Decision 09-05-037 May 21, 2009

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

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| Application of Southern California Edison Company (U338E) for Approval of its 2009-2011 Energy Efficiency Program Plans and Associated Public Goods Charge (PGC) and Procurement Funding Requests. | Application 08-07-021<br>(Filed July 21, 2008) |
| And Related Matters. | Application 08-07-022<br>Application 08-07-023<br>Application 08-07-031<br>(Filed July 21, 2008) |

# INTERIM DECISION DETERMINING POLICY AND COUNTING ISSUES FOR 2009 TO 2011 ENERGY EFFICIENCY PROGRAMS

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# INTERIM DECISION DETERMINING POLICY AND COUNTING ISSUES FOR 2009 TO 2011 ENERGY EFFICIENCY PROGRAMS

## 1. Summary

This decision adopts changes in existing rules on the calculation of energy savings and portfolio cost-effectiveness for the 2009-2011 energy efficiency portfolio applications of Pacific Gas and Electric Company (PG&E), Southern California Edison Company, Southern California Gas Company (SoCalGas), and San Diego Gas & Electric Company (SDG&E) (collectively, the Utilities). The adopted changes will enable the state's investor-owned utilities (IOUs or Utilities) to build portfolios of energy efficiency programs that are consistent with the strategic direction for energy efficiency investment set forth in the California Energy Efficiency Long-Term Strategic Plan (Strategic plan) and our policy decisions.

Today's decision addresses eight specific issues. Our determinations on these issues are summarized as follows:

- Cumulative savings will be counted for the years 2006-2011 for this program cycle. Energy Division will study specific assumptions around decay in advance of the 2012-2015 applications.
- Therm goals are adjusted by 22% for SDG&E and 26% for PG&E to take into account updated information on interactive effects. In the final decision in this proceeding we will again review the data and consider whether a different therm goal adjustment should be made to take into account interactive effects for the adopted portfolios.

- The Utilities' proposal to change attribution rules regarding savings credit for actions taken by customers supported by Utility programs, but who may also be motivated by external factors, is denied. However, incentives and savings in communities with "reach" building codes or similar efficiency requirements will be no different from those in other communities, and will not be treated as free riders.
- The Utilities' proposal to allow the maximum effective useful lives of measures to increase to 30 years is denied. Energy Division is directed to conduct a study on the issue of increasing the maximum expected useful lives of measures and report back to the assigned Administrative Law Judge and Commissioner in the relevant docket no later than December 1, 2010.
- The Utilities' proposal to allow Strategic Plan-related costs to be excluded from the risk/reward incentive mechanism is deferred to Rulemaking 09-01-019.
- The Utilities' request to use the individual utility weighted cost of capital adjusted for taxes (the post-tax discount rate) for the 2009-2011 energy efficiency portfolios is denied.
- The Utilities' request to revise our rule to allow mid-cycle funding augmentation to count towards the minimum performance standard is approved.
- The Utilities' request to use gross saving in the performance earnings benchmark is deferred to Rulemaking 09-01-019.

Today's decision will affect our calculation of cost-effectiveness of the Utilities' portfolios, and the ability of the Utilities' portfolios to achieve annual and cumulative goals. The disposition of these eight policy issues may also impact the Utilities' recommendations for the mix of programs in their 2009-2011 portfolios. We will require a supplemental filing by the Utilities to take into account this interim decision, and provide for comments by parties.

## 2. Procedural Background

The Utilities initially filed their proposed 2009-2011 energy efficiency portfolios on July 21, 2008 and filed amended applications on March 2, 2009. In both sets of applications, the IOUs jointly requested changes to certain issues that affect Evaluation Measurement & Verification (EM&V) rules on how savings are counted and cost-effectiveness determined.[1] An Assigned Commissioner/Administrative Law Judge (ALJ) Ruling dated February 25, 2009 specified that we would consider the following requests prior to our decision on the Utilities' 2009-2011 portfolios, in order to provide guidance to the Utilities and parties in developing and reviewing the 2009-2011 portfolios:

1. Redefine Cumulative Savings to mean the sum of the annual savings goals in the three-year portfolio cycle, instead of "the savings in that year from all previous measure installations (and reflecting any persistence decay that has occurred since the measures were installed) plus the first-year savings of the measures installed in that program year."[2]
2. Give the IOUs credit for energy savings actions taken by customers with non-utility motivations (*e.g.*, state laws/mandates, local ordinances and green messaging).
3. Use the post-tax discount rate to calculate performance earnings basis energy savings.
4. Eliminate the mid-cycle funding augmentation rule adopted in D.07-10-032.
5. Use gross savings metrics for calculation of performance under the risk/reward incentive mechanism (RRIM) adopted in D.07-09-043.

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[1] *See*, *e.g.*, SCE Testimony Chapter II.

[2] D.07-10-032, p. 79.

6. Remove certain costs related to implementation of Strategic Plan activities from the calculation of the RRIM (also known as "ring-fencing").

The IOUs proposed these changes (as well as several others which were ruled outside of the scope of this proceeding by the February 25, 2009 Ruling[3]) in their July 2008 portfolio filings and parties filed comments on the suggested changes on August 28, 2008.[4] The IOUs proposed two additional changes in their amended portfolio applications on March 2, 2009:

1. Change the current ceiling of 20 years on the maximum effective useful life (EUL) for all program measures to 30 years.
2. Remove residential interactive effects and commercial heating interactive effect from the calculation of energy efficiency savings in the Database for Energy Efficient Resources (DEER).

Pursuant to a March 17, 2009 ALJ Ruling, parties filed comments on the two new issues on April 3, 2009. Reply comments were filed on April 10, 2009.

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[3] The issues ruled out of scope in this proceeding were: (a) Updates to the Database for Energy Efficient Resources for the purpose of calculating incentives; (b) Ex-Ante True-Up for the purpose of calculating incentives; and (c) Exemption of Codes and Standards Costs from the Performance Earnings Basis.

[4] Comments were filed by The Natural Resources Defense Council (NRDC), County of San Francisco (CCSF), Women's Energy Matters (WEM), Schweitzer & Associates (Schweitzer), Local Government Sustainable Energy Coalition (LGSEC), Small Business California, National Association of Energy Services Companies (NAESCO), California Building Performance Contractors Association (CBPCA) and Clean Energy Solutions, Inc. (CESI). The Utility Reform Network and the Commission's Division of Ratepayer Advocates (TURN/DRA) jointly filed a protest on August 28, 2008. Reply Comments were filed by SDG&E and Southern California Gas Company (SoCalGas) (jointly), SCE and PG&E on September 8, 2008. On September 12, 2008, the Peer Review Group (PRG) filed its Report on the Utilities' applications. Some parties also commented on other issues which are not the subject of this interim decision, but which may be addressed in a final decision in this docket.

In their Applications, the Utilities state that Commission consideration of their requested changes is necessary to achieve energy efficiency portfolios which are consistent with our efficiency goals. Parties' comments are discussed below in each issue section. The Utility Reform Network and the Division of Ratepayer Advocates (TURN/DRA), filing jointly,[5] generally opposes the IOU proposed changes to our rules, contending that the changes could reduce the realized energy savings from Utility programs while increasing shareholder earnings. The NRDC supports much of what the Utilities propose, with some exceptions. Other parties address specific issues as indicated herein.

We take seriously the question of whether changes to rules and policies are necessary to better align our rules with our goals, adjust to ever-changing circumstances, and incorporate lessons learned. We recognize that in 2004 and 2005, we created a framework for Utility-administered energy efficiency programs in Decision (D.) 04-09-060, D.05-01-055 and D.05-04-051 that may not have been easy to carry out. Those decisions made significant changes to the then-existing programs, including:

1. Adoption of aggressive annual and ten-year cumulative goals for measured and verified electricity and natural gas savings by megawatt hour, megawatt, and therm;
2. Allowing the IOUs to develop their own programs and portfolios. Commission oversight of portfolio design was limited generally to determining whether each portfolio as a whole was cost-effective according to the Total Resource Cost and Program Administrator tests and achieved the IOUs' numerical savings goals; and

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[5] TURN and DRA filed their April 3, 2009 and April 10, 2009 comments separately.

3. Requiring the Commission's Energy Division to develop, launch and implement an extensive EM&V program to ensure that the IOU programs actually produced electricity and natural gas savings that could be relied on to offset the IOU's electricity and natural gas purchases. The EM&V program is unprecedented both in the scope and scale of the undertaking and in the nature of the responsibilities placed on this Commission's regulatory staff.

The Commission and the IOUs have gained experience through the implementation of the 2006-2008 energy efficiency portfolios. Certain changes were implemented by this Commission through D.07-10-032. For example, that decision requires a significant shift in the IOUs' program mix toward approaches to market intervention which stimulate durable long-term savings and moderate a bias towards short-term measures under current rules. D.07-10-032 established parameters for the development of the next generation of energy efficiency programs for the 2009-2011 energy efficiency portfolios. In that decision, we also mandated the development of a long-term energy efficiency strategic plan (Strategic Plan) for the state, subsequently adopted in D.08-09-040. Of specific relevance to today's decision, D.07-10-032 considered several issues regarding our cost-effectiveness and savings calculations.

However, as we consider adjustments to various elements of our program, we must move forward in a manner that is consistent with the overall purpose of our energy efficiency programs. Although the IOUs have described their requested changes as "policy determinations," most of the IOU-requested changes involve complex technical details on how savings from certain consumer actions are attributed to, or not attributed to, IOU programs and the inputs to the cost-effectiveness tests for the IOU portfolios. For simplicity, we will refer here to the requested changes as "policy issues."

A technically sound EM&V process is the cornerstone of this Commission's compliance with Public Utilities Code Section 454.5(b)(9)(C)'s mandate that we ensure that the IOUs first procure all cost-effective energy efficiency resources and with the Assembly Bill (AB) 32 mandate that greenhouse gas (GHG) reductions be real, verifiable, and additional. It is of paramount importance to maintain the analytical rigor of our methodologies to count savings and financial benefits accruing from energy efficiency efforts. If these programs do not produce verified cost effective savings, we may no longer be able to justify spending ratepayer funds on energy efficiency or ensure that rates are just and reasonable.

This distinction is critical. The foundational premise of our current energy efficiency programs is that efficiency savings are an energy resource and are the top priority in meeting the IOUs' resource needs. We adopted this policy in the 2003 Energy Action Plan and implemented the policy in D.04-09-060 by requiring the IOUs to purchase with procurement funds all cost-effective energy efficiency resources, in excess of the public goods charge-funded efficiency programs.

We recognized that the only way to justify this expenditure of procurement dollars and to confidently require the IOUs to purchase less electricity and build fewer power plants was to ensure that the savings from the energy efficiency programs are real and verifiable. We therefore removed EM&V responsibility from the IOUs and directed our staff to develop an EM&V program that used expert analysis and sound technical methodologies to count energy savings from ratepayer funded energy efficiency programs.[6] Our goal

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[6] D.05-01-055 gives Energy Division the lead role in development of EM&V protocols and procedures.

was to establish an independent system that was free of the inherent conflict of interest presented in IOU EM&V and from external pressures that would compromise the integrity of the EM&V results.

We note that we are not addressing the Utilities' request that we no longer use *ex post* measurement in our EM&V studies with regard to 2009-2011 program implementation, as this issue is outside of the scope of the proceeding. However, we do recognize that there are specific cases of incongruity between our adopted goals and the DEER which may require reconciliation. In this decision below, we address issues of cumulative savings and interactive effects which impact goals. There may also be a need in this proceeding to further consider changes to our existing goals to better match the most recent savings parameters of the DEER.

## 3. Issues and Discussion

In their Applications, the IOUs present both "mandated" and "preferred" versions of their portfolios. The "mandated" versions use existing Commission policies and directives. The "preferred" versions incorporate the policy changes advocated by the IOUs. The Utilities state that Commission adoption of their policy positions is necessary to achieve energy efficiency portfolios which are consistent with our energy efficiency savings goals. For example, PG&E states that the "preferred" changes must be adopted or else its portfolio "would not achieve the California Public Utilities Commission (CPUC) goals pursuant to D.07-10-032, would lead to a 28% reduction in the amount of carbon dioxide avoided and eliminate support for the long-term goals of the Strategic Plan." Similarly, SoCalGas states that adoption of these policies is essential to both AB 32 goal achievement and the "big, bold" visions laid out by the Commission in D.07-10-032. SDG&E states that if the IOUs' policy changes are not approved, they will not be able to implement portfolios that achieve the energy savings goals envisioned by the Strategic Plan, AB 32 greenhouse gas reduction and the Energy Action Plan.[7] Southern California Edison Company (SCE) makes a similar argument that the IOU policy changes would allow the Utilities to focus on execution of energy efficiency portfolios that support all of the State's energy efficiency goals. SDG&E and SoCalGas contend that they would need to spend an additional $200 million or more each on their portfolios to make them cost-effective if the IOU policy proposals are not adopted. PG&E and SCE state that their portfolios would be less cost-effective and would fail to meet the Commission's energy savings goals if their "preferred" portfolios are not adopted.

For each of their proposed changes, the IOUs have identified their analytical concerns; we will address these points in this decision. However, the IOUs have not provided evidence on the individual and cumulative impacts of their proposed changes on energy savings, cost-effectiveness and strategic goals. We do not have sufficient information to judge the relative importance of the IOUs' proposed changes (individually or collectively). On a broader level, there is insufficient evidence to verify the overall claim of the IOUs that their proposed package of policy changes must be adopted as a whole in order to achieve our major energy efficiency objectives, or that these changes will not compromise the integrity of our EM&V results.

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[7] SDG&E has separately requested a 25% reduction to its electricity savings goals, because these goals were established on a different basis than for the other utilities. This issue, which was recognized by the Commission in D.07-10-032 and D.08-07-047, will be addressed in the final decision in this docket.

### 3.1. Cumulative Savings

Our current rules on cumulative savings goals were first developed in D.04-09-060 to ensure the Utilities focus on long-term savings. We addressed this issue in depth in D.07-10-032 and concluded we should maintain our adopted approach, because our rules should motivate Utilities to pursue energy efficiency programs with long-term savings, as opposed to those with short-term payback and short EULs. We recognized that savings from a particular year's performance diminish through time as the measures installed in earlier years decay in performance or reach the end of their useful lives. We clarified that the definition of cumulative savings should encompass any such decay and that the IOUs would be held accountable to replenish decayed savings under cumulative goals. We noted that there are three generic ways to reduce or replenish decay: (1) repeat programs at additional expense in later years to replace "dead" measures in kind, (2) avoid short-term decay by promoting longer life measures in early years, or (3) document that market transformation of certain products of measures guarantees that like-efficiency measures are routinely installed when the consumer replaces an expired measure. We also reiterated our direction from D.04-09-060 for the Utilities to use 2004 as the base year for cumulative savings and to include these savings in reports required under our EM&V protocols for post-2005 programs.

#### 3.1.1. Parties' Positions

The IOUs have requested that the rules we have set forth in 2004 and 2007 for cumulative savings should be changed, such that "cumulative" refers to the sum of the annual savings goals for the three-year portfolio period upon which the proposed budget is based; in this case, 2009 through 2011, rather than our current rule that the savings are cumulative going back to 2004 as the baseline year.

The Utilities claim no adjustment for decay was made when the goals were adopted in 2004, and that the 2002 energy efficiency savings potential study underlying the goals did not consider such adjustment.  The IOUs admit that the 2002 potential study may have assumed that customers would replace efficient measures with similar measures, but claim that it was unclear whether these customers would participate in IOU programs (as opposed to, for example, replacing no longer useful Compact Fluorescent Lamps (CFLs) with replacement CFLs not subsidized through utility programs).

The IOUs also claim that the energy savings potential study did not incorporate increases in appliance standards and building codes, or manufacturer production of more efficiency technologies outside IOU programs, which would reduce the amount of potential savings available for IOU programs.  However, the IOUs claim that there is no way to reasonably track or report such savings through IOU programs and it would be unreasonable, if not impossible, for IOUs to make up for savings that have been addressed by other sectors in the marketplace.

The IOUs argue that certain changes to policy for counting savings implemented in the Energy Efficiency Policy Manual  adopted in D.07-10-032 create a problem in implementing cumulative savings for a period longer than the three-year program cycle.  For example, they state it is unclear when the useful life of savings should start for measures committed back in 2004 but not installed until 2007.

Utilities point to D.08-07-047 - our decision determining future energy savings goals - as adding an additional layer of uncertainty.  This is because that decision determined that energy savings goals in 2009-2011 should be considered on a gross basis, as compared to net of free riders as before. This means that the Commission will mix net achievements for 2004-2008 with gross achievements for 2009-2011. Utilities claim layering net and gross achievements complicates the implementation of cumulative savings as it ignores the gross savings that are no longer available for IOU programs, since these savings were not incorporated in the "net" accomplishments during the 2004-2008 period.

TURN/DRA oppose the IOU proposal. They support the current definition of cumulative savings as appropriately measuring decay and lifecycle savings. TURN/DRA also argue that the Commission should reject the Utilities' request because this change would focus energy efficiency programs on short-term savings, lasting only through the current portfolio period, rather than the long-term enduring savings envisioned by D.07-10-032.

NRDC supports the IOU proposal. NRDC believes cumulative savings in this program cycle should only be for 2009-2011 because no ex-post data exists from both 2004-2005 and 2006-2008 to inform IOUs how much they may need to make up. Therefore, NRDC argues it is unfair to hold the IOUs accountable for ensuring programs provide savings for this period.

#### 3.1.2. Discussion

Our current policy on cumulative savings goals was first developed in D.04-09-060 to ensure the Utilities focus on long-term savings. D.07-10-032 maintained this approach, finding that it aligned the public interest in long-term solutions with the Utilities interest in achieving annual goals.

Overall, our view has not changed. We maintain our focus on long-term savings, and have provided considerable detail and guidance in our Strategic Plan for all market sectors on programmatic efforts to achieve these goals. We do not find any need to reconsider our overall policy that requires the Utilities to report and attempt to meet long-term cumulative goals.

However, the IOUs raise valid concerns with the use of the 2004-2005 program years in calculating cumulative savings.  We agree that 2004 and 2005 data are not fully appropriate for inclusion in cumulative savings goals.  In 2004-2005, programs were selected by the Commission while the Utilities proposed most program starting in 2006.  As a result, we adopted more rigorous evaluation protocols for the 2006-2008 cycle in D.07-10-032.  In addition, the evaluation results for 2004-2005 were not reported in a fully consistent manner.

Therefore, 2004 and 2005 data is not directly reconcilable with 2006-2008 evaluation results.[8]

We agree with the Utilities that the 2004 goals decision did not incorporate decay, making it difficult for Utilities to make up for lost savings which they could not control nor properly account for. We note that this point also applies to 2006-2008 programs, and potentially to 2009-2011 as well. We do not rely on this point to conclude that 2004-2005 data should be excluded from cumulative savings.

For the purpose of EM&V the concept of "decay" concerns what happens to energy savings after the expected useful life (EUL) of a measure has expired. For example, when a residential CFL with a EUL of seven years burns out, that bulb could be replaced with an incandescent or with another CFL. If a given efficiency installation reverts to its inefficient alternative at the end of its expected useful life, the savings used to meet cumulative goals in future years are lost. Measurement of decay is important not only to determine achievement of cumulative savings goals, but also as an indication of whether the utility programs are contributing to market transformation for a particular measure.

The Commission does not yet have established assumptions for the treatment of post-EUL decay and savings attribution. The potential treatment of savings at the end of a measure's EUL ranges from the most conservative assumption that 100% of the savings are lost and must replaced by additional IOU measures and spending, to the most optimistic assumption that once a measure is installed, the socket is effectively transformed and savings will accrue

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8 This issue is discussed in more detail in the February 2009 Energy Division Verification Report for 2006 and 2007 energy efficiency programs.

at constant rates in perpetuity. We expect that the empirical truth lies somewhere between these two extremes. However, we do not currently have EM&V data to inform where the balance lies for a given measure.

The IOUs seem to believe that the Commission will use the most conservative assumption that every CFL will be replaced with an incandescent bulb for now and forever, and therefore 100% of the savings must be replaced once a CFL reaches the end of its useful life. This is nowhere stated as the Commission policy on decay, and there are many reasons to believe that savings will persist beyond the expected useful life of a given measure. In the case of CFLs, which constitute the vast majority of savings that will reach the end of their EULs in near term program cycles, high levels of naturally occurring adoption of CFLs greatly moderates the possibility of decayed savings. In addition, the implementation of the Huffman Bill will, to a large degree, eliminate the possibility of reversion to inefficient technologies at the end of most lighting measures useful lives. In light of these factors, our expectation is that decay will be significantly below 100%.

Without clear metrics for determining decay rates, we acknowledge that it could be difficult for the IOUs to design their 2009-2011 portfolios to make up for decayed savings from the 2004-2005 portfolios. It should be noted, however, that the bulk of the CFLs installed in the 2006 to 2008 programs would reach the end of their useful lives during the 2012-2015 program years, after the Huffman Bill takes effect. While the issue of decay rates for 2006 to 2008 CFLs is not yet resolved, this issue will be resolved well before the 2012-2015 portfolios. We will ask our Energy Division to establish specific assumptions around decay based on the above discussion in advance of the 2012-2015 applications, with opportunities for interested parties and persons to provide input on and comment on the Energy Division recommendations.

Overall, we do not see a compelling reason to eliminate 2006 and 2007 data for the purposes of cumulative savings. In contrast to 2004 and 2005, the 2006-2008 evaluation and reporting are centralized in Energy Division and governed by Commission-adopted California Evaluation Protocols adopted in 2006 and encompassed in the Energy Efficiency Policy Manual. Further, the Energy Division Verification Report of 2006 and 2007 energy efficiency activities now provides 2006-2007 data, which can be reasonably projected to 2008 and beyond by the IOUs. We are also not convinced that the change from net goals to gross goals in D.08-07-047 causes a significant problem in accounting for cumulative goals. That decision states that "The shift from net-to-gross (NTG) goals requires that we adjust our definition of cumulative savings so as to include this change. All that changes is that, unlike savings from program years 2004-2008 (which are measured as ex-post net cumulative savings) 2009-2011 savings will be measured as ex-post gross layered on top of 2004-2008 savings to measure cumulative savings."[9]

Given these concerns, we will define the requirement of cumulative savings for this program cycle to cover the period 2006-2011. This definition of cumulative savings is fair and reasonable because it excludes the imperfect data of 2004-2005 but is consistent with our direction in D.07-10-032 that short-lived measures early in the 2006-2008 cycle need to be replaced with more robust programs in the 2009-2011 IOU portfolio.

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[9] D.08-07-047 p. 29.

Although we find it necessary to adjust the starting point for counting cumulative savings, this action does not signal a weakening of our commitment to our end goal of cumulative savings. As we have stated previously, cumulative savings are a critical element of our overall strategy to create long-term, lasting savings through our ratepayer investments. Without the cumulative savings goals, we are unable to ensure that energy efficiency programs will be comparable to investments in power plants. We remain firmly committed to the requirement adopted in our previous decision that the Utilities meet cumulative savings through 2020.

### 3.2. Interactive Effects

Historically, the energy savings profile of a given efficiency measure has been considered in isolation. The impact of installing a single CFL, for instance, is estimated as the difference in its own energy consumption and that of the incandescent bulb it is assumed to replace. However, in some cases, measures have systems impacts, or "interactive effects," which are not captured by baseline comparisons along a single parameter.

For instance, inefficiency in devices and appliances is often realized as waste heat. Heat emitted from an inefficient appliance has the potential to interact with the overall heating or cooling requirements within a given space. In the winter, or in generally cool climates, the heat from inefficient lighting effectually serves to displace heating requirements that would otherwise exist. In turn, if a more efficient device replaces an inefficient one in an enclosed space, the temperature of that space will decrease, all else being equal. As an example, if incandescent lamps in a home or office are replaced with more efficient lamps, such as linear fluorescents, CFLs or light-emitting diodes, less heat will be produced in the space. Depending on the season or climate, this could result in either an increase in space-heating energy requirements or a reduction in space-cooling demand and energy requirements.

Recent updates to the DEER database have attempted to incorporate adjustments for interactive effects for a number of lighting and appliance measures, resulting in negative therm impacts and positive kilowatt-hour (kW) demand impacts for select measures. The data underlying the Commission's currently adopted goals, however, do not reflect assumptions regarding interactive effects.

#### 3.2.1. Parties' Positions

The IOUs request that the Commission remove negative therm interactive effects (but not positive kW demand effects) from DEER for the 2009-2011 program cycle.[10] The Utilities claim that due to the inconsistency with the adopted goals, the inclusion of interactive electric savings effects in DEER undermines gas savings accomplishments making it impossible for gas and gas/electric utilities to achieve both gas and electric goals under existing rules.

The IOUs also raise concerns regarding the validity of the assumption that interactive effects exist to the degree reflected in DEER. In support of this, they cite a CFL Energy Impact Study dated January 2009 done by San Diego State University (McNulty Study). The McNulty study examined 2,800 low-income homes in San Diego with CFLs installed, and used various regression models to test whether electricity and gas effects could be correlated to the CFL installations. The study ultimately finds that residential heating-related interactive effects are insignificant. The Utilities claim therefore that there is

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[10] *See, e.g.*, SCE Testimony, Ch. 2, pp. 34-35.

insufficient statistical evidence to support the negative heating interactive effects as stated in DEER.

Parties express a wide range of views in terms of how to treat interactive effects for the 2009-2011 program cycle. The Community Environmental Council (CEC) urges the importance of maintaining an empirical foundation to our metrics for energy efficiency program planning and evaluation, and recommend the inclusion of interactive effects to that end. CEC also raises concerns regarding the McNulty Study itself. CEC recommends that the Commission conduct a thorough analysis of the McNulty Study as well as a literature review on interactive effects before making any additional changes to the DEER interactive effects analysis and its use in the 2009-2011 proposed portfolios.

NRDC also supports the incorporation of thoroughly vetted values for interactive effects for future portfolio cycles, but not for the 2009-2011 cycle. If the Commission were to utilize the updated 2008 DEER values for interactive effects in this portfolio cycle, NRDC would recommend that the 2009-2011 goal be adjusted to maintain consistency. However, considering the current timing for review and approval of 2009-2011 applications, NRDC recommends that interactive effects be incorporated into future potential studies, goal updates and portfolio cycles as opposed to 2009-2011.

DRA recognizes the impact of interactive effects on energy savings claimable by utilities, and suggests that rather than ignoring their existence altogether, they should be incorporated into portfolio design. DRA also questions the applicability of the McNulty Study's sample of low-income residences, to the broad range of interactive effects covered in DEER, including multi-family dwellings and non-residential sectors, in particular the commercial sector, as well as appliances beyond CFLs. Finally, DRA calls into the question the validity of the McNulty Study for a number or reasons, including: the lack of professional review, limited data set, and sample characteristics. As such, DRA suggests the report provides insufficient evidence for removing all interactive effects from DEER, pointing out a number of empirical studies that have measured both positive and negative interactive effects.

TURN also holds the position that the findings of the McNulty Study do not justify a reversal in the Commission's policy toward interactive effects, for the same reasons articulated above.

#### 3.2.2. Discussion

A technically sound EM&V process is the cornerstone of this Commission's compliance with Public Utilities Code Section 454.5(b)(9)(C) mandate that we ensure that the IOUs first procure all cost-effective energy efficiency resources and with the AB 32 mandate that greenhouse gas (GHG) reductions be real, verifiable and additional. It is of paramount importance to maintain the analytical rigor of our methodologies to count savings. Compromising the technical integrity of our counting methodologies is tantamount to compromising the reliability of energy efficiency as a resource. Given the priority energy efficiency holds in our loading order, we are duly committed to reflecting our best knowledge regarding savings in DEER. With this in mind, we turn to the two issues raised by the IOUs: whether interactive effects are indeed legitimate and worthy for inclusion in DEER, and if so, how to reconcile the inconsistency inherent in our adopted goals.

For the reasons raised by parties above, we find the McNulty Study deficient as a sole basis for removing interactive effects currently in DEER. In particular, the major factor in question is the degree to which CFLs result in negative therm heating interactive effects. In order to fully study this question, it would be helpful to have a sample which includes residences in climate zones with a heating load more representative of California households. In San Diego where heating load is relatively low, the difference between using CFLs rather than incandescents is unlikely to show up in household's gas consumption. We are also given pause by the study's exclusive focus on low income households, which have distinctively characteristics relative to the broader housing stock to which our general energy efficiency programs apply.

It also bears mentioning that interactive effects are also incorporated into ASHRAE test standards, lighting standards, and international GHG impact standards. In addition, the evaluation of the 2004-2005 California Statewide Savings by Design program found negative interactive effects. Accordingly, we maintain our position that interactive effects are appropriate for incorporation into DEER.

Ensuring consistency with our goals is another matter. While we seek to set aggressive targets for our utilities, we take seriously the reasonability of success. In order to get a preliminary understanding for the magnitude of this impact, DRA cites analysis conducted in the Energy Division's February 2009 Verification Report for 2006-2007, which presented utility savings achievements over 2006 and 2007 calculated with no interactive effects, positive only effects, and all interactive effects. The Verification Report found that:

- Positive interactive effects increase energy savings by 2.7% and demand savings by 7.7% statewide;
- Negative impacts decrease gas savings for PG&E by 26%, and for SDG&E by 22%;
- SCE has no adjustment for negative impacts; and
- SoCalGas has no interactive effect adjustments.

While the inclusion of interactive effects in DEER is unlikely to undermine completely the ability of utilities to develop portfolios which meet Commission goals, we do recognize the significant impact they have on assumed savings achievements, particularly in the case of our dual-fuel utilities, SDG&E and PG&E. We find that it is reasonable to make adjustments to SDG&E and PG&E's gas goals to adjust for unique circumstances raised by incorporating interactive effects in evaluation methodologies. Drawing from the 2009 Energy Division Verification Report's analysis of 2006-2007 data, we will reduce SDG&E and PG&E's 2009-2011 gross Therm goals by 22% and 26%, respectively.

In comments on the proposed decision, the Utilities state that therm goals should be reduced by 40% or more to take into account interactive effects. While other parties see no need for any therm goal adjustment, we do believe an adjustment is necessary. PG&E and SDG&E calculate that 40% and 45% reductions are appropriate to take into account interactive effects. This calculation assumes these Utilities' proposed portfolios will be adopted; we do not know what changes we will ultimately make to the Utilities' proposed portfolios. We recognize that there is not a perfect alignment between the adopted adjustment in therm goals and interactive effects. Further study is needed as the Energy Division verification report was not intended as a definitive study on the relationship of interactive effects and goals. The adopted adjustments are useful because they will be incorporated into the update to the Utility filings required by this decision. In the final decision in this proceeding, we will again review the data and consider whether a different therm goal adjustment should be made to take into account interactive effects for the adopted portfolios.

### 3.3. Energy Savings Credit for Actions Taken by Customers With External Motivations

#### 3.3.1. Parties' Positions

In D.07-10-032, the Commission acknowledged that Utility-administered efficiency programs need to be leveraged and integrated with other statewide efforts to ensure maximum energy savings for the State:

> In the past, we have emphasized utility programs, utility funding, and utility customers. This is logical given the limits of our legal jurisdiction, but this approach has resulted in fractured energy efficiency program development and delivery. Cost-effective use of resources for maximum reductions in energy demand will require the commitment of the most influential decision-makers who can affect comprehensive change. In order to reach a goal of making energy efficiency an integral part of "business as usual," we need a pronounced commitment from business and government leaders and a more collaborative approach that involves all key stakeholders."[11]

The IOUs contend that our adopted regulatory framework, in which savings can only be applied to the Commission's goals if they are both attributable to the IOUs' energy efficiency program and specifically identified by the customer as the reason for engaging in the activity, does not motivate increased cooperation and collaboration. They argue that, to the contrary, current rules compel Utilities to compete with other entities to have energy savings attributable to their programs. The IOUs request that they receive full energy efficiency savings credit for energy efficiency actions taken by customers who are supported by IOU programs but who may be motivated by other factors, including:

[11] D.07-10-032, p. 7.

a. Federal and state policies or legislation (including the recent Economic Stimulus package);
b. Federal funding or loans;
c. Local codes and ordinances; or
d. Sources of "green" messaging.

The IOUs argue that such a rule change is consistent with the Commission's savings goals for 2009-2011, as adopted in D.04-09-060. They point out that because the 2002 potential study upon which the savings goals are based did not envision the increased scope of non-utility efforts likely to be impacting energy savings in 2009-2011, the potential captured by these efforts is embedded within the goals to which the IOUs are to be held accountable. Thus, the IOUs argue that removing the ability to count such savings hampers their ability to design and implement a portfolio that meets Commission's adopted 2009-2011 goals.

Parties are divided as to the reasonableness of this request. NRDC agrees that IOUs should get credit for savings that may also be influenced by other statewide GHG reduction efforts. They argue that as the state moves towards aggressive greenhouse gas reduction programs and increased coordination, it will become increasingly difficult to assess what was the motivating factor for consumers who engage in energy efficiency programs.

TURN/DRA urge the Commission to reject this IOU request, arguing that it would allow IOUs to receive double-credit for certain energy savings, *e.g.*, those occurring from codes and standards since our rules already permit Utilities to claim savings from codes and standards. TURN/DRA also claim the Utilities' request is contrary to the Commission's order for the Utilities to identify an "end game" for each technology or practice, to bring about market transformation, and to phase-out the need for ratepayer subsidies.

LGSEC argues the Utilities should not be able to claim 100% of savings from codes and standards. It states that our rules on allowing savings from codes and standards must include (a) that a prescribed menu of activities jointly developed by the partners and the utilities be developed indicating what constitutes support from the utilities, (b) that the utility must clearly demonstrate its actions actually supported the adoption of the code or standard, and (c) that the local government entity be provided a right of first refusal to retain any savings that might accrue from the code or standard adoption. LGSEC claims SCE is not encouraging or supporting green building ordinances (*e.g.*, efforts in Los Angeles County), so it would be unreasonable to allow them to take 100% of credit for local codes and standards.

#### 3.3.2. Discussion

The issue of energy savings credits for actions taken by customers through existing Utility energy efficiency programs but motivated by external factors is not addressed at a detailed level in previous Commission decisions. Our basic policy is that Utility programs-funded by ratepayer dollars should be aimed at creating measurable energy savings, and Utilities should receive credit toward their energy efficiency savings goals (and in the incentive mechanism) for energy savings associated with these programs.

Utility involvement and partnership in promoting state policy and legislation, or local codes and ordinances, can promote the broader goal of improving energy efficiency statewide by providing incentives for measures and services. However, we also believe that they are only partially responsible for any resulting energy impacts and GHG emissions reductions since other entities that put the regulation or other opportunity in place (*i.e.*, code, standard, or ordinance) should retain appropriate credit for their role.

Traditionally, savings attribution has been dealt with in the context of our EM&V activity by tracking free-ridership and NTG ratios at the measure level across Utility portfolios. These metrics seek to track the influence IOU activity has had on observed changes in energy use for a given measure. The current Energy Efficiency Policy Manual (version 4.0) addresses savings created apart from direct Utility programs by considering certain customer actions as "free-riders." For example, the Policy Manual includes a method to attribute savings from green messaging if Utilities may have had some part in getting the message to customers. Current NTG methodologies use sampling methodologies to identify the motivations of customers that participate in IOU programs. Utilities may receive partial savings credit for energy efficiency actions taken by customers who may be motivated by state policies or legislation, local codes and ordinances, or multiple sources of "green" messaging when there are circumstances known as partial free-ridership, or any other factor influencing their participation.

The Utility request, in essence, asks that free-ridership due to external motivations be ignored in a number of broadly defined instances for the sake of savings attribution to Utilities, to encourage greater collaboration among Utilities and other market actors.

In D.08-07-047, the Commission established that for the 2009-2011 program cycle the adopted goals would be treated as gross savings goals.[12] This decision

[12] D.08-07-047, COL 4, p. 39.

was driven largely by the finding that the savings goals for 2009-2011, adopted as part of D.04-09-060, were significantly higher than up-to-date assessments of potential evaluated on a net basis, but well-aligned with gross potential. However, the decision's transition to gross goals also stated the intent "to motivate collaboration among regulatory agencies, IOUs, local governments, municipal utilities and private entities."[13]

Following D.08-07-047, the Utilities have submitted portfolios (both in the "Mandated" and "Preferred" scenarios) which are designed to meet gross savings goals.  By implication, attribution of savings for a given measure should not be a limiting factor in the composition of portfolios which achieve adopted savings goals for 2009-2011.  We are therefore unconvinced by the Utilities' claim that the ability to design and implement a portfolio which meets the Commission's savings goals turns on this requested change in attribution policy.

Questions of savings attribution matters do continue to impact cost-effectiveness calculations.  Despite D.08-07-047's setting of gross goals for 2009-2011, it remains exceedingly important that we continue to track the influence of Utility programs on observed changes in energy use through "net analysis."  This is particularly so in the face of increased scrutiny over the deployment of public funds, and the need to maximize the efficacy and success of utility-run efficiency programs.  Without attention to net savings, administrators have an incentive to claim savings that are principally or exclusively market driven, rather than program-induced.  This diverts program resources from opportunities that would benefit most from program

[13] D.08-07-047, p. 19.

interventions, as the administrator is indifferent to the fact that a much higher societal and ratepayer return is available from a measure with a higher NTG value, as opposed to a low one.

We decline to adopt changes to current rules allocating credit to the Utilities for customers participating in ratepayer funded programs, but potentially motivated by external factors.  This determination does not infer that savings attributable to Utilities under such programs will be zero.  Nor does it prejudge how savings will be credited under the pending revision of the RRIM on an ongoing basis.

Net, though difficult to measure, is a fundamentally important metric for optimizing portfolio performance and maximizing societal benefits.  Efforts are under way both here at the Commission and elsewhere to improve EM&V methods, particularly as activities scale up at a national level.  It may be necessary to reevaluate the determinations here as new approaches and protocols concerning multi-actor attribution emerge.  But for the 2009-2011 timeframe with our use of gross goals, we expect that the current approach will remain.

In responses to comments, we clarify our policy in one respect.  CCSF points out that current CPUC policy disadvantages businesses and residents of the communities with "reach codes," (mandatory levels of energy efficiency and/or "green construction" in new or renovated buildings at levels greater than minimum statewide codes) since these businesses and residents would be ineligible for ratepayer funded incentives for energy efficiency measures that would be available to the businesses and residents of less forward thinking communities.  This acts as a strong disincentive for local governments considering implementation of "reach codes" and standards since the effect is to deny their constituents funds that they would be eligible for absent a local reach requirement. Local reach codes and standards can be powerful program marketing tools for energy efficiency programs, and set precedents that can spur stricter codes and standards statewide.

We agree with CCSF that local ordinances that exceed state codes and standards can and should be part of carefully planned campaigns for market transformation. Therefore, incentives and savings in communities with "reach" requirements should be no different from those in other communities, and not be treated as free riders. In future energy efficiency funding cycles, we expect Energy Division staff will consult with the Utilities and other stakeholders to determine a framework for determining when "reach" mechanisms have become mainstream and markets are sufficiently transformed as to warrant the suspension of current efficiency incentive programs.

### 3.4. Extension of EUL Up to 30 Years

#### 3.4.1. Parties' Positions

Currently, our rules provide that the maximum EUL of all energy efficiency measures is 20 years. IOUs request that the maximum EUL be extended up to 30 years. The IOUs claim the 20-year limit is arbitrary and does not reflect the actual lifetime of some measures. They contend the 20-year rule biases the portfolio toward shorter measures whose savings are accumulated within the 20-year term, because the inability to count savings after the $20^{th}$ year reduces the calculated cost-effectiveness of measures lasting longer than 20 years.

Parties generally support removing barriers to the implementation of longer-term measures; however, the Utilities provided no empirical evidence to support the claim that maximum EUL should be extended from 20 to 30 years to "better reflect the true lifetime of certain measures." TURN reframes the question as,

> . . . how the Commission is to determine the appropriate maximum (and minimum) EUL for the energy efficiency programs. Most obviously, the effective useful life of a specific measure must be based on more than utility opinion, assumptions or non-engineering judgment.[14]

TURN claims a 30-year maximum EUL may be a more accurate representation of the actual lifespan of certain measures, however, just as the IOUs argue that the 20-year EUL was an arbitrary limit, TURN states that there is no evidence that a 30-year limit is any less arbitrary.

#### 3.4.2. Discussion

We agree that it is desirable to provide proper credit for measures that will provide long term savings even when the life of those savings exceeds our currently authorized maximum EUL of 20 years. However, we also agree with parties' comments that any increased EUL should be substantiated by supporting measure empirical data and subject to review by Energy Division.

It is important to note in addition that if the maximum EUL is extended to 30 years, it would not imply the automatic ability for IOUs to use higher values for any measure without providing empirical evidence to support updates to DEER or other IOU proposed measures. Allowing EUL values beyond 20 years must also include proper consideration and accounting for possible increased equipment maintenance and operating costs, possible performance degradation

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[14] Comments of TURN on Additional Policy Issues, April 3, 2009, Section III. (unpaginated).

or retrofit of older equipment as future energy efficiency technologies improve and energy prices increase.

Adopting a new 30-year maximum EUL will require substantial changes to cost-effectiveness tools, avoided cost calculations, and require 10 years of additional data on cost and performance. Our currently adopted avoided electric and gas costs would need to be extended out the additional 10 years. This would primarily require extending the gas price forecast for an added 10 years and calculating new avoided costs using the current methodologies using the extended gas forecast to provide 33 years of avoided cost data. To perform the required Total Resource Cost (TRC) and Program Administration Cost (PAC) calculations the current E3 Cost-effectiveness Calculators would also need to be expanded to allow an added 10 years of calculation. This would involve adding the 10 years of calculation capabilities to those calculators as well as re-calculating the combined measure loadshape and avoided cost datasets that allow the calculator to perform the TRC and PAC electric and gas benefits calculation.

As DRA points out in its April 3, 2009 comments, the impact of the Utility-requested change is likely to be minimal. If a measure was assumed to provide equivalent performance for 30 rather than 20 years, the likely maximum increase in electric or gas benefits for that measure would not exceed between approximately 12% and 14% depending upon the specific Utility cost-of-capital based discount rate applied to the net-present-value calculation of benefits. This increment to the benefits would be increased approximately 3% under the Utilities' proposed use of a lower discount rate. If the IOU portfolios savings were comprised of 5% of savings for measures that could be extended from 20 to 30 years the overall impact on the portfolio benefits would be less than 1%. From a TRC perspective this will not have a substantial impact on portfolio cost-effectiveness.  For an individual measure, moving from an EUL of 20 years to an EUL of 30 years could transform a measure from being not cost-effective with a TRC of near 0.9 to being cost-effective.

The Utilities provided only cursory information as to the number or type of measures that would, in their view, qualify to be assigned an EUL value of over 20 years.  The Utilities have also not provided an estimate of the savings those measures would contribute to their portfolios and an estimate of the percentage increase in portfolio avoided costs which might result for the proposed increase to those measures' EUL value.  From the discussion above, we conclude that the portfolio level impacts on savings and benefits might not be more than 1%.  We also conclude that substantial work would be required to allow the accurate calculation of this increased benefit.

We agree with the DRA and TURN comments that it is important to consider both the minimum and maximum EUL for the Utilities' energy efficiency portfolio.  We note that the Utilities have substantial energy efficiency savings in past portfolios as well as their current 2009-2011 applications due to measures with lifetimes that are very short.  For example, CFLs installed into many types of commercial buildings are a very significant portion of the savings estimates submitted by the Utilities for both 2006-2008 and 2009-2011 program cycles.  The Utilities agree with the DEER EUL values for these measures being less than three years.  These very short life measures form a very much larger fraction of the portfolio than measures which have 20-year EUL values.  We believe, however, it is reasonable to consider allowing EUL values greater than 20 years for program cycles beyond the 2009-2011 cycle.  However, from the discussion above, we expect that the portfolio level impacts on savings and benefits is likely to be minimal. We also expect that substantial work would be required to allow the accurate calculation of this increased benefit. Given these facts, we will not require that this change be made in advance of portfolio approval.

We deny the Utilities' request to extend the maximum EULs from 20 to 30 years for the 2009-2011 program cycle due to both the lack of specific information from the Utilities and that the substantial amount of work to implement the requested change, as well as the limited value of undertaking this substantial effort. We do not believe at this time that devoting scarce Energy Division staff or contractor resources to this issue is warranted. We believe, however, it is reasonable to consider allowing EUL values greater than 20 years for program cycles beyond the 2009-2011 cycle.

We direct Energy Division to conduct a study on this issue and report back to the assigned ALJ and Commissioner in the relevant docket, no later than December 1, 2010, so that this study can be used for the next round of energy efficiency portfolios. Energy Division should solicit input from stakeholders, its EM&V contractors and other experts in developing its report.

### 3.5. Use of Post-Tax Discount Rate to Calculate Performance Earnings Basis Energy Savings

#### 3.5.1. Parties' Positions

Consistent with conventions of financial analysis, benefits (*i.e.*, the dollar value of energy savings accruing in the future as a result of an energy efficiency measure) are discounted by a fixed rate when presented in the Utility portfolios.

The IOUs suggest, in their testimony,[15] that the practice of discounting savings over the lifetime of a measure in Policy Rule IV.2 to determine the cost-effectiveness of the IOU's proposed portfolio should be adjusted to use the individual IOU cost of capital modified for the Post-Tax Discount Rate.

The Utilities' full cost of capital is typically used to calculate the net present value of a capital investment in order to allow a comparison with some other alternative in terms of costs and benefits. However, the "true" discount rate, as used by financial institutions, is a calculation based on the utilities' cost of capital, deducting for the effect of taxes and is referred to as the Post-Tax Discount Rate.

The Post-Tax Discount Rate is calculated from the cost of capital summing the weighted average of the common equity cost and the preferred stock cost, and the weighted average of the long-term debt cost after a tax deduction is made for interest expense. As proposed for energy efficiency, this value would be applied to the cost of each measure, given its estimated useful life, and discounted back to its present value. The resulting cost streams for an energy efficiency portfolio would then be combined into a calculation called the Total Resource Cost (TRC), which quantifies the costs and creates a ratio of all the costs and the benefits of the energy efficiency portfolio as compared to the supply-side resource. The results provide an estimate of cost-effectiveness recognizing the avoided costs of comparable supply-side investments, and when weighted (two-thirds) with the Program Administrative Costs (PAC) (one-third), form the

15 PG&E 2B-57.

basis for the Performance Earnings Benefit (PEB) calculation, or the earnings potential of the energy efficiency portfolio ex ante.

The IOUs assert that a Post-Tax Discount Rate should be used for energy efficiency cost-effectiveness evaluation to properly reflect energy efficiency's position as "first in the loading order" for energy investments. PG&E and SCE state that a discounted Post-Tax weighted average cost of capital is appropriate, consistent with Energy Efficiency Policy Manual version 3.1 (Policy Rule IV.2 of Decision 05-04-051),[16] and Policy Rule IV.2 from the Energy Efficiency Policy Manual version 4.0 which states:

> "IV.2. This Commission relies on the Total Resource Cost Test (TRC) as the primary indicator of energy efficiency program cost effectiveness, consistent with our view that ratepayer-funded energy efficiency should focus on programs that serve as resource alternatives to supply-side options. The TRC test measures the net resource benefits from the perspective of all ratepayers by combining the net benefits of the program to participants and nonparticipants. The benefits are the avoided costs of the supply-side resources avoided or deferred. The TRC costs encompass the cost of the measures/equipment installed and the costs incurred by the

[16] SDG&E and SoCalGas did not submit comments on this issue.

> program administrator.[17] The TRC should be calculated utilizing a discount rate that reflects the utilities' weighted cost of capital."

SCE argues any final determination of the Commission on the appropriate weighted average cost of capital for energy efficiency should be used in the energy efficiency proceeding only. SCE states that it has used the "tax adjusted" discount rate in the 2006-2008 risk-reward mechanism and has continued its use for its application for 2009-2011. PG&E, which has also employed the "tax adjusted" discount rate in its preferred portfolio for 2009-2011, states use of the Post-Tax Discount Rate "best meets the direction and objectives in EE evaluation in recent decisions and in the Policy Manual (Version 3.1)." Although the Policy Manual does not explicitly address the issue of whether a Post-Tax Discount Rate or the full cost of capital should be used, PG&E states that "as opposed to any higher discount rate, use of the Post-Tax Discount Rate sets the appropriate threshold for evaluating EE programs, particularly when these are compared to alternative supply-side options."

D.05-04-051, which reaffirmed the use of the IOU's weighted cost of capital as the basis for energy efficiency cost-effectiveness calculations, considered and rejected proposals by some parties to utilize a "societal discount rate" in determining the present value of future benefits deriving from energy efficiency programs. The decision viewed energy efficiency in the current policy environment as a viable resource alternative to more expensive supply-side

[17] The TRC test looks at the "incremental" measure cost (not the full cost) when an energy-efficient appliance or measure promoted through the program is installed in lieu of the standard (less-efficient) appliance/measure that would have been installed, without the financial incentive or outreach program.

investments, and that the discount rate applied should facilitate comparisons among alternative investments.

TURN/DRA asserts that use of the Post-Tax Discount Rate is not appropriate because it only increases the estimated benefits of the portfolio programs, without any corresponding increase in savings.  Although TURN/DRA supports the "idea of metrics which incorporate the value of persistence, and allow long-lived programs to compete against CFL programs, they do not support the request at this time."  TURN/DRA believe the Commission should seek to normalize avoided cost approaches across proceedings, and that energy efficiency must be compared to supply side alternatives.

#### 3.5.2. Discussion

The discount rate is used in cost/benefit analyses of capital investments to provide a useful present value comparison of whether or not the capital investment may be cost effective over its expected life.  The cost/benefit analyses used for energy efficiency compare the costs of the utility building a new combined-cycle gas-fired generation plant or other comparable resource with investing in energy efficiency measures.  The comparison provides a cost estimate of a supply-side resource with energy efficiency resources using the weighted cost of capital for both resources in a net present value calculation.

TURN/DRA point out that using the Post-Tax Discount Rate increases the PEB, and hence incentive payments and the overall costs of the program.  This cost increase comes with no corresponding increase in avoided cost benefits, since this is only an accounting difference. This is a benefit to the Utilities, but may also benefit energy efficiency investments by improving their apparent cost-effectiveness.  However, while energy efficiency is first in the loading order per the Energy Action Plan, we are reluctant to change our policy rules on this issue simply to advantage this resource unless there is a compelling analytical basis for doing so.

The Commission has considered similar issues in the past for different types of investments and signaled a desire to normalize cost-effectiveness calculations across proceedings through R.04-04-025 (avoided costs), demand response (R.07-01-041), and distributed generation (R.08-03-008). When the discount rate issue was raised with respect to transmission investments, the Commission decided to use a pre-tax discount rate equal to the utility's cost of capital. In D.06-11-018, Finding of Fact 19, the Commission stated:

> Use of discount rates equal to the utilities' weighted cost of capital will facilitate consistent comparison of proposed transmission projects and alternative energy investments.

The Utilities wish to change the discount rate in the energy efficiency proceeding only. The treatment of energy efficiency investments should be based on a fair comparison to supply-side resources, not one with embedded inputs such as discount rates which vary by program or understate the costs of certain resources.

We recently considered this issue with regards to energy efficiency investments as well. Section IV, Rule 2 of the Energy Efficiency Policy Manual, Version 4, adopted in July 2008, requires the calculation of net present value for energy efficiency resources to incorporate the utility's weighted average cost of capital. In Version 4 of the Policy Manual, use of the discount rate for energy efficiency was changed from use of the average of all utilities' cost of capital to their respective costs of capital to be more accurate. Adjusting the calculation to incorporate the Post-Tax Discount Rate by removing the tax effect from the weighted cost of capital for energy efficiency resources would change the cost equation between energy efficiency and comparable supply-side resources.

The record does not support changing our current policy for energy efficiency with regards to the discount rate or changing the relationship between energy efficiency and supply-side resources. We do not agree that it is appropriate to use the Post-Tax Discount Rate for energy efficiency instead of the full weighted cost of capital to measure comparison with alternate resource choices. We will deny the Utilities' request and will use the individual utility weighted cost of capital adjusted for taxes for the 2009-2011 energy efficiency portfolio.

### 3.6. Modification of the Mid-Cycle Funding Augmentation Rule

Mid-cycle funding refers to incremental funding above the amount the Commission has already approved for a Utility's energy efficiency program cycle (in this case, 2009-2011). D.07-10-032, Ordering Paragraph 7, adopted Policy Rule 12, Section IV concerning mid-cycle funding as part of the Energy Efficiency Policy Manual. The Rule states:

> "Costs and energy savings from mid-budget cycle funding additions for programs other than low income energy efficiency (LIEE) programs shall be counted when calculating portfolio cost-effectiveness and the performance earnings basis in applying the energy efficiency risk/return incentive mechanism. Energy savings from mid-budget cycle funding additions shall count towards the utilities' energy efficiency goals for resource planning purposes only. Such savings shall not be counted towards the energy efficiency goals for the purpose of (1) satisfying the minimum performance standard (MPS) associated with the energy efficiency risk/reward incentive mechanism, or (2) determining which "performance band" (*e.g.*, deadband or applicable earnings tier level) should be used in calculating incentive payments or penalties. Each proposal to augment energy efficiency program funding must be carefully reviewed to ensure that such funding is

> not misclassified as LIEE, given the implications associated with LIEE classification that carry over to the adopted incentive mechanism. Savings associated with any mid-cycle funding augmentation to the LIEE program will not count towards the MPS."

In D.07-10-032, we noted that mid-cycle funding augmentations provide the Utilities with additional funding to accomplish a goal that was set with a lower budget. We determined that it would be unfair to provide extra funding to utilities between cycles in a way that would increase shareholder earnings with no additional offsetting risks. To this end, we adopted fund-shifting rules so that mid-cycle funding augmentations would be counted in the calculation of portfolio cost-effectiveness, and in the PEB for utility incentive awards. However, the savings from mid-cycle programs do not count toward achievement of energy savings goals.

#### 3.6.1. Parties' Positions

The IOUs have requested that the mid-cycle funding augmentation rule adopted in D.07-10-032 be modified to allow the IOUs to count all installed energy efficiency results towards energy savings and demand reduction goals. The IOUs' rationale is that the current rule: (1) creates a disincentive to propose new programs with augmented funding, (2) unnecessarily punishes IOUs when market conditions change which may require additional funds to incent customers in order to achieve the Commission energy efficiency goals, and (3) creates a contradiction to California's Energy Action Plan and Commission policy to pursue all cost-effective energy efficiency.

NRDC supports allowing the IOUs to gain credit for savings as a result of mid-cycle funding augmentation provided the overall portfolio remains cost effective. TURN/DRA points out that the Commission previously considered and rejected this same IOU proposal regarding the mid-cycling fund-shifting rule, and should do so again now. They state that allowing savings from mid-cycle funding augmentations to count towards goals provides more funds to accomplish a goal that was set with a lower budget. They also discuss that D.07-10-032 allows utilities to count energy savings from mid-cycle funding augmentations in the calculation of their portfolio cost-effectiveness and their PEB for incentive awards. TURN/DRA argue the IOUs' proposed change would dilute accountability and provide for increased shareholder earnings at greater ratepayer cost with less utility risk. TURN/DRA also suggest the Commission adopt expanded procedures for mid-cycle funding augmentation proposals to provide more specific guidance.

#### 3.6.2. Discussion

We are sympathetic with TURN/DRA's arguments that an expanded procedure should be adopted for mid-cycle funding augmentation proposals. We also agree with CCSF that current fund shifting rules are too opaque. However, these issues are not squarely within the scope of this interim decision. TURN/DRA's position is a procedural issue dealing with how mid-cycle funding shifts should occur. This decision is concerned with how additional mid-cycle funding should be considered for portfolio development. We will continue current policy at this time to approve mid-cycle funding proposals. This procedural method provides an open process to review the request and justification for additional funding and is consistent with current policy for approving mid-cycle funding. We may address fund shifting and procedural issues further in the final decision in this proceeding.

Regarding current mid-cycle funding policy, we agree with the IOUs' proposal with the caveat proposed by NRDC; in other words, as long as the total portfolio remains cost-effective, energy efficiency savings from IOU mid-cycle funding proposals should be allowed to count towards both the Minimum Performance Standard (MPS) and PEB. We recognize that the market changes rapidly and Utilities may develop valuable programs mid-cycle that reflect that changing market.

Any changes adopted in our review of the incentive mechanism in R.09-01-019 in the 2009-2011 cycle may change IOUs proposals to some extent. The uncertainty over the ultimate fate of the incentive mechanism leads us to allow the Utilities a bit more flexibility in adjusting their portfolios midstream. We also believe this modification is needed to allow time for the information still emerging from the results of the 2006-2008 EM&V studies to be fully incorporated into the 2009-2011 portfolio.

### 3.7. Proposed Changes to the RRIM

As noted above, modifications to the mechanisms of the RRIM will be decided in R.09-01-019. However, the IOUs included two specific changes to the RRIM in their recently refiled portfolio applications, continuing to state that their portfolios "are contingent upon" adoption of their proposed changes, presumably including the proposed changes to the RRIM.

As discussed above, we understand that our current policies and rules may need to change based on the experience gained over the past four to five years. We are open to considering changes that have a sound analytical and evidentiary basis and which further our policy goals in light of the totality of our program rules, including establishing metrics for performance other than measured and verified energy savings targets. For procedural reasons, we do not resolve the IOUs' proposed RRIM changes in this decision. However, we address below two items they have raised in the context of their RRIM related proposed changes which impact our upcoming decision on the portfolios and provide guidance below on these two matters.

#### 3.7.1. Excluding (Ring-Fencing) Strategic Plan (and Advanced Codes and Standards) Activity Costs from RRIM

The Strategic Plan contains near- and long-term goals for energy efficiency in California that are in addition to our numeric energy savings goals.  We expect the IOUs to play a significant part in supporting the achievement of Strategic Plan goals.  However, many of the Strategic Plan oriented items may not produce identifiable or measurable savings, or may produce only minimally or even non-cost-effective energy savings in the near term.

As required, the IOUs include all savings and costs - including those from exempted Strategic Plan-related programs -- in their cost-effectiveness showing calculations for the 2009-2011 portfolios to ensure that the portfolio as a whole produces positive benefits to customers.

##### 3.7.1.1. Parties' Positions

The IOUs propose that the cost of activities in support of the Strategic Plan (SCE, SDG&E and SoCalGas also include advanced Codes and Standards activities) that do not produce measurable, cost-effective savings in 2009-2011 should be exempt from the RRIM.

SCE, SDG&E and SoCalGas (but not PG&E) also request changes to how costs from Codes and Standards programs are counted.  These utilities advocate that Codes and Standards costs should be excluded from the PEB.  NRDC supports segregation of Strategic Plan non-resource programs (programs which do not directly reduce demand or supply obligations) from the RRIM calculation, but only for truly non-resource Strategic-Plan-related programs.  NRDC believes that neither new construction programs nor Codes and Standards are non-resource programs, and thus the cost of these programs should be included in incentive calculations.

TURN/DRA advocates that the current policy on Codes and Standards should be retained, and the SCE/SDG&E/SoCalGas proposal should be denied. TURN/DRA point out that current Commission policy, as expressed in D.07-09-043 regarding the RRIM, states that 50% of the pre-2006 verified savings associated with the pre-2006 codes and standards advocacy work will be credited towards the 2009-2011 energy savings goals (the MPS) and not towards the PEB, while 100% of the post-2006 verified savings associated with the post-2006 codes and standards advocacy work will count towards the 2009-2011 MPS as well as the PEB. TURN/DRA claims SCE, SDG&E and SoCalGas and Sempra are repeating their previously denied arguments that Codes and Standards costs should be excluded from the PEB. Since the policy rules specify that the costs for Codes and Standards programs will be included in the PEB when they are incurred, TURN/DRA believes the Utilities are attempting to decrease PEB costs and inflate incentive payments.

CCSF does not object to taking the costs of certain activities outside of the RRIM in theory, provided that: (1) the activities that are exempt from the RRIM are limited to activities that truly will not produce measurable, cost-effective savings during the entire 2009-2011 period, (2) an adequate performance metric is put into place to ensure that funds allocated to these activities produce their intended results, and (3) unduly elevated shareholder rewards are avoided.

#### 3.7.1.2. Discussion

There is no disagreement among the parties that Strategic Plan-related activities should be included in the calculation of cost-effectiveness. Therefore, there is no need to consider any changes to our cost-effectiveness methodology for this purpose.

Issues related to ring-fencing of Strategic Plan-related activities in the incentive mechanism are not within the scope of this proceeding, and we will not make any decisions on these issues at this time. These issues will be addressed in R.09-01-019, our open Rulemaking on RRIM issues. However, the question of ring-fencing Strategic Plan-related activities does have an impact on the portfolios for 2009-2011, because if the IOUs are allowed to ring-fence certain programs for incentive purposes, it may be possible to incorporate more of these programs into the upcoming portfolio. This can occur, for example, in the situation where we can choose between a minimally cost-effective portfolio (with more Strategic Plan-related programs) and a more cost-effective portfolio (with fewer Strategic Plan-related programs). We will make the decisions on the overall makeup of the 2009-2011 portfolios in our final decision in this docket. Because a decision on ring-fencing and other RRIM issues likely will not occur before we make our final decision in this docket, we will articulate some preliminary thoughts on ring-fencing at this time to provide some guidance in this area.

In some areas, we do not foresee a need to change from our current approach. For example, Emerging Technologies are currently excluded from the PEB in the current incentive mechanism. No party suggests any change to this policy and we do not anticipate any changes will occur in R.09-01-019. In addition, we do not at this time see a rationale for changing the current policy on Codes and Standards work. We may consider alternative approaches to this issue in R.09-01-019 if additional arguments make a compelling case.

An Energy Division White Paper issued in April 2009 set forth an alternate approach to the RRIM that would use performance metrics that are unrelated to the achievement of verified reductions in energy usage, but which would reward achievement in areas such as strategic plan programs that do not yield short term savings. Comments on this White Paper have been received jointly in this proceeding and in R.09-01-019, and may be used to consider the ring-fencing issues in this proceeding or R.09-01-019, as appropriate.

### 3.7.2. Use of gross metrics as the basis of the Performance Earnings Basis

#### 3.7.2.1. Parties' Positions

The Utilities propose that gross metrics (not net of free-riders) be used for the calculation of performance toward the MPS and PEB under the RRIM.[18] They argue that such an approach might warrant changes to the RRIM including, potentially, changes to the shared-savings rates (given the increased resource benefits being provided) in order to maintain an appropriate balance of risk and reward between shareholders and customers.

The IOUs give two rationales for their proposal. First, they argue that de-linking the use of gross goals from the performance basis-which is utilized to calculate shareholder earnings for meeting these goals-provides the false sense that the IOUs are meeting goals, when in reality they may not be due to the use of a point-estimate NTG ratio whose basis will always be in question. Second, the Utilities state that using a gross performance earnings basis calculation for the 2009-2011 period could open up the opportunity for more program options that support long-term goals for energy efficiency. It should allow for parties to focus less on the attribution of savings and more on maximizing the energy savings potential of energy efficiency programs in California.

NRDC supports further study of the issue, stating that it generally supports reevaluating how the MPS and PEB should be calculated for the 2009-2011 cycle, but recommends that this effort be further discussed at the same time that Energy Division evaluates how defining the 2009-2011 goals as gross may impact the risk-reward mechanism, as ordered in D.08-07-047. NRDC recommends that the Commission include a conversation on the merits of the gross basis of the PEB proposal at that time.

TURN/DRA opposes the IOU proposal. First, they note that using gross metrics would undermine the efficacy of the RRIM as a tool of program evaluation. Calculation of PEB using net values, they argue, provides valuable indicators of energy efficiency portfolio success, illustrating which components of the portfolio are effective and informing the Commission's future portfolio planning, and that this was an important reason for the Commission adopting this approach. They assert that if PEB were changed to be calculated using gross metrics, its value as a tool of program evaluation will be undermined as it would be unclear how the Commission would distinguish between effective and ineffective programs.

Second, TURN/DRA argue that issues concerning the RRIM should be dealt with in another proceeding at another time. They remind us that D.08-07-047 explicitly decided against using gross metrics to calculate PEB, and

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[18] *See, e.g.*, SCE, Chapter 2, pp. 41-43.

indeed affirmed the continued calculation of PEB based on net benefits (immediately prior to Utilities' filing of their 2009-2011 applications).

CCSF opposes the Utility proposal for a gross basis of PEB stating that the utilities do not provide sufficient justification for expanding the use of gross goals. CCSF retains general concerns about the movement towards gross savings, particularly that goal achievement may have been made too easy. CCSF is also concerned that the utility proposal on gross basis for PEB, if adopted, could have serious unintended consequences. First, CCSF fears that utilities would likely focus their efforts on customers who were already motivated to install energy efficiency and IOUs would have little to no incentive to pursue more difficult long lived savings or hard to reach markets. CCSF asserts that this in turn would require the Commission to be even more engaged in oversight activities. It also is concerned that the use of gross metrics for PEB could undermine California's requirements on cost-effectiveness by providing incentives to customers that are already motivated to undertake energy efficiency improvements.

NAESCO and QuEST support the IOUs' proposal in this area. NAESCO argues that adoption of the utility proposed policy changes provides needed certainty for utilities to administer energy efficiency programs to accomplish Commission goals. They also argue that basing the value of energy efficiency measures on *ex post* evaluations requires them to "fly blind" in planning subsequent portfolios, as *ex post* results are not available at the time that planning is needed. QuEST states that using a gross basis of PEB would avoid the use of problematic free-ridership methodologies in determining NTG ratios. It advocates eliminating the use of these methodologies for several reasons relating to the impact of market effects, the continuing global awareness of climate change, and avoiding penalizing early adopters of energy efficient technologies.

#### 3.7.2.2. Discussion

In D.08-07-047, we determined that the calculation of goals for the 2009-2011 portfolios would be done on a gross basis, without netting out free-riders.[19] Regarding calculation of goals in the PEB, we stated: "The change from NTG goals only affects the calculation of the minimum performance standard of the Risk/Reward Incentive Mechanism adopted in D.07-09-043 and does not impact the calculation of the performance earnings basis also adopted in that decision. The performance earnings basis remains calculated using net benefits."[20]

Now, the IOUs are asking that gross goals be calculated for the PEB as well as for the MPS. This issue is more squarely addressed in our current Rulemaking on the incentive mechanism, R.09-01-019. However, we will address the IOUs' argument that this issue impacts their ability to design and implement cost-effective portfolios. This guidance may be considered further in R.09-01-019.

We agree with TURN/DRA that the current Commission methodology of using net metrics as the basis for PEB provides important indicators distinguishing between effective and ineffective programs. It remains exceedingly important that we continue to track the influence of utility programs on observed changes in energy use through net analysis. As discussed in

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[19] In D.08-07-047, we asked our Energy Division to consider whether using gross goals in 2009-2011 would provide any windfall to the IOUs. Energy Division has not yet provided its analysis of this topic.

[20] D.08-07-047, p. 27, footnote 36.

Section 3.3.2, without attention to net savings, administrators have a clear incentive to claim savings that are principally or exclusively market driven, rather than program-induced.

Retaining a net metrics basis for PEB is consistent with this approach and the policy goals. We are not convinced by the Utilities' argument that allowing use of gross metrics for the PEB could open up the opportunity for more program options which support long-term goals for energy efficiency in the 2009-2011 portfolio. We are concerned that that a PEB based on gross savings accomplishments will have unintended consequences. Simply initiating more programs without ensuring that the energy efficiency savings emerging from them are truly additive - *i.e.*, that they would be unlikely to occur in the absence of the Utility program-would not necessarily result in the cost-effective net energy benefits that California seeks. Nor will necessarily it result in the GHG reductions required under AB 32. We agree with CCSF that removing a net savings basis from the calculation of PEB could limit the Commission's ability to steer efficiency programs towards those aimed at hard to reach customers.

We also agree with NAESCO that certainty in energy resources, net benefits and incentive payments is highly desirable. However, we disagree that moving to gross basis of PEB is the only method to achieve this goal. For instance, utilizing some combination of *ex ante* and *ex post* verified net energy savings as the basis for PEB could also greatly improve certainty of results while still steering Utility programs towards hard to reach customers for whom participation in Utility programs is truly additive.

While we do not adopt this proposal in this proceeding, we will explore this issue further in R.09-01-019 along with a broader review of the incentive mechanism.

## 4. Next Steps

Today's decision will affect our calculation of cost-effectiveness of the Utilities' portfolios, and the ability of the Utilities' portfolios to achieve annual and cumulative goals. The disposition of these eight policy issues may also impact the Utilities' recommendations for, and our analysis of, the mix of programs in their 2009-2011 portfolios. We will allow a supplemental filing by the Utilities to take into account this interim decision, and provide for comments by parties. The Utilities shall file a supplement to their March 2, 2009 amended testimony incorporating in the outcomes of today's decision. The assigned ALJ and/or assigned Commissioner will issue a Ruling spelling out the timing and requirements for this filing.

## 5. Categorization and Assignment of Proceeding

This proceeding is categorized as Ratesetting. The assigned Commissioner is Dian M. Grueneich and the assigned Administrative Law Judge is David M. Gamson.

## 6. Comments on Proposed Decision

The proposed decision of the ALJ 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 May 11, 2009, and reply comments were filed on May 18, 2009 by the Utilities (filing jointly), DRA, TURN, CCSF, and NRDC. In response to comments, we have made the following revisions:

- Add a due date of December 1, 2010 for the Energy Division study of maximum EUL, to address the Utilities comments about the need for a date certain.
- Based on comments from the Utilities and NRDC, change the reduction in therm goals for interactive effects from 20% for both SDG&E and

PG&E to 22% for SDG&E and 26% for PG&E to better align this modification of goals with the findings in the Energy Division Verification Report, and consider whether this adjustment should be modified in the final decision in this proceeding.

- Require that incentives and savings in communities with "reach" requirements shall be no different from those in other communities, and shall not be treated as free riders, based on CCSF's comments.
- Based on comments from the Utilities, we require Energy Division to study specific assumptions around decay in advance of the 2012-2015 applications to better determine cumulative savings goals, with opportunities for interested parties and persons to provide input on and comment on the Energy Division recommendations.
- Deny the Utilities' request to change to a Post-Tax Discount Rate, based on TURN's comments that Commission precedent provides for the same discount rate for all resources.

In addition, we have clarified the discussion of certain issues, Findings of Fact, Conclusions of Law and Ordering Paragraphs without modifying the substance of the outcomes.

## Findings of Fact

1. The IOUs have not provided evidence on the individual and cumulative impacts of their proposed changes on energy savings, cost-effectiveness and strategic goals, other than SDG&E and SoCalGas representing that they would have to spend approximately an additional $200 million each to fashion cost-effective portfolios if their recommended policy changes are not adopted.

2. There are new issues in this proceeding regarding the interaction between cumulative savings, the 2009-2011 portfolios, the incentive mechanism and our new energy efficiency savings goals which were not present when cumulative goals were last considered in D.07-10-032.

3. Our focus on long-term savings, as supported by our Strategic Plan, continues to require the reporting of cumulative savings.

4. The 2004 and 2005 data are not fully appropriate for inclusion in cumulative savings goals, because the evaluation data for those years was not consistently reported or governed by the California Evaluator's Protocols, and 2004-2005 data is not directly reconcilable with 2006-2008 data.

5. There is no compelling reason to eliminate 2006 and 2007 data for the purposes of cumulative savings.

6. There are many reasons to believe that savings will persist beyond the expected useful life of a given measure. In the case of CFLs, high levels of naturally occurring adoption of CFLs greatly moderates the possibility of decayed savings. In addition, the implementation of the Huffman Bill will, to a large degree, eliminate the possibility of reversion to inefficient technologies at the end of most lighting measures useful lives. In light of these factors, our expectation is that decay will be significantly below 100%.

7. The Commission's adopted energy savings goals in 2004 did not incorporate the interactive effects between electric and gas savings.

8. The 2008 DEER is used to measure Utility performance against Commission-established energy savings goals. The 2008 DEER incorporates interactive effects between electric and gas savings.

9. The Utility-supplied McNulty Study is not sufficiently robust to disprove the existence of the interactive effects reflected in the 2008 DEER.

10. It is reasonable to reconsider and adjust therm goals for dual-fueled utilities on the basis of recent information in the Energy Division Verification Report for 2006 and 2007. This Report shows negative interactive effects decrease gas savings for PG&E and SDG&E, by 26% and 22%, respectively.

11. The Commission's policy is that Utility programs - funded by ratepayer dollars - should be aimed at creating measurable energy savings, and Utilities

should receive credit toward their energy efficiency savings goals and in the incentive mechanism for energy savings associated with these programs.

12. D.08-07-047 established 2009-2011 adopted goals which encompass gross savings, not net of free riders. Therefore, attribution of savings for a given measure does not impact the Utilities' ability to build a portfolio which meets gross savings goals.

13. The Energy Efficiency Policy Manual addresses savings created apart from direct Utility programs by considering certain customer actions as free riders.

14. Current Commission policy disadvantages businesses and residents of the communities with "reach codes," since these businesses and residents would be ineligible for ratepayer funded incentives for energy efficiency measures that would be available to the businesses and residents of less forward thinking communities. This acts as a strong disincentive for local governments considering implementation of "reach codes" and standards since the effect is to deny their constituents funds that they would be eligible for absent a local reach requirement.

15. It is desirable to provide credit for the Utilities with energy efficiency measures that will provide long-term savings consistent with the effective useful life of those savings.

16. Adopting a new 30-year maximum EUL would be a complex process, including substantial changes to cost-effectiveness tools and avoided cost calculations, and necessitating 10 years of additional data on cost and performance.

17. There is limited record information as to the number or type of measures that would qualify to be assigned an EUL value of over 20 years. There is no

record estimate of the savings those measures would contribute to Utility portfolios.

18. The impact of the Utility-requested change to EUL on portfolio cost-effectiveness would likely be less than 1%.

19. There is no disagreement among parties that Strategic Plan-related activities should continue to be included in the calculation of cost-effectiveness.

20. Issues related to ring-fencing of Strategic Plan-related activities in the incentive mechanism are not within the scope of this proceeding. However, the question of ring-fencing Strategic Plan-related activities does have an impact on the portfolios for 2009-2011, because if the IOUs are allowed to ring-fence certain programs for incentive purposes, it may be possible to incorporate more of these programs into the upcoming portfolio.

21. The calculation of net present value for energy efficiency resources and supply-side resources should be comparable in terms of treatment of taxes.

22. Section IV, Rule 2 of the Energy Efficiency Policy Manual, version 4, requires the calculation of net present value for energy efficiency resources to incorporate the utility's weighted average cost of capital. The utility's weighted average cost of capital includes a component for taxes.

23. Removing taxes from the net present value calculation for energy efficiency resources would alter the choice between energy efficiency and supply-side resources.

24. Per Section IV, Rule 12 of the Energy Efficiency Policy Manual, version 4, mid-cycle funding augmentations currently are counted in the calculation of portfolio cost-effectiveness, and are counted in the PEB for Utility incentive awards. The savings from mid-cycle programs currently do not count toward

achievement of energy savings goals for the purpose of assessing whether performance has reached the MPS under the risk/reward incentive mechanism.

25. We recognize that the market for energy efficiency services changes rapidly and Utilities may develop valuable programs mid-cycle that reflect that changing market.

26. Uncertainty over the ultimate fate of the incentive mechanism suggests that the Utilities may need more flexibility to adjust their portfolios midstream, subject to the requirement of overall portfolio cost-effectiveness.

27. In D.08-07-047, we determined that the calculation of goals in the MPS for the 2009-2011 portfolios would be done on a gross basis, without netting out free-riders, but the PEB would remain calculated using net benefits.

## Conclusions of Law

1. The 2004 and 2005 data should not be used for cumulative savings purposes for this program cycle.

2. Cumulative savings should be counted for the years 2006-2011 for this program cycle. This definition of cumulative savings is reasonable because, on the one hand, it excludes the imperfect data of 2004-2005, while on the other hand, it is still consistent with our direction in D.07-10-032 to maintain cumulative goals.

3. Gross therm goals for 2009-2011 should be adjusted downward by 22% for SDG&E and 26% for PG&E to take into account updated information on interactive effects.

4. The current methodology in the Energy Efficiency Policy Manual regarding free-ridership and partial free-ridership is still appropriate for considering attribution of energy savings from customers who are motivated to

save energy based on receiving messages and programs from entities other than the Utility.

5. No changes should be adopted at this time to current attribution rules regarding savings credit for actions taken by customers supported by IOU programs, but who may also be motivated by external factors.

6. Incentives and savings in communities with "reach" requirements should be no different from those in other communities, and not be treated as free riders.

7. The Utility proposal to allow the maximum effective useful lives of measures to increase to 30 years should not be adopted for 2009-2011.

8. Consistent with current Commission policy, Strategic Plan-related energy efficiency activities should be included in the calculation of cost-effectiveness.

9. R.09-01-019 is the appropriate proceeding to consider how or if Strategic Plan-related energy efficiency activities should be included in the incentive mechanism.

10. For energy efficiency resources, the utilities should continue to use the full weighted cost of capital as spelled out Section IV, Rule 2 of the Energy Efficiency Policy Manual, version 4, in order to provide a fair comparison between energy efficiency resources and supply-side resources.

11. As long as the total portfolio remains cost-effective, energy efficiency savings from IOU mid-cycle funding proposals should be allowed to count towards both MPS and PEB. Section IV, Rule 12 of the Energy Efficiency Policy Manual, version 4, should be amended to reflect this change.

12. R.09-01-019 is the appropriate proceeding to determine if net or gross savings should be included in the PEB.

## INTERIM ORDER

**IT IS ORDERED** that:

1. The proposal of Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company, and San Diego Gas & Electric Company to count cumulative savings solely for the years 2009-2011 program cycle is denied. Cumulative savings shall be counted for the years 2006-2011 for this program cycle, as will be detailed in the Ruling referenced in Ordering Paragraph 9.

2. Energy Division shall study specific assumptions around decay in advance of the 2012-2015 energy efficiency portfolio applications, with opportunities for interested parties and persons to provide input on and comment on the Energy Division recommendations.

3. The proposal of Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company, and San Diego Gas & Electric Company to eliminate interactive effects in the Database for Energy Efficient Resources for dual-fuel Utilities is denied. Gross therm goals for 2009-2011 adopted in Decision 08-07-047 shall be adjusted downward by 22% for San Diego Gas & Electric Company and 26% for Pacific Gas and Electric Company.

4. The proposal of Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company, and San Diego Gas & Electric Company to change attribution rules regarding savings credit for actions taken by customers supported by Utility programs, but who may also be motivated by external factors, is denied. However, incentives and savings in communities with "reach" building codes or similar efficiency requirements shall

be no different from those in other communities, and shall not be treated as free riders.

5. The proposal of Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company, and San Diego Gas & Electric Company to allow the maximum effective useful lives of measures to increase to 30 years is denied for 2009-2011. Energy Division shall conduct a study on the issue of increasing the maximum effective useful lives of measures and report back to the assigned Administrative Law Judge and Commissioner in the relevant docket no later than December 1, 2010. Energy Division shall solicit input from stakeholders, its evaluation, measurement and verification contractors and other experts in developing its report.

6. The proposal of Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company, and San Diego Gas & Electric Company to allow Strategic Plan-related costs to be excluded from the risk/reward incentive mechanism is denied without prejudice. Rulemaking 09-01-019 is the appropriate proceeding to consider how or if Strategic Plan-related energy efficiency activities should be included in the incentive mechanism.

7. The proposal of Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company, and San Diego Gas & Electric Company to use the individual utility weighted cost of capital, after removing the effect of taxes, for calculating the net present value of the 2009-2011 energy efficiency portfolios is denied.

8. The Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company, and San Diego Gas & Electric Company request to revise Section IV, Rule 12 of the Energy Efficiency Policy

Manual, version 4, to allow mid-cycle funding augmentation to count towards the minimum performance standard is approved. Energy Division shall make adjustments to Section IV, Rule 12 consistent with this Decision as soon as practicable so as to allow its usage in the final decision in this proceeding.

9. The Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company, and San Diego Gas & Electric Company request to use gross saving in the performance earnings basis is denied without prejudice. Rulemaking 09-01-019 is the appropriate proceeding to determine if net or gross savings should be should be included in the performance earnings basis.

10. Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company, and San Diego Gas & Electric Company shall file a supplement to their March 2, 2009 amended testimony incorporating the outcomes of today’s Decision. The assigned Administrative Law Judge and/or assigned Commissioner shall issue a Ruling spelling out the timing and requirements for this filing.

11. Applications (A.) 08-07-021, A.08-07-022, A.08-07-023, and A.08-07-031 remain open.

This order is effective today.

Dated May 21, 2009, at San Francisco, California.

MICHAEL R. PEEVEY
President
DIAN M. GRUENEICH
JOHN A. BOHN
RACHELLE B. CHONG
TIMOTHY ALAN SIMON
Commissioners

I reserve the right to file a concurrence.

/s/ TIMOTHY ALAN SIMON
Commissioner