

Decision 11-07-030 July 14, 2011

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

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  
(Filed July 21, 2008)

And Related Matters.

Application 08-07-022  
Application 08-07-023  
Application 08-07-031

**THIRD DECISION ADDRESSING PETITION  
FOR MODIFICATION OF DECISION 09-09-047**

**TABLE OF CONTENTS**

<b>Title</b>	<b>Page</b>
THIRD DECISION ADDRESSING PETITION FOR MODIFICATION OF DECISION 09-09-047 .....	2
1. Summary .....	2
2. Background.....	2
3. <i>Ex Ante</i> Values -- Overview .....	6
3.1. DEER Values .....	9
3.2. Non-DEER Values (except Custom Projects) .....	10
3.2.1. The Petition and Comments.....	10
3.2.2. The CMS Report.....	15
3.2.2.1. Net-to-Gross Ratio .....	16
3.2.2.2. Effective Date of Energy Division Reviewed and Approved <i>Ex Ante</i> Values that Differ from Utility Proposed <i>Ex Ante</i> Values .....	18
3.2.2.3. Application of Installation Rate to Utility Measure Installation Claims.....	20
3.2.2.4. Dual Baseline for Early Retirement.....	23
3.2.2.5. Treatment of Unidentified HIMs relative to the <i>Ex Ante</i> Freeze ...	26
3.2.2.6. How and Where Official Frozen DEER and Non-DEER Values Will be Archived.....	27
3.2.2.7. Adoption of Non-DEER HIM <i>Ex Ante</i> Values.....	28
3.3. Custom Projects .....	31
3.3.1. Gross Realization Rate .....	34
3.3.2. Effective Date of Custom Measure Gross Realization Rate Adjustments and Energy Division Reviewed and Approved <i>Ex Ante</i> Values that Differ from Utility Proposed <i>Ex Ante</i> Values.....	38
3.3.3. Dual Baseline for Early Retirement.....	38
3.3.4. Other Issues Pertaining to the Energy Division Proposed Custom Measure Review Process .....	39
4. Comments on Proposed Decision .....	42
5. Assignment of Proceeding .....	42
Findings of Fact.....	42
Conclusions of Law .....	45
ORDER .....	47

**TABLE OF CONTENTS (cont.)**

<b>Title</b>	<b>Page</b>
Attachment A – Summary of Final Determinations of Non-DEER <i>Ex Ante</i> Energy Savings Values for High Impact Energy Efficiency Measures for Utility 2010-2012 Portfolios	
Attachment B – Custom Project Review Process	

## **THIRD DECISION ADDRESSING PETITION FOR MODIFICATION OF DECISION 09-09-047**

### **1. Summary**

This is the third decision on a Petition for Modification of Decision 09-09-047 filed by the four major California energy utilities. This decision adopts modifications and clarifications regarding energy efficiency portfolios for 2010-2012. The decision does the following:

- Adopts final *ex ante* (also known as estimated) energy savings workpapers for non-standard energy efficient measures (i.e., those which are not in the Database for Energy Efficient Resources) for 2010-2012 (see Attachment A).
- Determines that January 1, 2010 is the effective date for adopted *ex ante* energy savings workpapers and custom projects.
- Requires the utilities to identify installation rates for each non-DEER energy efficiency measure in their 2010-2012 energy efficiency portfolios.
- Adopts an Energy Division custom project *ex ante* value review process (see Attachment B), including a Gross Realization Rate value of 0.90.
- Allows the utilities to make any energy efficiency portfolio program design changes (e.g., database management system changes, appropriate rebate/measure changes, etc.) consistent with the adopted non-DEER *ex ante* workpapers within 60 days.

This decision brings finality and certainty to the determination of *ex ante* energy savings values for the 2010-2012 portfolios and closes the proceedings.

### **2. Background**

In Decision (D.) 09-09-047, the Commission adopted energy efficiency portfolios for 2010 through 2012 for Southern California Edison Company (SCE), Southern California Gas Company (SoCalGas), San Diego Gas & Electric

Company (SDG&E), and Pacific Gas and Electric Company (PG&E) (collectively, Joint Utilities or Joint Investor-Owned Utilities (Joint IOUs)). A subsequent Ruling on November 18, 2009 clarified a number of issues regarding evaluation, measurement and verification (EM&V) for the 2010-2012 portfolios. For example, the Ruling provided for Energy Division review and approval of *ex ante* (also known as estimated) energy savings<sup>1</sup> value workpapers for energy efficiency measures after utility submission of these workpapers to Energy Division.

D.10-04-029 required the IOUs to cooperate and collaborate with Energy Division in the development of these workpapers, consistent with the November 18, 2009 Ruling.

On September 17, 2010, Joint Utilities filed a Petition for Modification of D.09-09-047, seeking 28 separate changes to the Decision, in eight subject areas.

D.10-12-054 adopted modifications to D.09-09-047 in the following areas:

- Freezing *ex ante* energy savings values for energy efficiency measures based on the 2008 DEER, version 2.05.<sup>2</sup> Issues regarding *ex ante* values for non-DEER energy efficiency measures were deferred to the current decision.
- Clarifying that co-branding requirements with the Engage 360 brand apply to all energy efficiency programs provided through

---

<sup>1</sup> Energy efficiency measures may result in both energy savings (measured in kilowatt-hours or therms) and demand (measured in kilowatts). In this decision, we use the term “energy savings” to refer to both energy and demand reductions.

<sup>2</sup> DEER stands for Database for Energy Efficient Resources. This database contains estimated energy savings values for standard energy efficiency measures. Non-standard energy efficiency measures are referred to as non-DEER measures. Non-DEER measures include custom energy efficiency projects designed for a single customer. The most recent updated DEER (the 2008 DEER version 2.05) was adopted by Ruling in R.06-04-010 in August 2008.

energy efficiency funds, but not to programs provided solely through other funds. Also, the decision clarified the timing for the start of the co-branding efforts.

- Reducing annual energy savings goals per home for the statewide Prescriptive Whole House Retrofit Program (PHWRP) from 20% in utility service territories to 10%, while retaining the annual energy savings goals per home for the utilities Whole House Performance Programs (WHPP) at 20%. The decision clarified that these are average annual savings goals per home; the annual savings at individual participant homes will fall below and above these levels.
- Providing that the required \$1,000 performance bonus applies only to single family units in the California Advanced Home Program. The decision also provided that a lower \$200 bonus or a territory-specific incentive (e.g., marketing dollars, customized engineering reports, etc.) apply for each applicable multi-family unit.
- Adding language to provide a State Action Doctrine defense for utilities engaging in certain joint energy efficiency activities which are consistent with state policy and supervised by the Commission.

Joint Utilities also request a number of other changes to D.09-09-047, which are considered in a separate decision in this docket:

- Modify IOU benchmarking requirements to exclusively promote the Energy Star Portfolio Manager tool for all IOU benchmarking activities; target larger facilities first; and remove the requirement to benchmark all facilities now specified in D.09-09-047.
- Adopt a reporting process for limited statewide program variations among IOUs to allow flexibility for appropriate regional and IOU differences.
- Clarify that sponsorships for energy efficiency events or activities that directly promote programs or partnerships are considered allowable administrative costs.

Today's decision deals solely with remaining issues concerning determination of non-DEER (including custom project) *ex ante* energy savings values.

Comments on all issues in the Petition were jointly filed on October 18, 2010 by the Division of Ratepayer Advocates (DRA) and The Utility Reform Network (TURN), and comments were separately filed by EnerNOC, Inc. A Prehearing Conference (PHC) was held on October 22, 2010. A major theme of both the Petition and the PHC involved Energy Division implementation of provisions of D.09-09-047 and the subsequent November 18, 2009 Ruling.

At the PHC, it became clear that, despite the requirements in D.09-09-047 and the November 18, 2009 Ruling, the utilities and Energy Division had been unable to reach agreement on determination of *ex ante* values and other matters since implementation of the portfolio began in January 2010. Because D.09-09-047 provided that Energy Division would have a number of significant tasks in implementing the decision, the assigned Administrative Law Judge (ALJ) determined that certain information concerning Energy Division's efforts since D.09-09-047 should be placed on the record in order to provide perspective on the Petition. Energy Division staff provided insights into their process and implementation recommendations at the PHC, and parties were able to question Energy Division staff on the record. In a Ruling dated October 29, 2010, parties were given the opportunity to comment upon specific written Energy Division implementation recommendations concerning *ex ante* values discussed at the PHC. Comments were filed by EnerNOC and DRA/TURN on November 5, 2010.

D.10-12-054 resolved issues from the Petition, including which version of DEER to use, but called for further consideration of non-DEER *ex ante* issues. A

workshop was held on January 5, 2011 for this purpose. After the workshop and subsequent discussions involving Energy Division and parties, SDG&E (on behalf of a number of parties) filed a Motion on February 18, 2011 seeking the right to file a Case Management Statement Report (CMS Report). The CMS Report was attached to the Motion. The ALJ granted the Motion.

The CMS Report sets forth issues for resolution, the sponsoring parties' positions on the issues, and alternative proposals to both Energy Division's recommendations regarding certain non-DEER *ex ante* values and Energy Division's proposed review and approval process of utility custom application/project *ex ante* values.

### **3. Ex Ante Values -- Overview**

The Commission and utilities use *ex ante* energy savings values for energy efficiency measures based on historical data and analysis to determine whether a utility's forecasted energy efficiency portfolio is expected to be cost-effective. These *ex ante* values are also used to estimate the savings from verified installed energy efficiency measures, and may be used as part of determining the level of rewards utilities can receive for successful energy efficiency efforts.<sup>3</sup>

The DEER dataset includes typical values for energy efficiency measures' net-to-gross ratios, effective useful life, unit energy savings, and load shapes values. These values are part of the input parameters used to calculate projected program/portfolio savings and cost-effectiveness. When a measure is not in the DEER dataset, it is called a non-DEER measure. Each utility provides non-DEER workpapers for each of these measures to estimate and justify proposed

---

<sup>3</sup> Issues related to the risk/reward incentive mechanism for energy efficiency activities are being considered in Rulemaking 09-01-019.



net-to-gross ratios, effective useful life, unit energy savings, and load shapes values.

D.09-09-047 stated (pp. 42-44):

We agree with SCE's and PG&E's comments that measure *ex ante* values established for use in planning and reporting accomplishments for 2010-2012 should be frozen. However, we do not agree with PG&E or SCE that those *ex ante* measure values should be frozen using the values found in the E3 calculators submitted with their July 2, 2009 applications. We agree with TURN's comment that frozen values must be based upon the best available information at the time the 2010-2012 activity is starting and that delaying the date of that freeze until early 2010 is a reasonable approach to better ensure that the maximum amount of updates is captured before the freeze takes effect.

The utilities' portfolio measure mix contains both DEER measures and non-DEER measures. As discussed in this decision (e.g., Sections 4.2 and 4.5), the Utilities have not always properly utilized current DEER measure values and assumptions in their submitted cost-effectiveness calculations. We note that the Utilities have commented that the documentation on the use of DEER is insufficient and that the Commission should be more specific about the version of DEER to be utilized. We clarify that the DEER 2008 values referred to by this decision are the complete set of data denoted as 2008 DEER version 2008.2.05, dated December 16, 2008, as currently posted at the DEER website (<http://www.deeresources.com>) maintained by Energy Division.

Energy Division must provide the utilities with further detail and clarifications on the proper application of DEER so that the utilities are able to correct these problems. Additionally, as of this decision, Energy Division has not performed a review and approval of non-DEER measure *ex ante* estimates provided by the utilities. Energy Division must complete that review in a timely manner before those measure assumptions are frozen. It is therefore essential that the utilities work with Energy Division in its review and approval of their non-DEER measures *ex ante* values so that this activity can be completed as soon as possible. However, Energy Division must implement a review and approval process that

balances the need for measure review with the utilities need to rapidly implement the portfolios approved by this Decision. We also recognize that the Energy Division or utilities may identify new measures appropriate for inclusion in the 2010-2012 portfolios that are not yet included in current DEER measure datasets. We also recognize that errors may be identified in frozen measure *ex ante* values. Energy Division, in consultation with the utilities, should develop a process by which new measures values can be added to the frozen measure datasets and mutually agreed errors in the frozen values can be corrected.

Therefore, in measuring portfolio performance against goals over the program cycle, we will freeze both DEER and non-DEER *ex ante* measure values as the 2010-2012 portfolio implementation begins. We concur with NRDC's<sup>4</sup> comments that the use of these frozen *ex ante* values is only for this portfolio planning proceeding and implementation management. These frozen *ex ante* values may or may not be used for purposes of the incentive mechanism that is subject of another proceeding. Furthermore, the decision here to hold constant measure *ex ante* values for the purpose of measuring performance against goals, does not imply that we will cease from updating DEER and non-DEER measures for other purposes, and in particular for striving for the best estimates of actual load impacts resulting from the program cycle. Our EM&V activity will continue to develop *ex post* verified measure, program and portfolio impacts to inform future energy efficiency and procurement planning activities. The frequency and scope of DEER updates going forward is discussed further in the EM&V section below. As for non-DEER *ex ante* measure review and approval, we direct Energy Division to develop that review and approval process within 30 days from the date of this decision, to be issued in an ALJ ruling.

From D.09-09-047, we find three concepts which will guide our decision today:

---

<sup>4</sup> NRDC stands for Natural Resources Defense Council.

- Use of best available information
- Finality: The freeze date for *ex ante* values was to be “early 2010”<sup>5</sup>
- Utilities and Energy Division were to work together to finalize *ex ante* values in a timely manner

In D.10-04-029, Ordering Paragraph 4, third bullet point, states “Review of completed IOU workpapers regarding *ex ante* savings estimates are subject to Energy Division review and approval, as set forth in an Administrative Law Judge’s Ruling of November 18, 2009 in Application 08-07-021, et al.”

Because the utilities and Energy Division did not finalize non-DEER *ex ante* values, we must do so now. There is no value in finding fault with any side in this dispute; the issues are certainly complex. At the same time, we will not allow the mere fact of delay to overrule the concepts for adopting *ex ante* values previously articulated in D.09-09-047.

### **3.1. DEER Values**

In D.10-12-054, we froze *ex ante* values as they exist in DEER 2008, version 2.05 (also denoted DEER 2008.2.05). We stated our expectation that DEER values would be updated and set using the best available information for the next energy efficiency portfolio cycle (scheduled to start in 2013), and that these values would be determined and frozen before the upcoming cycle begins.

---

<sup>5</sup> Ordering Paragraph 48 of D.09-09-047 required use of “best available information at the time the 2010-2012 activity is starting” for determining *ex ante* values for 2010-2012. That Ordering Paragraph was modified by D.10-12-054 to eliminate the quoted language, while adding language adopting DEER 2008.2.05. We use the discussion in D.09-09-047 cited herein to define “the time the 2010-2012 activity is starting” as early 2010. The discussion in D.09-09-047 also continues to use the term “best available information.”

### **3.2. Non-DEER Values (except Custom Projects)**

Only a subset of energy efficiency measures is contained in the DEER dataset. All other energy efficiency measures are considered non-DEER measures. Energy savings calculations for non-DEER energy efficiency measures are found in workpapers maintained by the utilities.

#### **3.2.1. The Petition and Comments**

D.09-09-047 at 43 allowed the Energy Division to conduct a non-DEER workpaper review process in order to finalize the non-DEER *ex ante* estimates, stating: “Energy Division must implement a review and approval process that balances the need for measure review with the utilities’ need to rapidly implement the portfolios approved by this Decision.” D.10-04-029 reinforced this process.

The November 18, 2009 Ruling established a deadline of March 31, 2010 as the date by which the entire spectrum of *ex ante* estimates (DEER and non-DEER) for 2010-2012 must be frozen. Consistent with the process established by the Ruling, the utilities submitted all required non-DEER measure workpapers in advance of the March 31, 2010 deadline. In its review, Energy Division rejected or required major changes to nearly all of the 70 workpapers it reviewed.<sup>6</sup> The utilities, citing language in D.09-09-047 which required them to work with Energy Division to finalize these values, did not accept most of the changes proposed by Energy Division.

While Energy Division was directed to approve final values, there was no required mechanism in D.09-09-047 or D.10-04-029 to do so. Energy Division

---

<sup>6</sup> Energy Division did not review most of the workpapers submitted by the utilities, consistent with a two-phase process set up by the November 18, 2009 Ruling.

could have proposed final non-DEER *ex ante* energy savings values in a Resolution, or sought an ALJ or assigned Commissioner Ruling, to approve final values.<sup>7</sup> However, Energy Division continued to work with the utilities to reach agreement. After the Petition was filed in September 2010, Energy Division deferred to the process leading up to this decision. Therefore, at this time, there is not yet a final set of frozen *ex ante* measure values for non-DEER measures.

In the Petition, Joint IOUs urge the Commission to clarify that the non-DEER workpapers they submitted, and for which Energy Division and the utilities could not reach agreement, will be dealt with in the following manner:

- (a) The *ex ante* values in IOU workpapers submitted by March 31, 2010 would be frozen for the duration of the program cycle.
- (b) Those workpapers which are impacted by the corrections to DEER accepted by the Joint Utilities would be updated accordingly immediately after the release of the corrected DEER data. The workpapers would then be frozen for the duration of the program cycle.
- (c) Corrections of errors would be made to workpapers during the program cycle if they are mutually agreed upon by the Energy Division and the IOUs.

During the course of a program cycle, Joint IOUs state in the Petition that they expect to implement new measures and/or modify existing program strategies that will require additional workpapers beyond the frozen DEER or non-DEER datasets. In their Petition, Joint IOUs request that the Commission modify D.09-09-047 to clarify the process for new workpapers the utilities have

---

<sup>7</sup> D.10-04-029, Ordering Paragraphs 7 and 8, established a “Motion for Evaluation, Measurement and Verification Dispute Resolution.” This process could have been used by Energy Division or a party to bring the dispute concerning *ex ante* values to the assigned ALJ or assigned Commissioner for resolution.

submitted post-March 31, 2010 for which no response has been received, as well as for new workpapers that will be submitted on a going forward basis.

DRA/TURN opposes the Joint Utilities' request in their Petition because freezing *ex ante* values strictly based on what the utilities filed on March 31, 2010 would eliminate the meaningful review role for Energy Division as envisioned by D.09-09-047. DRA/TURN believes the result would be to ignore the concerns expressed in D.09-09-047 about utility data, and simply adopt whatever the utilities proposed without regard to the quality of the underlying data.

At the October 22, 2010 PHC, Peter Lai of Energy Division described its process of review for the Joint Utilities non-DEER workpapers submitted March 31, 2010. He described separate processes for review of high-impact measure (HIM)<sup>8</sup> workpapers and non-high-impact measure (non-HIM) workpapers. For non-HIM workpapers, Mr. Lai stated that Energy Division and the utilities agreed that these workpapers would be frozen for the 2010-2012 program cycle without review. (RT 283-284.) Therefore, for current non-HIM workpapers, Energy Division and Joint Utilities are in agreement.<sup>9</sup>

---

<sup>8</sup> HIMs are defined as those which contribute more than 1 percent of portfolio energy efficiency savings. There were approximately 50 high-impact measures reviewed by Energy Division, which were in some cases subdivided to produce 70 workpapers.

<sup>9</sup> The utilities and Energy Division also agreed that if any non-HIM measures became an HIM measure during the program cycle, then it would be subject to the HIM Phase 2 Retrospective Review process for the submission, review, and acceptance/approval of new non-DEER measures workpapers, which was outlined in the November 18, 2009 Ruling. We address this issue in Section 3.2.2.7 of this decision.

Energy Division identified 70 HIM workpapers in its review of utility submissions.<sup>10</sup> For these HIM workpapers, Mr. Lai described an interactive process of Energy Division and utility discussion and review of the March 31, 2010 utility submission which lasted until July 12, 2010. RT 284-285. On July 12, 2010, Energy Division mailed to the utilities its position on which workpapers would be approved, which would be approved with recommendations, and which would not be approved. (RT 285.) The utilities' response to the Energy Division position is the Petition we consider here.

The ALJ's October 29, 2010 Ruling placed a number of Energy Division documents in the record, and sought comments on them. Attachment 1 to that Ruling summarized Energy Division's proposed disposition of non-DEER HIM workpaper review. Attachment 2 to that Ruling provided a detailed listing of the non-DEER workpapers reviewed by Energy Division and Energy Division's proposed disposition of the specific workpapers. That Attachment 2 lists the non-DEER workpapers reviewed by Energy Division and its proposed disposition of those workpapers, separated into the following three categories:

- Approved - Energy Division recommends approval of workpapers at this time.
- No Approval at this time - Energy Division recommends that the measure or group of measures workpapers not be approved at this time and provides documentation supporting its finding. This means the workpaper is not acceptable, and thus measure *ex ante* value cannot be frozen. The workpaper would need to be

---

<sup>10</sup> Energy Division began its review within the anticipated timeframe outlined in the November 18, 2009 Ruling. As anticipated by that Ruling, Energy Division did not review all utility non-DEER workpapers.

corrected per Energy Division's recommendation and resubmitted for review.

- Approval Upon Inclusion of Revisions – Energy Division recommends approval of measure workpapers after the revisions listed are incorporated into the workpaper and provides documentation supporting its finding. This means the workpaper is in general acceptable to Energy Division except for some minor issues. Once these issues are revised per Energy Division's suggestion, the workpaper will be completely acceptable and the *ex ante* value can be frozen.

In comments filed November 5, 2010, DRA/TURN recommends considering two general points in our review of the Petition and the related Energy Division materials. First, DRA/TURN contends D.09-09-047 was very clear that *ex ante* values for 2010-2012 should be frozen, based upon the best available information at the time the 2010-2012 activity is starting. Second, DRA/TURN notes that when D.09-09-047 was issued, the 2006-2008 evaluation process was approaching its conclusion, with the final results planned to be available in late 2009 or early 2010. Therefore, DRA/TURN contends that all parties should have understood that the 2006-2008 EM&V process would have substantial impacts on the *ex ante* values for use in planning and reporting accomplishments.

In November 15, 2010 reply comments, SCE (on behalf of the Joint Utilities) states that the Joint Utilities agree with some of the Energy Division's recommended non-DEER HIM revisions. However, SCE contends the Joint Utilities were unclear how to respond to some of Energy Division's recommendations, as SCE claims many of the requests were contradictory to previous Commission directives, or were otherwise unclear. For example, SCE contends that many of the requests contained direction to implement changes when fundamental disagreements still existed between Energy Division and the



IOUs, or provided unclear recommendations that were based on review of one IOU's workpapers, but implied changes to all IOU workpapers for the measure.

### **3.2.2. The CMS Report**

The CMS Report provides a more granular breakdown of issues in dispute regarding non-DEER HIM workpaper *ex ante* values. The CMS Report lists several broad issues that apply to the HIM workpapers:

- Source for Net-to-Gross Ratio
- Effective Date of Energy Division Reviewed and Approved *Ex Ante* Values that Differ from Utility Proposed *Ex Ante* Values
- Application of Installation Rate to Utility Measure Installation Claims
- Dual Baseline for Early Retirement
- Treatment of Unidentified HIMs relative to the *Ex Ante* Freeze
- How and Where Official Frozen DEER and Non-DEER Values Will be Archived

In addition, the CMS Report provides an attachment showing updated Energy Division's recommendations for all non-DEER HIM workpapers reviewed. Parties provided their comments on Energy Division's recommendations in the CMS Report. In general, the IOUs, third-party implementers and NRDC take issue with each of Energy Division's recommendations (although they do not necessarily agree with each other on all points), and DRA/TURN agrees with the Energy Division recommendations.

In the sections below, we make final determinations for each of the broad issues outlined in the CMS Report, and determine the non-DEER *ex ante* values to be used for the 2010-2012 portfolios.

In general, we reject one contention of the utilities which runs through the Petition and their comments in the CMS Report. The utilities essentially contend

that making any changes to the *ex ante* values they proposed on March 31, 2010 constitutes not “freezing” non-DEER *ex ante* values, because their proposed values (mostly stemming from data gathered from activities before 2006) have been in place since the portfolios began. This is not consistent with D.09-09-047 and D.10-04-029. Those decisions clearly anticipated Energy Division review and approval of these utility submissions, and the use of best available information to inform that effort. Further, adopting the utility-proposed values without review simply because of the length of the review process would not take into account that the utilities themselves were responsible for a significant part of the delay. While we do not parcel out blame, to adopt utility-proposed values without review simply because of delay would be inappropriate.

### **3.2.2.1. Net-to-Gross Ratio**

Net-to-Gross (NTG) ratio values for energy efficiency measures are intended to take into account that some customers are “free riders”; in other words, some customers who receive utility incentives for energy efficiency measures would have undertaken the programs anyway, even without utility incentives. If, for example, studies show that 30% of customers are “free riders,” then the net-to-gross ratio value is 1 minus 0.3, or 0.7. Therefore, the projected savings would be reduced by 30% to account for free ridership.

The frozen DEER values adopted in D.10-12-054 contain measure-specific net-to-gross (NTG) ratio values as well as NTG ratio values labeled as “default.” The values applied to both DEER and non-DEER measures. The measure-specific values were based upon published studies available prior to December 2008. The default values were included to provide an NTG ratio value to be used when there is no measure specific NTG ratio value, because there was no reliable or appropriate study from which an NTG ratio value could be drawn.

After the completion of its DEER 2008.2.05 work, the Energy Division published 2006-2008 EM&V reports which updated NTG ratio values for many measures not included in the 2008 version of DEER, and established new NTG ratio results for specific measures included in the 2008 DEER. The 2006-2008 EM&V reports were published in draft form by Energy Division in December 2009 and in final form in February 2010.

The issue here is the source of NTG ratio values to be utilized for the *ex ante* freeze; in other words, whether the *ex ante* values for NTG ratio values should be restricted to only those contained within the adopted DEER, or should include applicable updated results from 2006-2008 EM&V efforts.

Energy Division states that the default NTG ratio values in the adopted DEER were intended for use when no measure-specific values were available in relevant or appropriate recent studies. Energy Division recommends that in those cases measure-specific NTG ratio values from the 2006-2008 EM&V studies be used rather than adopted DEER values. This is because the 2006-2008 EM&V values were the best information available at the time the 2010-2012 program implementation activities started in early 2010. Energy Division does not believe the default NTG ratio is appropriate for non-DEER measures for which measure specific NTG ratio results are now available. However, Energy Division would accept the use of the adopted DEER NTG ratio values when they differ from the 2006-2008 EM&V NTG ratio results by less than five percent.

The utilities contend that the NTG ratio values have already been frozen, citing D.10-12-054. That decision adopted DEER 2008.2.05 as the frozen data source for use in reporting accomplishments for 2010-2012 energy efficiency programs. The utilities maintain that the adopted DEER dataset includes default NTG ratio values for all measures, including non-DEER measures.

Consistent with our decision in D.09-09-047 regarding freezing *ex ante* values, we seek to achieve finality and certainty. The DEER dataset used by the utilities included NTG ratio values for both DEER and non-DEER measures which did not include the best and most up-to-date information, as there is no dispute that the Energy Division updated NTG ratio values are the best available data. However, the Energy Division update of the DEER dataset for NTG ratio values was not released in final form until February 2010, after the start of the 2010-2012 portfolio.

In D.10-012-054, we adopted DEER 2008.2.05. That decision modified D.09-09-047 specifically to clarify the appropriate DEER dataset to use for the 2010-2012 portfolio. The adopted DEER dataset includes specified or default NTG ratio values for all energy efficiency measures. We will not change this determination here. In their March 31, 2010 submission to Energy Division, the utilities used NTG ratio values from DEER 2008.2.05. It is arguable that the utilities should have updated their NTG ratio values with available and improved new information last year, as it was not clear at the time which version of DEER would be adopted. However, we will not require them to do so at this time. It is not consistent with D.10-12-054 to now change one element of the adopted DEER based on new information that was finalized after the adoption of that dataset.

### **3.2.2.2. Effective Date of Energy Division Reviewed and Approved *Ex Ante* Values that Differ from Utility Proposed *Ex Ante* Values**

As directed by the November 18, 2009 ALJ Ruling in A.08-07-021, the utilities turned in non-DEER workpapers for review by Energy Division. Some of those workpapers were selected for review by Energy Division under the Phase 1 review process adopted by this ALJ Ruling. Energy Division did not

approve most of the workpapers reviewed but Energy Division recommended certain changes prior to approval.

The utilities began portfolio implementation activities on January 1, 2010, and have since been approving and paying incentives on the range of measures covered in their submitted workpapers. During the implementation process to date, the utilities have relied upon their own proposed workpaper *ex ante* values. Energy Division has proposed changes to the workpaper *ex ante* values currently being relied upon by the utilities. If any Energy Division recommended changes to the *ex ante* workpaper values are adopted, an effective date for the changes resulting from the Energy Division recommendations must be specified.

We will adopt January 1, 2010 as the date for freezing non-DEER *ex ante* values. The utilities' argument is that any values other than their own should only be imposed on a going-forward basis, as they have based incentives to date on their own values. This argument is inconsistent with the principle in D.09-09-047 that frozen values should be applied at the start of the 2010-2012 portfolio period. Instead, the utilities' proposal would have one set of values until the date of this decision, and another set for the remainder of the portfolio timeframe; changing *ex ante* values in the middle of the portfolio is not the same as freezing *ex ante* values.

The principle of frozen values was applied in D.10-12-054 to freeze DEER values at levels in place at the start of the 2010-2012 portfolio cycle; we now simply extend the same concept to non-DEER values. Further, the utilities' proposal to change *ex ante* values at this time would negate the required Energy Division review and approval process. The utilities had no expectation that all of their proposed values would be approved by Energy Division and were aware that Energy Division did not accept a number of proposed values for HIM

workpapers. The utilities had no expectation that their proposed values would be set in stone during the pendency of the Energy Division review period or the utility-filed Petition for Modification.

We recognize that adopting different non-DEER *ex ante* values may cause the utilities to want to adjust their energy efficiency programs for the remainder of the cycle. For example, the utilities may wish to change rebate levels to reflect newly adopted *ex ante* energy savings estimates. Such changes may be appropriate so as to achieve greater energy savings based on new adopted energy savings estimates. SDG&E and SoCalGas recommend that they be allowed to make all impacted program design changes (e.g., database management system changes, appropriate rebate/measure changes, etc.) within 60 days of the Commission's decision to provide adequate time to notify program participants and market actors. We agree and will allow this window for all the utilities.

### **3.2.2.3. Application of Installation Rate to Utility Measure Installation Claims**

Utility reporting of program savings claims is comprised of several savings parameters for each measure applied to the number of measure installations for each quarter of the program cycle. One aspect of past evaluation has been a verification of installations claimed versus *ex post* verification of installations actually found to be present. The ratio of *ex post* verified installations to utility *ex ante* claimed installations is the "installation rate." In other words, the installation rate is the actual amount of an energy efficiency measure (e.g., efficient lighting, advanced heating systems) put in place as compared to the projected amount.

For most program activities this value is very close to 1.0 (such as .99). However, for certain types of measures that contribute a large share of savings to the portfolio's overall accomplishments, the installation rate has been much lower than 1.0. Therefore, obtaining an accurate representation of those installation rates is important.

An installation rate can be lower than 1.0 for several reasons. Some events -- such as broken, lost or non-working purchased items -- lead to a permanent reduction in the utility's installation rate. Further, no savings are claimed by the utilities for non-installed items. However, the installation rate may also be lower than 1.0 due to a delay in installation rather than a permanent reduction in the number of installations. For example, for certain screw-in compact fluorescent lightbulbs (CFLs), the utilities may claim 90-92% installation rates for incented bulbs when in fact some portion of their claimed installations may still be on store shelves or have been placed into storage by the customer for possible future use. We conclude that products which are claimed as installed in a specific quarter but are likely to be installed at a later date should be accounted for via a "delayed installation" mechanism.

Energy savings calculations take into account the expected installation rate, based on prior experience. The utility workpapers for some measures, including certain screw-in CFLs, have included an installation rate adjuster factor in calculating per-unit energy savings values rather than applying an installation rate to the number of installations claimed. This practice makes it difficult to identify the installation rate being utilized by the utilities and to accurately account for the fraction of delayed unit installations as described above. Additionally, installation rates are subject to *ex post* true-up. This true-up process is made more complex and less easily subject to review when installation

rate components, such as the non-installed unit ratio or delayed installed unit ratio, are not explicitly reported but rather are included into other parameters.

The issue is what mechanism should be applied to adjust gross savings for installation rates. All measures have an installation rate represented as a ratio of the number of verified installations of that measure divided by the number of claimed installations rebated by the utility during a claim period. Some measure installations should also have a delay applied to a fraction of the installation claims to account for any delay between the time of the utility claim versus the units being placed into service.

Energy Division recommends that the installation rate for any non-DEER measure not be embedded into the gross savings for that measure but rather be kept as a separate adjustment that is applied to the number of installations claimed. Energy Division also recommends that delayed installations be explicitly accounted for by causing those installations to be credited at the time they are likely to actually occur. Energy Division recommends using the 2006-2008 EM&V results for all measure installation rates for the utilities 2010-2012 *ex ante* reporting of measure installations. Energy Division also recommends that all installation rates be subject to *ex post* true-up for both the installation rate value as well as the time delay of any installations. Energy Division recommends that any changes to cost-effectiveness calculation tools required to implement these recommendations be implemented as soon as possible.

We will require the utilities to report installation rates as a separate adjustment, as recommended by Energy Division. Energy Division should then make this information public. The parties agree that there is analytical value in providing the installation rate as a separate adjustment. Whether the installation



rate is embedded into the gross savings for a measure or not does not change the overall savings calculation over the long run. However, in this portfolio cycle, using a separate adjustment for the installation rate will move the accounting for some installations beyond this cycle (thereby more accurately reflecting reality). Therefore, this adjustment will reduce energy savings in this cycle, compared to the utility-proposed unadjusted figures.<sup>11</sup>

The utilities seek additional time to implement this requirement. For example, SDG&E and SoCalGas request that all necessary database system changes be implemented within 60 days from the Commission's decision. We will grant this request.

#### **3.2.2.4. Dual Baseline for Early Retirement**

The Commission's energy efficiency policy manual (Version 4, Page 8, Footnote 9) requires that a "dual baseline" be utilized for measures which are replaced before the end of their useful life, known as early retirement measures (see Rule IV.2). This requirement was added to the policy manual in August 2008. The dual baseline reflects the difference between the savings that should be credited for the initial years of installation based upon the pre-existing or replaced equipment versus the savings credit in later years that should be based upon an eventual pre-existing equipment replacement assumed to occur if the measure had not been installed. At the later date, when the pre-existing equipment would have been replaced due to normal turnover for reasons such as imminent failure or remodeling, an alternate equipment efficiency baseline

---

<sup>11</sup> It is possible, and may be desirable, that utilities will make changes to programs as a result of this determination.

should be utilized. Building codes, industry regulations and market conditions will dictate the replacement equipment efficiency.

As stated in the policy manual, this “dual baseline” requires two savings calculation periods:

- The remaining useful life (RUL) which DEER establishes as one-third of the expected useful life (EUL) for the equipment type (which may reflect the EUL of the new equipment rather than the replaced equipment). During the RUL period, savings is calculated using the full reduced energy use between the measure and the pre-existing condition. The measure cost for this period is the full cost of equipment, including installation, for the measure.
- The period between the RUL and EUL defines the second baseline calculation period. For this period, the savings are calculated based on the difference between the measure and code/regulations or industry standard practice baseline technologies. The measure cost for this period is entered as the negative of the full cost of equipment, including installation, for the second baseline equipment measure. Entered as a negative number, this value is then discounted by the RUL number of years at the utility discount rate and subtracted from the measure cost utilized for the measure equipment in the initial baseline.

The implementation of this dual baseline approach requires additional data for each measure and, in some cases, twice the amount of data as a single baseline approach. The additional information required includes the RUL for an early retirement measure plus the savings parameters relative to the second period baseline. This information is available for existing non-DEER measures; both DEER values and workpaper values are available for both the pre-existing and second baseline period (code/regulations or industry standard practice) savings. For custom measures both calculations can be performed for the two baseline cases. However, this information is not currently provided in the utility

workpapers for non-DEER measures and the utility tracking systems do not currently include a mechanism to identify and report the information required for dual baseline measures.

Energy Division recommends that the requirements of the current Commission energy efficiency policy manual be followed and a dual baseline calculation be utilized for cost effectiveness calculations as well as utility annual and cumulative savings reporting. Energy Division recommends that any changes to cost-effectiveness calculation tools required to implement these recommendations be made as soon as possible. If a short term “fix” is required for immediate utility reporting it is recommended that a simplified calculation methodology be developed and the full correct calculation be implemented before the reporting of 2011 annual claims by the utilities.

The utilities support the concept of the dual baseline requirement, but contend that it should not be implemented until the next portfolio cycle. However, they point to no new information which requires a change from the current dual baseline requirement in the Commission energy efficiency policy manual. Their main argument appears to be that there is an administrative cost involved in compiling the dual baseline information. However, the Commission provided the utilities with substantial administrative costs for this portfolio cycle in D.09-09-047 for purposes such as this. In other words, the utilities have no valid reason for not having already implemented the dual baseline requirement. The issue of implementation cost is not new and does not override the purpose for the Commission’s dual baseline requirement. The policy was put in place for a valid reason, and that reason has not changed.

We will not alter the dual baseline requirement at this time, except to provide the utilities with flexibility to provide simplified calculation methodologies as suggested by Energy Division.

### **3.2.2.5. Treatment of Unidentified HIMs relative to the *Ex Ante* Freeze**

The November 18, 2009 ALJ Ruling includes a process for Phase 2 Energy Division retrospective review of non-DEER measures not originally identified as HIMs in Phase 1, but identified as HIMs in subsequent utility accomplishment filings. This process was necessary because Energy Division had limited time and resources to review utility non-DEER workpapers at the start of the portfolio cycle. In Phase 2, Energy Division is to undertake additional review when a utility claim indicates that an existing measure is likely to become a HIM. The parties ask us to determine the effective date for any revised *ex ante* values for non-DEER measures identified as HIMs during Phase 2 retrospective review. Energy Division recommends that the effective date of all Phase 2 retrospective or new measure reviews is January 1, 2010.

The events leading up to the Petition involved disagreements between the utilities and Energy Division concerning implementation of D.09-09-047 (as well as the need for certain clarifications of that decision). Of the disagreements, determination of *ex ante* values for non-DEER HIMs was perhaps the most contentious. We resolve these issues for currently identified HIMs in this decision, but the question of how to determine *ex ante* values for newly-identified HIMs remains.

We will freeze identification of energy efficiency HIMs by limiting them to the current set of 70 for this portfolio cycle. All other existing measures will thus

be considered non-HIMs.<sup>12</sup> This freeze will provide finality on this issue and prevent on-going controversy over future determination of HIM *ex ante* values in this portfolio cycle. In practical terms, it is likely that utilities and Energy Division have already identified most, although not all, HIMs. To the extent that existing measures turn out unexpectedly to be high impact measures, using the utility-proposed *ex ante* values – even if inaccurate – should have a small impact on overall portfolio evaluations.

The Phase 2 review process adopted by the November 18, 2009 ALJ Ruling also applies to new measures that have not had *ex ante* values specific to those new measures submitted by a utility in any previous workpaper. There has been no opportunity for Energy Division to review or approve new measures which are introduced mid-cycle. If a new measure is determined by Energy Division to be a high impact measure, utility workpapers will continue to be subject to Energy Division review as envisioned by the November 18, 2009 Ruling.

#### **3.2.2.6. How and Where Official Frozen DEER and Non-DEER Values Will be Archived**

Energy Division believes that the “official” frozen DEER and non-DEER *ex ante* values should be archived such that all the frozen values are clearly available for public review in a manner so that utility reporting of portfolio accomplishments can be shown to be utilizing the official frozen values. No party disputes the need for an appropriate location for frozen values, accessible to the public. The only question is the specific location.

---

<sup>12</sup> As discussed above, Energy Division and the utilities have agreed to allow the utilities’ proposed non-HIM *ex ante* values to be used.

We will require Energy Division to compile all Commission-adopted frozen values into one website. The utilities shall cooperate with Energy Division. Energy Division shall identify the specified website in a report to be filed in this proceeding within 10 days after the date of this decision.

### **3.2.2.7. Adoption of Non-DEER HIM *Ex Ante* Values**

Attachment 1 of the CMS Report shows Energy Division's specific recommendations for all non-DEER HIM workpapers reviewed. Energy Division recommends that all the individual workpaper revision recommendations presented in Attachment 1 be adopted and the resultant *ex ante* values be frozen. Energy Division recommends that all workpapers not reviewed be frozen as submitted with the caveat that any measures that were not identified by the utilities as HIMs but that are identified during the program cycle via utility claims reporting submission as likely to become HIMs or as having become HIMs be subject to Phase 2 retrospective review as adopted via the November 18, 2009 ALJ Ruling.

PG&E recommends that the Commission reject Energy Division's revisions to the workpapers shown on Attachment 1. However, if the Commission decides that changes are warranted, PG&E provided comments on Attachment 1 indicating its agreement or disagreement with Energy Division's recommended changes.

The utilities recommend that *ex ante* values in place as of January 1, 2010 (i.e., the unreviewed utility *ex ante* workpapers) should be the values used for existing measures for the program cycle. SCE, for example, claims it began the 2010-2012 cycle using the best available information at the time the 2010-2012 activity started, consistent with D.09-09-047, Ordering Paragraph (O.P.) 48. If changes are adopted nevertheless, SCE recommends they should not be applied

retroactively. SCE states that a minimum of 60 business days would be required to make the changes.

DRA/TURN agree with the Energy Division's recommendations.

Attachment 1 to the CMS Report details 70 different non-DEER HIM *ex ante* workpapers, noting consensus on 28 workpapers.<sup>13</sup> For some of the consensus items, Energy Division and/or one or more of the utilities changed their positions from previous filings in this docket. On each non-consensus item, we are asked to make a determination. Alternatively, the utilities request that we simply adopt their March 31, 2010 proposed values on these disputed items.

We will not return to the March 31, 2010 utility proposals, as these proposals did not take into account valid analytical concerns and best available information as provided by Energy Division, pursuant to D.09-09-047 and the November 18, 2009 Ruling. The process undertaken since the January 2011 workshop has worked well. After the workshop and subsequent discussions, there are now significantly fewer HIM workpapers in dispute. We appreciate the efforts of all parties and Energy Division to work productively to resolve a number of methodological and technical differences regarding the workpapers.

We adopt all of the workpapers contained in Attachment 1 of the CMS Report which are now not in dispute. There is not sufficient record to adjudicate each of the remaining items in dispute; this is inherently a very technical review process which we expected to be resolved by the utilities and Energy Division. Further deliberation and record development would only delay implementation even longer. The only practical solution at this time to reach finality is to either

---

<sup>13</sup> In its initial review of utility HIM workpapers, Energy Division accepted only two workpapers.

adopt on a wholesale basis the Energy Division recommendations (supported by DRA/TURN) or the utility recommendations (supported by NRDC).

We will adopt the Energy Division recommendations for the outstanding HIM workpapers. D.09-09-047 and D.10-04-029 referred not just to an Energy Division review process, but also to an Energy Division approval process. Energy Division performed its review and proposed many changes to the utility proposals. Before final Energy Division approval occurred, the utilities filed the Petition before us. Now, we will provide for final approval.

The utilities essentially want to eliminate the Energy Division review and approval process for workpapers where consensus has not been reached.<sup>14</sup> The process we envisioned was that the utilities and Energy Division would work together, leading to a final Energy Division determination. This process has now run its course, and we must reach finality. The additional process has been helpful to clarify technical issues and reduce issues in dispute. Energy Division now recommends a number of adjustments to its earlier recommendations, and the utilities have accepted a number of Energy Division recommendations. With these adjustments, sufficient consultation has occurred and the Energy Division's final determinations should be accepted. The adopted non-DEER HIM *ex ante* determinations are shown in Attachment A.<sup>15</sup>

---

<sup>14</sup> In Attachment 1 of the CMS Report, there are a number of workpapers where only one utility disagrees with Energy Division. In this situation, the utilities propose that any one utility can veto any Energy Division proposed changes.

<sup>15</sup> The adopted non-DEER HIM *ex ante* values take into account the other determinations made in previous sections of this decision.



### **3.3. Custom Projects**

Custom measures and projects are energy efficiency efforts where the customer financial incentive and the *ex ante* energy savings are determined using a site-specific analysis of the customer's facility. Customized projects, by their nature, require unique calculations for each project, as they do not rely on fixed DEER or workpaper values. For these custom measures and projects the *ex ante* values cannot be frozen in advance since the preliminary *ex ante* values are not created until the project is identified. Final *ex ante* values are not developed until the project is completed. As such, it is necessary to establish a clear process by which *ex ante* energy savings estimates from custom measures and projects can be reviewed in real-time as such measures and projects are identified and implemented.

While the values themselves cannot be "frozen," Joint IOUs in their Petition contend it is reasonable and consistent with Commission policy to freeze the approach (or methodology) to calculating energy savings for customized projects for the 2010-2012 program cycle. Further, Joint IOUs propose that the values determined at the time of installation of a customized project be frozen for purposes of determining whether the utilities have met their goals. They claim this enables the same predictable and consistent process for customized projects.

In their Petition, Joint IOUs claim Energy Division has greatly expanded data requirements related to customized projects. For example, they claim Energy Division has asked the utilities to aggregate savings in real time from all measures from all programs at a given customer site during a three-year period and notify Energy Division within one business day when the project savings reaches a certain trigger level. Energy Division has also asked the utilities to provide a detailed archive and non-industry standard analysis of engineering

tools that Joint IOUs claim they may not be legally able to perform and that would also require numerous project specific details that may not be universally applicable.

DRA/TURN sought to have Energy Division's input on the customized energy efficiency project review process placed in the record. This was done at the October 22, 2010 PHC and through the October 29, 2010 Ruling. At the PHC, Energy Division staff Peter Lai discussed Energy Division's interactions with the utilities, including the production of a document outlining Energy Division's approach to reviewing customized projects. (RT 309-312.) This document was included as Attachment 3 of the October 29, 2010 Ruling. Further, Energy Division has also provided its proposed revisions to the Joint IOU proposal in the Petition. This document was included as Attachment 4 of the October 29, 2010 Ruling.

Energy Division, the utilities, and several utility implementers have had discussions on several versions of the Energy Division proposed process since early in 2010. Based on these discussions, the February 18, 2011 CMS Report contains a new Energy Division proposed process for review and approval of utility *ex ante* values for custom calculated projects. Several issues remain in disagreement between Energy Division and the utilities and other parties. The CMS Report also contains four alternative custom review processes, proposed by PG&E, SCE, SDG&E and NRDC.

Generally, in the CMS Report recommendation, Energy Division must complete its review prior to the utility formalizing an agreement to pay an incentive for a project to a customer or customer representative. The recommended process defines when Energy Division must select projects for review and how projects not selected for review are treated relative to freezing

their non-reviewed *ex ante* values. Utilities would provide a list of projects in their pre-application stage to Energy Division. Energy Division would select projects to review within a two-week period after the utilities supply complete information on the project, including a complete project application from the customer. Projects not selected for review would have their *ex ante* values adjusted by a “gross realization rate” based upon historical statewide evaluation results for custom projects and measures.

The recommended process also would establish how the utilities and Energy Division would handle cases when the utilities disagree with the Energy Division review. Consistent with D.10-04-029, this dispute resolution process first requires that Energy Division and the utilities strive to settle differences together but allows for escalation of the dispute to Energy Division management and ultimately to the assigned ALJ.

Energy Division’s custom review process proposal in the CMS Report differs significantly from its proposal in the October 29, 2010 ALJ Ruling. The October 2010 proposal provided that Energy Division would review any projects or measures once the utilities provided quarterly savings claims to Energy Division.<sup>16</sup> In the October 2010 proposal, once the claims were available Energy Division would have 90 days to complete its review and direct the utilities to modify the claims. The CMS Report proposal requires the utilities to notify Energy Division of a project in its pre-application stage, to provide sufficient time for Energy Division to review the project’s energy savings parameters with the utility’s internal reviewers. Energy Division would then provide required

---

<sup>16</sup> These claims are made after the project is completed and the incentive has already been paid by the utility.

changes prior to the utility entering into any agreement with the customer. In this manner, the CMS Report proposal allows Energy Division review and approval in parallel with the utility review and approval. Thus, incentive payments would be based upon the reviewed and approved *ex ante* values.

In addition, the proposal outlined in October 2010 allowed Energy Division to review and request changes to any claimed *ex ante* value once the claim has been made. The proposal in the CMS Report would require Energy Division to identify projects to be reviewed before the project application results in an incentive payment agreement with a customer. Thus projects not so identified would not be reviewed. However, those non-reviewed projects would have a gross realization rate applied to their *ex ante* estimates in the utility filings to the Commission.

D.09-09-047 did not speak directly to *ex ante* values for customized projects, rather including this issue under the overall non-DEER discussion. As with DEER values and non-DEER HIM workpapers, D.09-09-047 called for making determinations based on best available information. We discuss the particular issues in contention below, as outlined in the CMS Report.

### **3.3.1. Gross Realization Rate**

The gross realization rate (GRR) is a multiplier that attempts to take into account the likelihood that not all Commission-approved projects undertaken by utilities will come to fruition. Based on studies from past years' outcomes, Energy Division has determined that approximately 80% of projected savings from custom projects were actually achieved. To this end, D.09-09-047 anticipated that the utilities should utilize a GRR based on updated E3 calculators for all custom measure *ex ante* estimates utilized in their planning

filings.<sup>17</sup> The updated E3 calculators contain a 0.80 GRR adjustment for custom measures.

Because Energy Division will not have the time or resources to review most of the hundreds of custom projects that result in utility savings claims, Energy Division proposes that a GRR multiplier be applied to all projects which Energy Division does not review. As a result of meetings since the January 2011 workshop with the utilities and some of their third party implementers, Energy Division in the CMS Report now proposes revisions to the adopted GRR. Energy Division's proposed changes are shown in Table 1 below. Energy Division believes the review process, if implemented as proposed, will improve the *ex ante* calculations both for reviewed and non-reviewed projects. DRA/TURN supports using these updated GRRs, while other parties oppose both a 0.80 GRR and Energy Division's update.

**Table 1: Default Custom Measure Gross Realization Rates Recommended by Energy Division**

IOU	kWh	kW	Therm
PG&E	0.7	0.7	0.75
SCE	0.8	0.8	
SDG&E	0.8	0.7	0.7
SoCalGas			0.75

PG&E believes a GRR of 1.0 is appropriate and the default GRR's in Table 1 are arbitrary. PG&E maintains that Energy Division has not provided a

---

<sup>17</sup> O.P. 15g of D.09-09-047 requires a compliance advice letter to include: "The individual utility E3 calculators as modified by Energy Division to use as the base starting point for modeling the portfolio mix of measures and budget changes. Energy

*Footnote continued on next page*

justification for those values. PG&E contends that Energy Division has already approved PG&E's proposed portfolio plan using a GRR of 1.0 for custom measures in an Energy Division disposition letter dated October 21, 2010, regarding PG&E's supplemental Advice Letter 3065-G-A&B/3562-E-A&B.

In comments on the Proposed Decision, National Association of Energy Service Companies (NAESCO), the utilities, and NRDC refer to a 0.80 GRR as "arbitrary." However, this figure was based upon extensive study by Energy Division in establishing the E3 calculator. NAESCO, NRDC, and the utilities also comment that Energy Division's GRR determinations are controversial and subject to differences in professional opinion. Certainly, different opinions and analyses exist in determining GRRs, as with many technical matters within the complex energy efficiency analytical construct. However, it is necessary to make a determination in this decision about what constitutes "the best available information at the time the 2010-2012 portfolio is starting."

We note that using a GRR other than 1.0 does not affect incentives paid to customers with custom energy efficiency projects. Payments from utilities to customers are made based on post-installation review of actual energy efficiency savings. In other words, if the customer achieves more or less energy savings than in the *ex ante* estimate, payment is made based on actual savings. The only direct impact on customers in adopting a GRR less than 1.0 is that some custom projects will now not go forward, as the GRR value indicates that these projects are not cost-effective. This outcome will only affect those custom projects with

---

Division shall notify the assigned Administrative Law Judge and Commissioner of significant deviations from the modified E3 calculators."

the lowest cost-effectiveness value that otherwise would have gone forward under the utilities' proposed methodology.

We encourage Energy Division and parties to continue to work to refine analytical methods for GRRs and other metrics. In particular, we would like to see increased granularity in the GRR figures, as a single GRR does not fully capture the variations in program achievements among various energy efficiency custom measures.

The revised Energy Division GRR values in Table 1 represent more current data than anticipated by D.09-09-047, as they take into account 2006-2008 analyses which were unavailable for consideration in D.09-09-047, or in the Energy Division's next updated E3 calculators. However, consistent with our discussion of NTG ratio values in this decision, we will not adopt new, contested data that did not exist at the start of the portfolio cycle and was not anticipated by D.09-09-047.

We also do not accept PG&E's argument that a 1.0 GRR level should be adopted. Whatever basis Energy Division used in its Disposition letter regarding PG&E's Advice Letters does not supersede a Commission decision. Other arguments by parties about arbitrariness or portfolio impacts are not appropriate to consider here, as these are arguments which should have been made before D.09-09-047 was decided. No new facts or circumstances have been raised here to justify changing that decision on this point.

We will adopt a GRR of 0.90. While the Energy Division's determination of a 0.80 GRR was included in the E3 calculator as envisioned by D.09-09-047, and is in the record of this proceeding, there is no analytical support for this value in the record beyond the reference to the E3 calculator. At the same time, parties have not justified adoption of 1.0 GRR either. It is undisputed that not all

planned custom projects will come to fruition. Therefore, a 1.0 GRR would artificially inflate utility *ex ante* energy savings for the 80% or more of custom projects which will not be reviewed by Energy Division. It is reasonable to adopt a GRR value of 0.90 as a conservative value to account for the difference between projected and actual energy savings for unreviewed custom projects.

### **3.3.2. Effective Date of Custom Measure Gross Realization Rate Adjustments and Energy Division Reviewed and Approved *Ex Ante* Values that Differ from Utility Proposed *Ex Ante* Values**

The issue is the effective date of the custom measure *ex ante* values review process, including application of GRR adjustments, proposed by Energy Division. Energy Division recommends that the effective date for the custom measure *ex ante* review process be January 1, 2010, so that the utilities would apply the GRR adjustment to non-reviewed projects *ex ante* values for their savings claims starting January 1, 2010. GRR values would therefore be effective for all implementation activities for the 2010-2012 cycle, including those already completed. Additionally, Energy Division recommends that the custom measure review process should commence immediately so as to allow Energy Division the opportunity to begin review projects not yet completed as soon as possible.

As the method for determining GRRs value was already decided in D.09-09-047, there is no reason that the effective date for implementing this value should be anything other than January 1, 2010. This determination is consistent with our discussion of effective date in Section 3.2.2.2 of this decision.

### **3.3.3. Dual Baseline for Early Retirement**

This is the same issue as presented in Section 3.2.2.3 above. We will apply the same determination for custom projects as for all other non-DEER measures.



### **3.3.4. Other Issues Pertaining to the Energy Division Proposed Custom Measure Review Process**

The custom project and measure review process defines the timing and the type of information the utilities must provide to Energy Division to allow for the review. This information transfer begins when the utility first learns of a potential project and continues until the project is completed. The process also identifies the timing by which Energy Division must complete its review and how the utilities must take action based on the contents of the review.

Parties were concerned that the process proposed by Energy Division in October 2010 would allow *ex ante* values used to inform incentive payment to customers to vary greatly from the *ex ante* values actually frozen after the Energy Division review was completed. The CMS Report process allows the frozen *ex ante* values to also be those used for incentive payments. Parties were also concerned that the time frame of the Energy Division review recommendations being provided to the utilities could result in customer projects being delayed. The new CMS Report proposal allows for much earlier information transfer from the utilities to Energy Division thus enabling a much more parallel review process. Additionally, Energy Division and the utilities agreed to provide for an expedited review process whereby projects identified as requiring faster response from both the utilities and Energy Division can be identified in advance and an expedited review undertaken.

Some parties argue that the review process proposed in the CMS Report should be implemented on a prospective basis for this portfolio cycle, or that this cycle should be used as a test basis for the next cycle. We disagree. Any overstated *ex ante* values (potentially resulting in overpayment of incentive payments) or unrealistic savings estimates must be corrected as soon as possible and cannot wait for the next cycle. The utilities propose that they not be required

to adjust *ex ante* values in response to Energy Division reviews and that non-reviewed *ex ante* values not be subject to a gross realization rate adjustment. We will not adopt this suggestion, which would delay or even preclude *ex ante* values being reflective of actual savings.

We will adopt the Energy Division's custom review process as proposed in the CMS report, with modifications to take into account parties' concerns about duplication, timeliness of review and transparency. We agree with parties' position that storing project specific tools and processes in the Calculation Tool Archive (CTA) could potentially create duplication, because the purpose of the CTA is to store generic tools and processes, not specific items. Thus, project specific tools and processes will be stored in the Custom Measure and Project Archive (CMPA).

We are sensitive to parties' concern over the timeliness of the Energy Division parallel review process. It is both the Energy Division's and the utilities' responsibility to have the reviews done in an expeditious manner. Energy Division's review can only be conducted in parallel with a utility's internal review if the utility provides the project information to Energy Division in a timely manner. As such, we direct the utilities to provide a summary list of all projects, in pre-application stage and application stage, in their CMPA. Each utility shall keep a complete up-to-date electronic archive of all custom measures and projects. Each project should be added to the archive immediately after either being identified in the pre-application stage, or after the date of the customer's application to the utility, whichever is sooner.

We agree with parties that a public archive should be available for stakeholders to access Energy Division's project review comments and lessons learned. We will require Energy Division to maintain a public archive database

with a summary of issues identified in its custom applications and projects reviews, and the Energy Division dispositions of those issues. Customer-specific data and information should be removed from the Energy Division summary of issues and dispositions.

We are sensitive to parties' concern for a dispute resolution process; however, such a process would inevitably delay the timeliness of the review process. The utilities and Energy Division should first discuss any disputes to come to some mutual agreement. For *ex ante* values where the difference between a utility's estimated value and Energy Division's review is less than +/- 20%, the accepted *ex ante* value shall be the mid-point value between the utility's value and the Energy Division's value. For differences in value that are greater than 20%, the accepted *ex ante* value will be Energy Division's reviewed value.

We agree with NRDC and the utilities that the compelling evidence determination in the Energy Division Methodology for Determination of Baseline for Gross Savings Estimate flow chart diagram (Appendix I in the Custom Review Process document) appears to be one-sided. We clarify that the compelling evidence determination applies both ways. There needs to be compelling evidence to determine whether a project is "replace on burnout" or "early retirement."

With these changes, and the modified GRR of 0.90, we adopt the custom review process shown in Attachment B to this decision.

In comments on the Proposed Decision, Joint Utilities, NRDC, and NAESCO reiterate their concerns about the Energy Division's custom project review process. Even as modified herein, these parties are concerned the process will allow for too much time for Energy Division's review, thus discouraging

beneficial custom energy efficiency projects. We agree with NAESCO that all interested parties should collaborate to develop and test an alternative custom review process, and propose a process which fixes any imperfections in the process adopted here so that a potentially improved process can be considered for the next program cycle. For the remainder of this program cycle, parties should focus on efficient implementation of the adopted process.

#### **4. Comments on Proposed Decision**

The proposed decision of ALJ Gamson in this matter was mailed on April 26, 2011 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 16, 2011, and reply comments were filed on May 23, 2011, by Joint Utilities, NRDC, DRA, TURN, Women's Energy Matters, Small Business California, and NAESCO, EnerNOC, and Global Energy Partners, LLC.

#### **5. Assignment of Proceeding**

This proceeding is assigned to Commissioner Michel Peter Florio and ALJ David M. Gamson. ALJ Gamson is the Presiding Officer.

#### **Findings of Fact**

1. D.09-09-047 adopted energy efficiency portfolios for 2010 through 2012 for Southern California Edison Company, Southern California Gas Company, San Diego Gas & Electric Company, and Pacific Gas and Electric Company. That decision established, among other things, that DEER and non-DEER *ex ante* values for energy savings estimates should be frozen using best available information at the time the 2010-2012 energy efficiency portfolio cycle was starting.

2. D.09-09-047 and D.10-04-029 established that Energy Division would review and approve utility *ex ante* energy savings estimates.

3. The utilities and the Energy Division agree that workpapers submitted by the utilities by March 31, 2010 containing *ex ante* values for energy savings estimates for non-high impact energy efficiency measures not contained in the adopted DEER dataset should be accepted.

4. The utilities and the Energy Division have not been able to agree on how to freeze many non-DEER *ex ante* workpapers for high impact measures.

5. Energy Division final determinations for the non-DEER high impact measure workpapers in Attachment 1 of the CMS Report where there is no consensus are based on their review as provided for by the Commission in D.09-09-047, and consultation with parties after a workshop in January 2011.

6. It is important to establish clear frozen *ex ante* values for energy efficiency savings in order to ensure the utilities can fully implement the energy efficiency measures approved in D.09-09-047.

7. The 2010-2012 energy efficiency cycle began on January 1, 2010, even though *ex ante* values for energy efficiency measures could not have been finally established at that time.

8. D.10-12-054 modified D.09-09-047 to adopt frozen DEER values based on the 2008 DEER version 2.05.

9. Energy Division provided data to utilities and the public regarding net-to-gross values for energy efficiency measures in draft form in December 2009 and in final form in February 2010.

10. Net to gross ratio values for energy efficiency measures were contained in the 2008 DEER version 2.05 adopted in D.10-12-054.

11. The adopted 2008 DEER version 2.05 *ex ante* values were effective as of January 1, 2010.

12. There is analytical value in providing the installation rate for energy efficiency measures as a separate adjustment because it will then more accurately reflect the number of installations in this portfolio cycle.

13. Providing the installation rate for energy efficiency measures as a separate adjustment will reduce energy savings in this cycle, compared to the utility-proposed unadjusted figures.

14. The current Commission energy efficiency policy manual (Version 4, Page 8, Footnote 9) requires that a “dual baseline” be utilized for early retirement measures. This requirement was added to the policy manual in August 2008.

15. Consistent with a November 18, 2009 ALJ Ruling in this docket, Energy Division did not review all of the non-DEER energy efficiency measure workpapers for *ex ante* values submitted by the utilities to determine if they constituted high impact measures in Phase 1 of its review. Of the non-DEER workpapers reviewed by Energy Division in Phase 1, 70 were determined to be high impact measures.

16. It is important that adopted frozen DEER and non-DEER *ex ante* values be archived and available for public review.

17. Twenty eight of the 70 workpapers contained in Attachment 1 of the CMS Report are not in dispute.

18. A GRR adjustment factor for non-DEER custom energy efficiency projects attempts to take into account the likelihood that not all Commission-approved custom projects will come to fruition.

19. Per D.09-09-047, utilities were required to use individual utility E3 calculators, as modified by Energy Division, in compliance Advice Letters.

These modified E3 calculators include a 0.80 GRR adjustment for custom energy efficiency measures. However, the record does not show the analytical basis for this value.

20. A 1.0 GRR value does not account for the likelihood that not all approved custom projects will come to fruition.

21. Revised Energy Division GRR values for non-DEER custom energy efficiency projects include more accurate data than anticipated by D.09-09-047, as these revised values take into account analyses of 2006-2008 energy efficiency results which was unavailable for consideration in D.09-09-047. However, this update was not finalized until February 2011.

22. After discussions with parties, Energy Division proposed a custom project *ex ante* review process in the CMS Report which takes into account concerns expressed by parties about earlier Energy Division proposals on this topic.

23. The Energy Division custom project review process in the CMS report is reasonable, except for clarifications regarding redundancy, timeliness, transparency and standard of review.

### **Conclusions of Law**

1. As required by an ALJ Ruling, consistent with D.09-09-047 and D.10-04-029, the utilities properly submitted their proposed non-DEER *ex ante* values for energy efficiency measures to Energy Division by March 31, 2010 for Energy Division review and approval.

2. It is consistent with D.09-09-047 for workpapers submitted by the utilities by March 31, 2010, containing *ex ante* values for energy savings estimates for non-high impact energy efficiency measures not contained in the adopted DEER dataset, to be frozen using the data in the workpapers submitted by the utilities.

3. Data regarding net-to-gross ratio values for energy efficiency measures provided by Energy Division in draft form in December 2009 and in final form in February 2010 should be considered the best available information for determining *ex ante* values at the time the 2010-2012 energy efficiency portfolio cycle was starting.

4. D.10-12-054 adopted 2008 DEER version 2.05, including net-to-gross ratio values. Therefore, the adopted net-to-gross ratio values in the 2008 DEER version 2.05 should be used for determining *ex ante* values for the 2010-2012 energy efficiency portfolios.

5. Consistent with the January 1, 2010 effective date for *ex ante* values in the DEER dataset, as adopted in D.10-12-054, non-DEER *ex ante* values for energy efficiency measures and custom projects should be effective as of January 1, 2010.

6. The installation rate for energy efficiency measures should be provided as a separate adjustment.

7. There is no valid rationale for changing the requirement in the current CPUC energy efficiency policy manual that a “dual baseline” be utilized for early retirement measures.

8. Consistent with the Commission’s policy adopted in D.09-09-047 to freeze *ex ante* values for energy efficiency measures at the start of the portfolio cycle, no additional non-DEER workpapers contained in the set of those submitted by utilities for Energy Division review and approval by March 31, 2010 should be considered as high impact measures for the purpose of determining *ex ante* values.

9. Energy Division, in its Phase 2 review and approval process of utility non-DEER *ex ante* workpapers, should continue to review and approve mid-cycle workpapers for possible high-impact measure workpapers.



10. Adopted frozen DEER and non-DEER *ex ante* values should be archived such that all the frozen values are clearly available for public review.

11. The non-controversial *ex ante* values from the workpapers summarized in Attachment 1 of the CMS Report should be adopted. For those workpapers in dispute in the CMS Report, the Energy Division determinations should be adopted.

12. No new facts or circumstances have been raised here to justify changing the use of E3 calculators as modified by Energy Division, as anticipated by D.09-09-047, with regard to GRR values for determining *ex ante* values for non-DEER custom energy efficiency projects.

13. A GRR value of 0.90 should be adopted and used for determining *ex ante* values for non-DEER custom energy efficiency projects, in order to account for the difference between planned and realized energy savings for those custom projects unreviewed by Energy Division.

14. The Energy Division's custom project *ex ante* review process proposed in the CMS Report should be adopted with modifications to the GRR, to enhance transparency and timeliness, and to reduce redundancy.

## O R D E R

**IT IS ORDERED** that:

1. Ordering Paragraph 48 of Decision 09-09-047 (as modified by Decision 10-12-054) is modified to read: "The *ex ante* (also known as estimated) energy savings values for energy efficiency measures established for use in planning and reporting accomplishments for 2010-2012 energy efficiency programs shall be frozen. This freeze of *ex ante* energy savings values shall apply both to energy efficiency measures contained in the Database for Energy Efficient

Resources (DEER) and non-standard energy efficiency measures (non-DEER measures). The frozen version of DEER shall be 2008 DEER version 2.05, dated December 16, 2008, as currently posted at the DEER website (<http://www.deeresources.com>) maintained by Energy Division. The frozen non-DEER *ex ante* values shall be based upon the values adopted in Attachment A to this decision. All non-DEER energy efficiency measures not referenced in Attachment A to this decision (except for custom measures) shall have *ex ante* energy savings values frozen based on workpapers submitted to Energy Division by March 31, 2010, pursuant to the Administrative Law Judge Ruling of November 19, 2009 in this proceeding. All non-DEER *ex ante* energy savings values shall be effective as of January 1, 2010."

2. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company shall provide all approved *ex ante* energy savings values not in the 2008 Database for Energy Efficient Resources, version 2.05, including the values based on Attachment A to this decision, to Energy Division within 14 days after the effective date of this decision.

3. Within 60 days of the effective date of this decision, Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company may make any energy efficiency portfolio program design changes (e.g., database management system changes, appropriate rebate/measure changes, etc.) consistent with the adopted *ex ante* workpapers adopted in Ordering Paragraph 1 of this decision. Any such program design changes shall be consistent with the applicable Ordering Paragraphs of Decision 09-09-047 regarding fund shifting, program design and reporting requirements.

4. The only high impact energy efficiency measures used for determination of *ex ante* energy savings values for the 2010-2012 energy efficiency portfolios of Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company, are those identified in Appendix A of this decision, except for any new measures (i.e., measures not identified as of March 31, 2010) which are identified as high impact energy efficiency measures through the Phase 2 process in the Administrative Law Judge's Ruling of November 19, 2009 in this proceeding.

5. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company shall provide information to Energy Division identifying the installation rates for each non-Database for Energy Efficiency Resources energy efficiency measure in their 2010-2012 energy efficiency portfolios within 60 days after the effective date of this decision.

6. Energy Division shall compile all Commission-adopted frozen *ex ante* energy savings values into one website. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company shall cooperate with Energy Division in this effort. Energy Division shall identify the specified website in a filing in this proceeding within 10 days after the date of this decision. The filing of this report will not reopen this proceeding.

7. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company shall follow the custom project *ex ante* value review process set forth in Attachment B to this decision.

8. The Administrative Law Judge's grant by e-mail of the February 18, 2011 Motion of San Diego Gas & Electric Company seeking the right to file Case Management Statement Report is affirmed.

9. The June 9, 2011 Motion entitled "Request of the Division of Ratepayer Advocates for Official Notice and for Reopening the Record" is denied.

10. Applications (A.) 08-07-021, A.08-07-022, A.08-07-023, and A.08-07-031 are closed.

11. This order is effective today.

Dated July 14, 2011, at San Francisco, California.

MICHAEL R. PEEVEY  
President  
TIMOTHY ALAN SIMON  
MICHEL PETER FLORIO  
CATHERINE J.K. SANDOVAL  
MARK J. FERRON  
Commissioners

I will file a concurrence.

/s/ MICHEL PETER FLORIO  
Commissioner