-2014 program cycle. Since several ESPI metrics rely on specific data relating to 2013-2014 programs, the updating of some ESPI formulas may be appropriate for subsequent program cycles, either as part of the review of new EE budget applications or through a separate rulemaking.

4. The ESPI mechanism should create incentives sufficient to motivate utility investors and managers to view EE as a core part of the utility's regulated operations that can generate meaningful earnings for its shareholders. At the same time the adopted incentive mechanism should protect ratepayers' financial investment and ensures that program savings are real and verified.

5. Calculations of resource efficiency savings achievements used to determine ESPI earnings awards should be subject to independent verification by Commission Staff and our EM&V contractors, based on adopted EM&V protocols as prescribed in Attachment 2 to this decision.

6. The process for resolution of EM&V disputes adopted in D.10-04-029 should be adopted for purposes of resolving disputes regarding ex post evaluations in accordance with the process outlined in Attachment 4. This dispute resolution process should only be invoked after the other more informal processes for resolving disputes have been exhausted.

7. The schedule for submission and resolution of ESPI earnings claims adopted in Attachment 6 of this decision represents a reasonable balancing of relevant considerations, namely, to ensure that claims and payments are linked

to EM&V results while providing ongoing incentives to achieve stated goals and recognizing resource limitations and competing priorities for staff time.

8. The procedures for review and approval of ESPI earnings claims set forth in Attachment 6 are reasonable and should be adopted.

9. Issues relating to how the use of EE budget funds should be prioritized or allocated among utilities and other entities, how EE savings should be incorporated into supply-side procurement planning, and the design of incentives for CCAs or other non-utility entities, are beyond the scope of this proceeding.

10. Although the ESPI mechanism does not incorporate a cost-effectiveness multiplier at this time or savings-based incentives for Codes and Standards, these potential improvements to the mechanism set forth in this decision should be considered for the ESPI in future iterations.

O R D E R

IT IS ORDERED that:

1. The Efficiency Savings and Performance Incentive (ESPI) mechanism, as prescribed in Attachments 1 through 7, is hereby adopted. The ESPI mechanism shall take effect immediately, and shall apply to programs funded and implemented for the 2013-2014 Program Cycle. The ESPI mechanism shall continue in effect for subsequent program cycles until modified by further notice.

2. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company shall each be eligible for claiming incentive awards under the Efficiency Savings and

Performance Incentive mechanism in accordance with the terms and conditions set forth in Attachments 1 through 7.

3. The Efficiency Savings and Performance Incentive mechanism shall incorporate opportunities for performance incentives in the following categories.

A. Energy Efficiency Resource Savings:
An incentive is offered to encourage energy efficiency resource savings, paid as a combination of ex ante "locked down" and ex post verified units of savings results, according to the level of uncertainty of the measures for which savings are being claimed. The methodology for measuring resource savings is modified from previous cycles to focus on net lifecycle savings. Incentives for EE resource savings are capped at 9% of resource program budgets, minus funding dedicated to administrative activities, codes and standards programs, EM&V, and CCA/RENs.

B. Ex-Ante Review Process Performance:
For performance in implementing the lock down of ex ante parameters, a performance award shall be paid based on the scoring of performance metrics in accordance with the procedures and standards set forth in Attachments 5 and 7. The award shall be capped at 3% of resource program expenditures.

C. Codes and Standards (C&S) Program Management Fees:
An incentive for savings from building C&S advocacy will be paid as a management fee equal to 12% of approved C&S program expenditures, not to exceed authorized expenditures, and excluding administrative costs.

D. Non-Resource Program Management Fees:
For performance in implementing non-resource programs (which support savings based programs but in which there are no direct savings), a management fee shall be paid equal to 3% of non-resource program expenditures, not to exceed authorized expenditures for these programs exclusive of administrative costs.

Incentive caps are specific to each component. If a utility does not earn up to the cap of one component, those incentives are not available to be earned under a different incentive component.

4. In accordance with the schedule set forth in Attachment 6, an annual Tier 3 advice letter shall be filed for approval of incentive claims in accordance with the schedule adopted in this decision. The first annual advice letter will occur beginning in 2014, and continuing annually thereafter, to claim recovery of Efficiency Savings and Performance Incentive (ESPI) incentive elements in the following sequence:

(a) Claims for ESPI awards covering the first program year (PY) of each cycle shall be made during the first following year (PY +1) for the following ESPI elements:

- Non-Resource program management fee
- Codes and Standards program management fee
- Ex ante performance award
- Preliminary ex ante locked down deemed measure savings award

(b) Claims covering the first program year of each cycle shall be made in the second following year (PY +2) for the following ESPI elements:

- Custom projects
- Ex post verified deemed measure savings
- True up of preliminary ex ante lockdown award based on verified counts.

5. Claims for the Efficiency Savings and Performance Incentive awards for the second program year of each cycle shall be made following the same sequence as set forth for the first program year. The sequence of claims and approvals will be repeated for each subsequent program cycle thereafter until further notice.

6. Incentive claims covering program years 2012 and 2013 (for the elements specified in Ordering Paragraph 4a) shall be consolidated into a single advice letter filing in 2014.

7. The schedule and procedural processes for the submission, review, and approval of resource savings awards for measures subject to ex ante treatment set forth in Attachment 6 is adopted.

8. The schedule for processing, review, and approval of resource savings awards subject to ex post evaluations set forth in Attachment 6 is adopted.

9. If necessary to resolve disputes over ex post results, and only after other more informal efforts at resolution have been exhausted, parties may invoke the dispute resolution process in accordance with the process set forth in Attachment 4.

10. Once Commission staff issues a Final Performance Earnings Statement in accordance with the procedures in Attachment 6, the level of incentive earnings shall be based on applying the formulas adopted in Attachment 1 of this decision to the data in the Performance Earnings Statement.

11. Efficiency Savings and Performance Incentive awards for resource savings shall be derived as the sum of the following components that increase as a linear function up to the earnings target for each respective metric as set forth in Attachment 1:

--For savings of electric consumption:

(Units of Kwh Savings) * (Earnings Rate Coefficient)

--For reduction of peak electric demand

(Units of MW Reductions) * (Earnings Rate Coefficient)

--For savings of natural gas consumption:

(Units of MMTherm Savings) * (Earnings Rate Coefficient)

12. The quantity of units of resource savings for each category shall be calculated based on the procedures and protocols set forth in Attachment 2.

13. Earnings rate coefficients shall be calculated as the amount that correlates incentive earnings potential for resource savings with a cap of 9% of the approved resource program budget for each savings type, excluding funding for administrative activities, Evaluation, Measurement and Verification, codes and standards programs, and the Regional Energy Network/Community Choice Aggregation programs not administered by the utilities. The coefficients shall be applied in accordance with the procedures and based on the values set forth in Attachment 1.

14. The Ex Ante Review incentive component shall be calculated and paid as a percentage of Energy Efficiency resource program expenditures, up to a cap of 3% of resource expenditures. The actual percentage to be applied shall be calculated based on the scoring of metrics, as explained and set forth in Attachments 5 and 7.

15. The Codes and Standards (C&S) Management Fee shall be calculated and paid as a management fee equal to 12% of C&S program expenditures, not to exceed authorized expenditures, incurred in each program year.

16. The non-resource program component of the incentive mechanism shall be calculated and paid as a management fee equal to 3% of non-resource program expenditures, not to exceed authorized expenditures.

17.In order to verify Codes and Standards and non-resource program expenditures for the purposes of awarding these management fees, we will rely upon public versions of the Commission's Utility Audit, Finance and Compliance Branch reports. Upon completion, the Commission's Utility, Audit, Finance and Compliance Branch shall serve on the service list in this proceeding

(or its successor) a notice of availability of the public copy of its audit report detailing its review of annual expenditures for 2013 and 2014 Energy Efficiency programmatic activity.

18. Lifecycle savings goals used to calculate the correlation coefficient set forth in Attachment 1 shall be the product of adopted first year savings goals adopted in Decision 12-11-015 multiplied by (a) the portfolio average effective useful life of the efficiency measures, and (b) portfolio average net-to-gross ratios.

19. Rulemaking 12-01-005 is closed.

This order is effective immediately.

Dated _____, at San Francisco, California.

ATTACHMENT 1

Formulas to derive Resource Savings Elements of ESPI Mechanism

Attachment 1 sets forth the formulas are adopted for purposes of determining the Efficiency Savings Performance Incentive (ESPI) awards for resource savings. Aggregate earnings caps for resource savings are derived in Table 1 below based on a cap of 9% of the EE resource budget for 2013-2014. The budget figures exclude funds for administrative activities, EM&V, codes and standards programs, and regional energy network/community choice aggregator programs.

Savings goals are derived in Table 2 below. The earnings rate coefficients are calculated in Table 3 below, derived by scaling earnings caps (from Table 1) in correlation with savings goals (from Table 2).

Table 1

Resource Savings Earnings Caps

For purposes of calculating incentives for resource savings, aggregate earnings caps equal to 9% of the approved EE budget shall apply, assigned to each savings type as follows:

(Dollars in 000s)

Savings Type[1]	2013-2014 EE Budget[2]	Earnings Cap @ 9%
Electric	$ 767,190,185	$ 69,047,117
Demand	380,911,527	34,282,037
Gas	261,378,624	23,524,076
Total	$1,409,480,336	$ 126,853,230

Table 2

Conversion of Annual Gross Goals to Net Lifecycle Savings Goals

For calculating of incentive earnings, earnings caps in Table 1 are scaled to correlate with lifecycle savings goals, utilizing target stretch goals as follows: Portfolio average effective useful life of savings measures are based on 12 years (for electric) and 15 years (for natural gas). Also, a net-to-gross ratio of 0.8 is used as a stretch goal to convert gross savings goals to a net basis. Based on these values, net lifecycle goals for incentive calculation purposes are as follows (since demand savings represent peak summer demand, the lifecycle unit for peak demand is expressed as a MW-yr):

---

[1] Budgets are allocated by savings type according to each one's estimated relative contribution to portfolio net benefits within each IOUs' budget, then summed. PG&E and SDG&E budgets are allocated 56.7%, 28.3%, and 25% for electric, demand, and gas, respectively. SCE budget is allocated 67% electric, 33% demand. SCG budget is allocated 100% to gas.

[2] Budget numbers have been updated to reflect the IOUs' Compliance Filings. Resource budget figures exclude funds for administrative activities, EM&V, codes and standards programs, and regional energy network/community choice aggregator programs.

	(a)	(b)	(c)	(d)
	2013-2014 Goals (D.12-05-015 Pg, 95)	Effective Useful Life (in years)	Net-to-Gross Ratio	Net Lifecycle Goals (d) = (a)*(b)*(c)
PG&E				
Electricity (GWh)	1192	12	0.8	11,443
Peak Load (MW-Yr)	214	12	0.8	2,054
Natural Gas (MMTh)	41.3	15	0.8	496

SCE

	(a)	(b)	(c)	(d)
	2013-2014 Goals (D.12-05-015 Pg, 95)	Effective Useful Life (in years)	Net-to-Gross Ratio	Net Lifecycle Goals (d) = (a)*(b)*(c)
Electricity (GWh)	1338	12	0.8	12,845
Peak Load (MW-Yr)	293	12	0.8	2,813

SDG&E

	(a)	(b)	(c)	(d)
	2013-2014 Goals (D.12-05-015 Pg, 95)	Effective Useful Life (in years)	Net-to-Gross Ratio	Net Lifecycle Goals (d) = (a)*(b)*(c)
Electricity (GWh)	318	12	0.8	3053
Peak Load (MW-Yr)	69	12	0.8	662
Natural Gas (MMTh)	4.3	15	0.8	52

SoCalGas

Natural gas (MMTh)	46.3	15	0.8	556

TOTAL PORTFOLIO LIFE CYCLE GOALS BY SAVINGS TYPE

Electricity (GWh)	27,340
Peak Load (MW-YR)	5,530
Natural Gas (MMTh)	1,100

Table 3

Resource Savings Earnings Rate Coefficients Per Unit of Savings

To establish the earnings coefficient rate per unit for each savings type, we divide the earnings cap by savings type (calculated in Table 1 above) by the respective lifecycle savings (calculated in Table 2 above). The earnings cap is allocated between electric and natural gas savings based on the contribution of each to total portfolio economic benefits. Earnings caps are further allocated between energy and peak demand savings also based on the relative proportion of net benefits in the IOUs' portfolio applications. The resulting savings incentive earnings rate coefficients for the 2013-2014 EE portfolio cycle for each savings type are provided in the table below:

Electricity ($/MWh)	$ 2,525
Peak Demand ($/MW-Yr)	$ 6,200
Natural Gas ($/MMTh)	$21,331

(END OF ATTACHMENT 1)

ATTACHMENT 2

Protocols for Ex Post Evaluations of Portfolio Performance Parameters

This protocol identifies which portfolio parameters may be subject to updates by Commission staff in develop the Savings Performance Statement for ex post ESPI savings claims for deemed measures and custom projects.

Commission staff will provide the information for the performance incentive in the form of the Performance Statement, which will represent staff's estimate of each IOU's performance for custom projects as well as those deemed measures identified at the beginning of each program year (PY) as not locked down ex ante and therefore requiring ex post verification for an ESPI savings claim.

A draft Savings Performance Statement will be published annually by June 30, two years after the program year and will be finalized by August 31, two years after the PY. With respect to deemed measures, Evaluation consultants will develop and vet evaluation plans that will identify updates to key parameters or measures identified as uncertain in the evaluation planning process, as well as evaluation plans for custom projects. The Savings Performance Statement will address updates for the following portfolio cost effectiveness parameters for deemed measures:

1. Measure Installations/Measure Count

2. Unit Energy Savings

3. Gross Energy Savings (product of 1 and 2)

4. Net-to-Gross Ratios by Program Strategy and/or Measure

5. Net Energy Savings (product of 3 and 4)

6. Effective Useful Life

7. Load Factors or Daily Load Shapes used to transform annual electricity savings estimates into peak savings estimates.

For custom projects, all components of the projects will be subject to review. An evaluation based estimate of the savings claim for custom projects in the defined program year will be applied to the custom ex ante claim to adjust gross savings. Net to gross ratios will also be estimated for the projects based on ex post analysis.

Description of How Each Performance Parameter will be updated

1. **Measure Installations/Measure Count** - Program Administrators are expected to report on the number of measure installations and associated program costs. Commission staff, with assistance from evaluation contractors, will verify this information on measure installations by performing quality control checks on the measure installation inputs to the data base and verifying actual installations in a sample of customer premises using contact information provided by utilities. For custom projects, Commission staff, with assistance from evaluation contractors, will verify that the project was installed as claimed.

2. Unit Energy Savings - Utility program administrators have already provided estimates of the unit energy savings by measure or end-use and then used these estimates combined with measure installations to develop program level savings estimates. Commission staff plans to provide measure savings results for the pre-defined evaluation targets combined with the ex ante savings estimates in the Savings Performance Statement. For custom projects, Commission staff, with assistance from evaluation contractors, will assess the project savings versus savings claimed based on a review of the engineering assumptions (for example ensuring appropriate baseline was used), and conduct on-site measurement to make any necessary adjustments to the savings claim based on actual field operations.

3-5. Estimates of Gross and Net Energy Savings

Staff will estimate net-to-gross ratios as part of its load impact evaluations. These net-to- gross ratios will be multiplied by the estimates of gross energy savings (which is the product of parameters 1 and 2 above) to yield net savings estimates in the Savings Performance Statement. Net to gross ratios will be developed for both deemed and custom projects.

6. Expected Useful Life

When deemed appropriate, the Commission will hire contractors to estimate survival functions for a selected set of measures using guidance from the expected useful life protocol. The goal is to estimate survival functions and ultimately useful lives for those measures that are forecast to be responsible for a significant proportion of the portfolio savings. For custom projects, Commission staff, with assistance from evaluation contractors, will assess the lifecycle of the project savings versus savings claimed based on a review of the engineering assumptions and ensure that appropriate expected useful lives are applied to the custom projects.

7. Load Factors or Daily Load Shapes to Transform Annual Energy Savings Estimates Into Peak Savings Estimates

Commission staff and its contractors will estimate the peak load impacts in the course of conducting impact evaluations using the Gross Demand Savings Protocols. These protocols allow the evaluators to use secondary load shape data or primary interval meter data to estimate peak savings depending on the level of rigor selected by the evaluation team. Staff will include these factors if they are identified for update in the evaluation-based results, and will update for custom projects as appropriate based on review of the projects engineering assumptions. These peak savings estimates will be published at the same time as the estimates of program energy savings.

(END OF ATTACHMENT 2)

ATTACHMENT 3

List of Deemed Measures Subject to Ex Post Evaluation for Program Year 2013 (Determined in accordance with criteria and processes prescribed in Atachment 6)

Utility	Measure Description	Contribution to Portfolio (Gross Savings)		Comments on need
		2013-2014 Compliance Filing Portfolio	2010-2012 Portfolio Ex Ante Claims	
PGE	**Total Portfolio (less C&S)**	**>1,710 GWH**	**> 4,000 GWH**	
	Total Deemed Portfolio	**> 933 GWH**	**> 2,090 GWH**	
	Home Energy Reports (Residential Energy Advisor Program)	> 150 GWH	n/a	Behavioral program requires ex post evaluation of all claims.
	Screw-in CFLs of all types	> 100 GWH	> 550 GWH	Update of the gross baseline assumptions to account for CFLs replacing CFLs will also alter NTG and installation rate due to inter-relationships of values. Previous NTG values included CFL-CFL replacements, so net and gross analysis needs coordinated update. Details of amounts and timing of lamps placed into storage and removed to be installed require coordination with net and gross analysis.
	Computer network and workstation power management software	> 62 GWH	> 24 GWH	Major concern that supply of this software is standard practice; this measure has not been previously studied and impact assumption need verification.
	Sprinklers - low pressure nozzles and micro conversions	> 45 GWH	> 30 GWH	Energy savings estimates uncertain due to unclear measure definition; this measure has not been previously studied and impact assumption need verification.
	HVAC Quality Maintenance activities	> 40 GWH	> 37 GWH	Change in program design and maturing program offering with many new measures makes assumption for impact highly uncertain.

Utility	Measure Description	Contribution to Portfolio (Gross Savings)		Comments on need
		2013-2014 Compliance Filing Portfolio	**2010-2012 Portfolio Ex Ante Claims**	
	T5 fluorescent lamps and fixtures replacing metal halide	> 37 GWH	> 150 GWH	Update baseline of replaced lamp assumptions, net savings and installation rate; market move to T5 technology requires verification of assumptions.
	LED Surface, Pendant, Track, Accent, and Recessed Downlight	> 10 GWH	> 13 GWH	Update baseline of replaced lamp assumptions, net savings and installation rate; market move to LED technology requires verification of assumptions.
	Occupancy sensor lighting controls - integrated and wall/ceiling	> 7 GWH	> 50 GWH	Code changes may change standard practice.
	De-lamping of T12 lamps in existing fixtures	> 2 GWH	> 60 GWH	De-lamping may normally be a required action during retrofit of surrounding fixtures thus subject to code or other baseline consideration.
	Energy Upgrade California	new	n/a	Change in program design and maturing program offering makes assumption uncertain; normal replacement versus early retirement assumptions are uncertain.
SCE	**Total Portfolio (less C&S)**	**> 1,870 GWH**	**> 4,300 GWH**	
	Total Deemed Portfolio	**> 1,000 GWH**	**> 3,390 GWH**	
	Screw-in CFLs of all types	> 100 GWH	> 550 GWH	Update of the gross baseline assumptions to account for CFLs replacing CFLs will also alter NTG and installation rate due to inter-relationships of values. Previous NTG values included CFL-CFL replacements, so net and gross analysis needs coordinated update. Details of amounts and timing of lamps placed into storage and removed to be installed require coordination with net and gross analysis.

Utility	Measure Description	Contribution to Portfolio (Gross Savings)		Comments on need
		2013-2014 Compliance Filing Portfolio	2010-2012 Portfolio Ex Ante Claims	
	T5 fluorescent lamps and fixtures replacing metal halide	> 180 GWH	> 250 GWH	Update baseline of replaced lamp assumptions, net savings and installation rate; market move to T5 technology requires verification of assumptions.
	Occupancy sensor lighting controls - integrated and wall/ceiling	>35 GWH	> 100 GWH	Code changes may change standard practice.
	De-lamping of T12 lamps in existing fixtures		> 65 GWH	De-lamping may normally be a required action during retrofit of surrounding fixtures thus subject to code or other baseline consideration.
	Home Energy Surveys (mail and phone)	> 10 GWH	> 45 GWH	Changing survey and audit methods and target population makes use of previous result inappropriate.
	LED night lights	> 1 GWH	> 30 GWH	Assumptions of replaced equipment and use uncertain.
	Computer network and workstation power management software	> 16 GWH	> 22 GWH	Major concern that supply of this software is standard practice; this measure has not been previously studied and impact assumptions need verification.
	Sprinklers - low pressure nozzles and micro conversions	new	n/a	Energy savings estimates uncertain due to unclear measure definition; this measure has not been previously studied and impact assumptions need verification.
	HVAC mini-split system	> 50 GWH	n/a	This new technology is now widely available yet expensive with limited applicability; performance has not been studied and free ridership is uncertain.

Utility	Measure Description	Contribution to Portfolio (Gross Savings)		Comments on need
		2013-2014 Compliance Filing Portfolio	**2010-2012 Portfolio Ex Ante Claims**	
	HVAC Quality Maintenance activities	> 30 GWH	n/a	Change in program design and maturing program offering with many new measures makes assumption for impact highly uncertain.
	Energy Upgrade California	new	n/a	Change in program design and shifting program offerings make assumptions uncertain; normal replacement versus early retirement assumptions are uncertain.
SDGE	**Total Portfolio (less C&S)**	**> 495 GWH**	**> 775 GWH**	
	Total Deemed Portfolio	**> 225 GWH**	**> 543 GWH**	
	Screw-in CFLs of all types	> 100 GWH	> 550 GWH	Update of the gross baseline assumptions to account for CFLs replacing CFLs will also alter NTG and installation rate due to inter-relationships of values. Previous NTG values included CFL-CFL replacements, so net and gross analysis needs coordinated update. Details of amounts and timing of lamps placed into storage and removed to be installed require coordination with net and gross analysis.
	Occupancy sensor lighting controls - integrated and wall/ceiling	> 10 GWH	> 20 GWH	Code changes may change standard practice.
	De-lamping of T12 lamps in existing fixtures	> 2 GWH	> 8 GWH	De-lamping may normally be a required action during retrofit of surrounding fixtures thus subject to code or other baseline consideration.
	HVAC Quality Maintenance activities	> 9 GWH	n/a	Change in program design and maturing program offering with many new measures makes assumption for impact highly uncertain.

Utility	Measure Description	Contribution to Portfolio (Gross Savings)		Comments on need
		2013-2014 Compliance Filing Portfolio	**2010-2012 Portfolio Ex Ante Claims**	
	Variable speed pool pump	> 7 GWH	> 6 GWH	Rapid reduction in equipment pricing and improved efficiency makes gross and net savings uncertain.
	Energy Upgrade California	new	n/a	Change in program design and maturing program offering makes assumption uncertain; normal replacement versus early retirement assumptions are uncertain.
	Water savings kits/items (shower and faucet)		> 1 MMTherm	Energy impacts of this measure not subject to previous evaluation and assumption are uncertain; uncertain install rate and level of free riders.
SCG	**Total Portfolio (less C&S)**	**> 55 MMTherm**	**> 77 MMTherm**	
	Total Deemed Portfolio	**> 19 MMTherm**	**> 28 MMTherm**	
	Water savings kits/items (shower and faucet)	> 2.5 MMTherm	> 7.5 MMTherm	Energy impacts of this measure not subject to previous evaluation and assumption are uncertain; uncertain install rate and level of free riders.
	Pipe insulation - steam and hot water	> 3.4 MMTherm	> 4 MMTherm	Uncertain typical pipe internal and surrounding temperatures, install rate (measure eligibility) and level of free riders.

(END OF ATTACHMENT 3)

ATTACHMENT 4

Dispute Resolution Process for Ex Post Evaluation Matters

The following procedure shall apply for resolving disputes relating to ex post evaluation results used in ESPI calculations. This formal procedure should only be invoked after informal attempts to resolve disputes have been exhausted. A party may file a "Motion for Evaluation, Measurement and Verification Dispute Resolution" (EM&V Motion) in the EM&V docket for resolution of a dispute relating to ex post evaluations. (If an entity is not already a party in the EM&V docket, a motion for party status would be necessary).

The Motion must include a statement from Commission staff giving its side of the dispute and documentation of an attempt at informal dispute resolution. The ALJ assigned in the EM&V docket may undertake any appropriate process to gather further information. The ALJ may issue a Ruling to resolve the dispute.

In a Motion for EM&V Dispute Resolution filed pursuant to this process, the filing party or Commission staff may ask that the matter be resolved by the assigned Commissioner or the full Commission. In that case, the Administrative Law Judge (ALJ) will consult with the assigned Commissioner to determine the appropriate course of action. In this situation, the assigned Commissioner or ALJ may issue a ruling to resolve the dispute. If the assigned Commissioner determines the matter should be brought before the full Commission, the ALJ or assigned Commissioner shall issue a Proposed Decision and allow for comment under Rule 14 of the Commission's Rules of Practice and Procedure.

(END OF ATTACHMENT 4)

ATTACHMENT 5

Annual Ex Ante Review (EAR) Performance Scoring Protocols

The award for the EAR performance component of the ESPI will be an annual payment based on each utility's score against the metrics-- and weightings thereof--outlined in Attachment 5 hereto, based on a rating scale of 1 to 5. On this scale, 1 is a low score and 5 is a high score. A maximum score will yield 100 points. The 1-5 rating scale is distinguished as follows:

1. Consistent underperformer in meeting the basic Commission expectations;
2. Makes a minimal effort to meet Commission expectations but needs dramatic improvement;
3. Often meets or makes an effort to meet Commission expectations, however improvement is required;
4. Sometimes meets or exceeds Commission expectations
5. Consistently exceeds Commission expectations.

The EAR performance incentive award claim will be determined and distributed through the following process:

1. By June 1 of each program year (PY), Commission staff, for their EAR contractors, will post preliminary EAR performance scores to the deeresources.info website. (Note that because the ESPI is being developed during the 2013 PY, this step is delayed for PY2013. Preliminary EAR performance scores for the first half of PY2013 are expected in the fall of 2013.)
2. By July 1 of each PY, Commission staff will hold a meeting (by phone or in person) with each utility to discuss the preliminary EAR scoring results. This meeting is not intended to be a forum for the utilities to dispute their scores, but rather for Commission staff to explain their concerns, and for the IOUs and Commission staff to identify any possible factual errors or miscommunications in the use of the metrics and areas where utilities' scores can be improved. (Note that this step is expected in the fall of 2013 for PY2013.)

3. By January 31 of PY +1, Commission staff, or their EAR contractors, will post final EAR performance scores to the deeresources.info website.
4. By February 15 of PY +1, Commission staff will hold a meeting (by phone or in person) with each utility to discuss the final EAR scoring results. This meeting is not intended as a forum for the utilities to dispute their scores, but rather to discuss each utility's EAR performance through the PY and any potential changes in performance since the progress report, as well as to identify any possible factual errors or miscommunications in the use of the metrics.
5. If utilities wish to dispute how the EAR performance scores were calculated, they may initiate the Dispute Resolution process described in D.10-04-029 by submit their concern(s) to the ALJ by March 1 of PY +1.
6. The ALJ will resolve any disputes by June 15 of PY +1.
7. By June 30 of PY +1, each utility will file its annual ESPI advice letter for Energy Division disposition pursuant to section 7.6.1 of General Order 96-B addressing the EAR performance incentive award claim. In the advice letter, each utility will calculate the EAR incentive award claim using their respective EAR performance score as a percentage of the total EAR performance component cap. For instance, if a utility scores 86 out of 100 for EAR performance, their EAR incentive award claim would equal 86% * [3% of resource program expenditures].[1]
8. Energy Division will prepare a draft resolution to approve the advice letter as practicable as possible thereafter so as it correctly incorporates the final EAR performance scores. If it does not, Energy Division will take other appropriate action under General Order 96-B.

(END OF ATTACHMENT 5)

---

[1] Excluding funding dedicated to administrative activities, codes and standards programs, and non-utility administration of programs (e.g., CCA and RENs' programs).

ATTACHMENT 6

Annual Process for Submission, Review and Resolution of Management Fee and Incentive Award Claims

Overview

The non-resource programs and codes and standards advocacy component of the ESPI will be paid based on a management fee. In order to verify expenditures, we will rely upon public versions of the Commission's Utility Audit, Finance and Compliance Branch reports. Upon completion, the Commission's Utility, Audit, Finance and Compliance Branch shall serve on the service list in this proceeding (or its successor) a notice of availability of the public copy of its audit report detailing its review of annual expenditures for 2013 and 2014 Energy Efficiency programmatic activity.

The resource program savings award component of the ESPI will be calculated based on both ex ante and ex post parameters. Energy and demand savings resulting from the majority of deemed measures will be calculated on an ex ante basis and a preliminary incentive award for these savings will be distributed in the year following program implementation (i.e., PY +1).

Additionally, all custom projects and a specific subset of deemed measures with parameters identified as highly uncertain will not be locked down during the portfolio cycle and will be subject to ex post review in order to determine the applicable savings award. The award for the portion of resource program savings subject to ex post review and the true-up of the preliminary ex ante savings incentive based on verified measure counts will be distributed two years following the relevant program year (i.e., PY +2). This attachment details the processes and timelines by which the ex ante and ex post savings claims will be determined and awarded.

Ex Ante Savings Claims

Locked down savings parameters will be used to determine the ex ante savings claim for deemed measures that are not on the "high uncertainty measure list" at the beginning of each program year (or not added to the list during the program year, in the case of "Phase 2" or "mid-cycle" non-DEER workpapers).[1]

1. By June 30 of the year following the program year (i.e., PY +1), each utility will file an annual ESPI advice letter for Energy Division disposition pursuant to section 7.6.1 of General Order 96-B, addressing the ex ante savings award claim. In the advice letter, each utility will calculate its ex ante savings claim for the previous PY using the locked down values and their installation rates for each measure (i.e., measure counts).

2. Energy Division will approve the advice letter for the preliminary ex ante savings incentive as practicable as possible thereafter, making any revisions to the IOU claim estimate that result from errors identified in the IOUs' ex ante parameter values. If it does not approve the advice letter, Energy Division will take other appropriate action under General Order 96-B.

3. Commission staff will adjust the preliminary ex ante payment to account for any errors in measure count (or ex ante parameter input errors not identified when the preliminary award was approved) in the subsequent year's annual ESPI advice letter, after the ex post evaluation for that PY is completed.

[1] The vetting process for DEER updates, as well as the DEER and Phase 1 Non-DEER Workpaper lock down deadline, are determined in the EE proceeding.

Ex Post Savings Claims

The ex post savings claim for custom projects claimed in a particular PY and any deemed measures identified as not locked down for that same PY will be based on each IOU's Savings Performance Statement for that PY.[2] The Savings Performance Statement will be developed through the following process:

1. By October 31 of the previous PY, Commission staff will finalize the list of DEER and Phase 1 Non-DEER Workpaper measures that will not be locked down for the upcoming PY and post this "high uncertainty measure list" on a publicly accessible website. Commission staff will post a draft list of measures in advance of the October 31 date, which will be vetted with stakeholders. The list of measures that are not locked down will be based on a review of remaining uncertainties which may have a significant impact on the portfolio performance and that can be addressed with additional research. For ESPI purposes, "highly uncertain" measures are defined as those measures for which the Commission believes the –net lifetime savings of the current DEER or non-DEER savings estimate may be as much as 50% or more under- or over- estimated. For example, three parameters with just over 20% uncertainty or two with 30% uncertainty can provide an overall uncertainty threshold of at least 50%. In addition, only parameters that are expected to be addressed by the Commission's evaluation activity during the current period are included in the sufficiently uncertain measure list. Commission staff shall similarly identity any uncertain parameters in mid-cycle (also referred to as "Phase 2") workpapers submitted by the IOUs in the workpaper dispositions developed during the portfolio implementation period. All other deemed measures will be awarded based on ex ante savings parameters.

   (Note that because the ESPI is being developed during 2013, this step is delayed for PY2013. The non-DEER workpapers were not locked down

[2] The specific components of the portfolio claim (or portfolio parameters) that will determine the ex post savings award are described in Attachment 2.

until March 1, 2013; A preliminary list of deemed measures subject to ex post evaluation for PY2013 is provided in Attachment 3 of this decision is being provided in this decision.) A final version of the 2013 list will be posted after ED hosts a conference to discuss the list.

2. Throughout the year, Commission staff may add to the list any measures submitted via Phase 2 (i.e. mid-cycle) non-DEER workpapers that staff deems too uncertain to lock down based on information submitted by the IOUs in the workpapers.

3. By October 31 of the implementation PY, Commission staff will post on a publicly accessible website – Evaluation Plans for the upcoming PY based on a review of proposed and the first three quarters of actual IOU program activity.

4. By December 31 of the implementation PY, the Evaluation Plans are finalized in response to stakeholder input and posted to a publicly available website.

5. Commission staff, with assistance from their evaluation contractors, complete draft final evaluation reports[3] based on the plans and post them on a publicly accessible website by December 31 of PY+1. The draft final evaluation reports will detail the specific updates that are recommended for application to the IOU savings claims based on the field analysis. The evaluation contractors notify the CPUC Energy Efficiency service lists of the availability of the draft final evaluation reports and their website posting location(s) and provide the date/time/location of the conference described in Step 6.

---

[3] Evaluation reports refer to either interim or final reports submitted to the Commission by program evaluation contractors describing evaluation results (e.g., impact evaluation studies) for specific portfolio areas.

6. Commission staff, with assistance from their evaluation contractors, hold a conference, under Commission staff sponsorship, with stakeholders (by telephone or in-person) to discuss draft final evaluation reports by January 15 of PY+2.

7. Stakeholders have an opportunity to provide written comments identifying any errors in the draft final evaluation reports. Stakeholders will be required to include in the written comments at least a brief description of every point in the draft report which they believe needs correction, even if discussed at the conference, by January 31 of PY+2.

8. Commission staff directs evaluation contractors to make any necessary changes to final evaluation reports stimulated by the comments. All written comments, and Commission staff's treatment of them, will be reflected in appendices to the final evaluation reports. The final evaluation reports are posted on a publicly accessible website by February 28 of PY+2 (one month after comments are received).

9. If parties have continued disputes with how the comments were addressed or handled, they may submit an issue to the ALJ via the Dispute Resolution process outlined in D.10-04-029 by March 15 of PY +2. The ALJ will resolve any disputes by June 30 of PY +2.

10. For IOUs not impacted by a dispute process, Commission staff applies evaluation results to the IOU filed tracking data to quantify the portfolio energy savings and uses that quantity to develop the draft Savings Performance Statement by March 31 of PY +2. For IOUs impacted by a dispute process, Commission staff develops the draft Savings Performance Statement by July 31 of PY+2.

    In either case, Commission staff will notify the CPUC Energy Efficiency service lists of the availability of the draft Savings Performance Statement and the website posting location and provide stakeholders with the date/time/location of the conference described in Step 11.

11. Commission staff, with the assistance of relevant contractors, holds a conference with stakeholders by telephone or in-person to address each IOU's Savings Performance Statement by April 15 of PY+2 (August 15 if a dispute was addressed). At this meeting, all stakeholders have an opportunity to ask questions about the application of evaluation results in the draft Savings Performance Statement with those who prepared it (and supporting consultants).

    Stakeholders may raise questions about the draft Statement, receive responses from those who prepared it, and point out any errors they believe are contained in the Statement. The goal is to have a give and take between the stakeholders, report authors, and the supporting technical experts.

12. Stakeholders have an opportunity to provide written comments identifying any errors in each IOU's draft Savings Performance Statement by April 30 of PY+2 (August 31 if a dispute was addressed). Stakeholders will be required to include in the written comments at least a brief description of every point in the draft statement which they believe needs correction, even if discussed at the conference. However, stakeholders are not allowed to re-initiate debates over the evaluation results that were already reviewed.

13. Commission staff makes any necessary changes to the Savings Performance Statement stimulated by the oral conference and written comments and posts the Final Savings Performance Statement on a publicly accessible website and sending it to the Energy Efficiency proceeding service list(s), by May 31 of PY+2 (September 30 if a dispute was addressed). All written comments, and Commission staff's treatment of them, will be reflected in an appendix to the Final Savings Performance Statement.

14. Within 30 days of issuance of the Final Savings Performance Statement (i.e., by June 30 of PY+2, or October 30 if a dispute was addressed), each utility will file an advice letter for Energy Division disposition pursuant to section 7.6.1 of General Order 96-B. The advice letter will address the ex

post savings award claim based on the Final Savings Performance Statement.

15. Energy Division will approve the advice letter by August 31 of the PY or as practicable as possible thereafter so long as it correctly incorporates the results of the Final Savings Performance Statement. If it does not, Energy Division will take other appropriate action under General Order 96-B.

(END OF ATTACHMENT 6)

ATTACHMENT 7

Ex Ante Implementation Scoring Metrics

Metric		Weight	Custom Project Benchmarks	Workpaper Benchmarks
1a	Timeliness of action in the implementation of ordered ex ante requirements (e.g., A.08-07-021, D.11-07-030, D.12-05-015, etc.) in the pre-submittal/ implementation phase: Timing of disclosure in relation to reporting	5	(1) Percentage of projects in quarterly or annual claims that were reported in the CMPA twice-monthly list submissions; (2) Percentage of projects for which there is a two weeks or less difference between the application date and the date reported in the CMPA; (3) Percentage of tools used for calculations disclosed prior to use	For new or changed workpapers: (1) Fraction of deemed measures for which workpapers have been submitted to Commission prior to measure being offered in the portfolio; (2) Fraction of workpapers disclosed prior to or during work commencement and submitted upon completion rather than withheld and submitted in large quantity; (3) Fraction of workpaper development projects for new technologies submitted for collaboration versus total number of workpapers for new technologies submitted
1b	Timeliness of action in the implementation of ordered ex ante requirements (e.g.,	5	Percentage of projects which experience significant delay[1] due to slow response to requests for readily available (or commonly requested)[2]	Percentage of workpaper reviews which experience significant delay[3] due to an IOU's slow response to requests for readily

[1] A "significant delay" in this case is considered any time that a reporting claim is not included in a quarterly data submission because readily available or commonly requested information is not provided to ex ante reviewers.

[2] "Commonly requested" data related to custom projects includes, and is not limited to, documentation to support baseline assignment, pre- and/or post-installation inspection

Footnote continued on next page

	Metric	Weight	Custom Project Benchmarks	Workpaper Benchmarks
	A.08-07-021, D.11-07-030, D.12-05-015, etc.) in the post-submittal/ implementation phase: Timing of responses to requests for additional information		additional information (higher percentage = lower score)	available (or commonly requested)[4] additional information (higher percentage = lower score)
2	Breadth of response of activities that show an intention to operationalize and streamline the ex ante review process	10	(1) Percentage of custom project submissions that show standardization of custom calculation methods and tools; (2) Development and/or update of comprehensive[5] internal (to IOUs, third parties, and local government partners, as appropriate) process manuals/checklists and QC	Percentage of workpapers that address all aspects of the Uniform Workpaper Template (as described in A.08-07-021, or any superseding Commission directive)

reports, supporting data for preliminary savings calculations, and pre-installation billing history.

[3] A "significant delay" in this case is considered any time that a reporting claim is not included in a quarterly data submission because readily available or commonly requested information is not provided to ex ante reviewers.

[4] "Commonly requested" data related to workpapers includes, and is not limited to, reports cited within the body of the workpaper, previous studies and/or reports prepared related to the measure described in the workpaper, and/or industry standard practice reports/studies.

[5] "Comprehensive" in this context has two meanings: (1) Process manuals/checklists and QC processes show that the IOU has oversight over all activities related to development of custom project review submissions; AND (2) The IOU has incorporated all CPUC-directed guidance (including guidance from IOU/ED Technical Collaboration meetings, guidance in relation to the use of DEER and DEER methods) and Decision language.

	Metric	Weight	Custom Project Benchmarks	Workpaper Benchmarks
			processes	
3	Comprehensiveness of submittals (i.e., submittals show that good information exchange and coordination of activities exists, and is maintained, between internal program implementation, engineering, and regulatory staff to ensure common understanding and execution of ex ante processes)	10	Number of repeated formal requests for additional documentation for project information and/or reporting claims that support ex ante review activities (fewer requests = higher score).	(1) Percentage of workpapers that include appropriate program implementation background as well as analysis of how implementation approach influences development of ex ante values;[6] (2) Percentage of workpapers which, on initial submission, were found to include all applicable supporting materials or an adequate[7] description of assumptions or calculation methods
4	Efforts to bring high profile, high impact, or existing (with data gaps) projects and/or measures to Commission staff in the formative stage for collaboration or input	10	Percentage of large high impact projects or measures referred to CPUC early or flagged for review	Percentage of high profile program (which Commission staff have identified and communicated to the IOUs), or high impact measure, workpapers submitted for collaboration or flagged for review
5	Quality and	10	Frequency of inappropriate	Frequency of

[6] This metric is intended to assess how IOUs consider program activities in their development of workpaper parameter estimates. Because program implementation activities have a clear impact on how savings are realized, it is important to consider those activities when developing savings estimates. This metric is not intended to be an avenue through which program design can be influenced through ex ante review.

[7] "Adequate" in this context means that the Commission reviewer can easily understand how the underlying assumptions of each workpaper section were derived.

Metric		Weight	Custom Project Benchmarks	Workpaper Benchmarks
	appropriateness of project documentation (e.g., shows incorporation of Commission policy directives)		or inferior quality documentation on project eligibility, baseline determination, program influence, use of custom elements in projects, assumptions and data supporting savings, and project costs (higher frequency = lower score)	inappropriate or inferior quality at the time of initial Commission staff review after IOU formal submission (higher frequency = lower score)
6a	Depth of IOU quality control and technical review of ex ante submittals: Third party oversight	5	Quality of custom project estimates prepared by customers, third parties, and local government partners submitted by IOUs	Quality of workpapers prepared by consultants, third parties, and local government partners submitted by IOUs
6b	Depth of IOU quality control and technical review of ex ante submittals: Clarity of submittals and change in savings from IOU-proposed values not related to M&V	5	(1) Percentage of Projects requiring three reviews or re-requests for supporting information commonly requested; (2) Percentage of projects for which IOU-proposed savings and ED-approved savings[8] differ by 20% or more (higher percentage = lower score)	(1) Percentage of workpapers which required changes to parameters of more than 10% or required substantial changes to more than two parameters among UES, EUL/RUL, NTG, impact shape, or costs; (2) Percentage change from IOU-proposed values to ED-approved values (higher percentage = lower score)
7	Use of recent and relevant data sources that reflect	10	Percentage of custom projects that use data sources and methods per	Percentage of workpapers with analysis of existing data and projects that are

[8] NTG will be considered differently since IOUs can screen out freeriders.

Metric		Weight	Custom Project Benchmarks	Workpaper Benchmarks
	current knowledge on a topic for industry standard practice studies and parameter development that reflects professional care, expertise, and experience		standard research and evaluation practices[9]	applicable to technologies covered by workpaper
8	Thoughtful consideration, and incorporation, of CPUC comments/inputs. In lieu of incorporation of comments/input, feedback on why comments/input were not incorporated	10	(1) Frequency of improved engineering/M&V methods and processes resulting from (and/or appropriate and well-defended rejection of) CPUC reviewer's recommendations; (2) Percent of projects in custom reviews that reflect guidance provided in prior reviews	Frequency of revisions to workpapers in response to (and/or appropriate and well-defended rejection of) CPUC reviewer's recommendations
9	Professional care and expertise in the use and application of adopted DEER values and DEER methods	10	Percentage of custom projects including, and not limited to, new or modified existing technologies or project types that appropriately incorporate DEER assumptions and methods	Percentage of workpapers, including those covering new or modified existing measures, that appropriately incorporate DEER assumptions and methods
10	Ongoing effort to incorporate cumulative	10	Percentage of projects identified in claims review that were implemented per	Percentage of workpapers including analysis of previous activities,

[9] The Commission chooses to use standard research and evaluation practices as a benchmark rather than "best available information" as "best available information" can be outdated and irrelevant for the custom project for which it is being applied. Use of "best available information" could make the ex ante review process susceptible to accepting data sources that are inappropriate and incorrect for use.

Metric		Weight	Custom Project Benchmarks	Workpaper Benchmarks
	experience from past activities (including prior Commission staff reviews and recommendations) into current and future work products		CPUC directions in previous reviews[10]	reviews and direction[11]
		100		

(END OF ATTACHMENT 7)

[10] We understand that it takes a varying amount of time for IOUs to communicate changes to third parties and customers. As such, we do not set a specific grace period for when we expect dispositions to be incorporated into future work products

[11] Since IOUs are aware of all workpapers in progress, we expect that they will be able to immediately incorporate guidance from dispositions into any upcoming submittals.