



**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
(Filed July 21, 2008)

And Related Matters.

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

**MOTION OF SAN DIEGO GAS & ELECTRIC COMPANY (U-902-M), ET. AL.
SEEKING THE RIGHT TO FILE CASE MANAGEMENT STATEMENT REPORT**

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February 18, 2011

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**I.
INTRODUCTION AND BACKGROUND**

San Diego Gas and Electric Company (“SDG&E”) respectfully files this Motion of San Diego Gas (U-902-M), et. al. Seeking the Right to File Case Management Statement Report (“Motion”) in the above-captioned proceeding, as explained below, on behalf of itself and the following named parties (collectively the “Sponsoring Parties”):

Division of Ratepayer Advocates, Ecology Action, Ecos Consulting, EnerNOC, Inc., Global Energy Partners LLC, Heschong Mahone Group, Inc., National Association of Energy Service Companies, Natural Resources Defense Council, Onsite Energy Corporation, Pacific Gas and Electric Company, Quantum Energy Services and Technologies, Resource Solutions Group, Silicon Valley Leadership Group, Willdan Energy Solutions, Southern California Edison Company, Southern California Gas Company, and The Utilities Reform Network.

All parties to this Motion have provided their agreement to be included in this Motion via email to Peter Lai of the Commission Staff’s Energy Division (“ED”).

On September 17, 2010, the utilities filed “Southern California Edison Company (U 338-E), Pacific Gas and Electric Company (U 39-M), Southern California Gas Company (U 904-G) and San Diego Gas & Electric Company (U 902-M) Petition for Modification of

Decision 09-09-047”, in the above captioned proceeding, to address 28 separate changes to D.09-09-047, in eight subject areas.

On December 16, 2010, the Commission issued D.10-12-054 which addressed some of the requested 28 changes and deferred the remaining outstanding requests to a subsequent decision. Among the deferred requested changes are the freezing of the Non-DEER values and the Custom Projects Process (collectively, the “deferred issues”). D.10-12-054 states (at pages 15 and 18): “we will defer making a determination on this issue to allow an opportunity for further consideration. This issue will be addressed in a forthcoming decision on the Petition.”

On December 16, a Notice of Workshop was issued for a January 5, 2011 workshop (“workshop”) to consider the deferred issues related to the non-DEER and customer ex ante values. That workshop was chaired and conducted by ALJ Gamson. As a result of the workshop, ED scheduled a public meeting for January 28, 2011 to continue discussions on the deferred issues pursuant to an agenda published by ED on January 26, 2010,

The purpose of the January 28, 2011 public meeting was to continue discussion of the deferred issues among parties with the goal to produce a report to ALJ Gamson identifying clear statements of issues to be resolved and areas of agreement and disagreement on those issues. At this meeting the utilities suggested using the Case Management Statement (“CMS”) format to report to ALJ Gamson. The CMS format is organized such that it provides a clear statement of each issue and the parties’ own statements of agreement or disagreement as to each such issue in one document. ALJ Gamson agreed to the use of the CMS format when presented to him by ED.

On February 4, 2011 ED sent an email letter to the participating parties and Service List, which provided the following direction from ALJ Gamson concerning the use of the CMS:

- “4. The case management statement report should be filed either (a) by one party, with a declaration from any other party that wishes to associate itself with it (including dissenting opinions), or (b) jointly by all sponsoring parties. In either case, all parties on the service list should be given an opportunity to either associate itself with the report, or provide input to revise the report before it is filed. ALJ Gamson does not want to have any party to say later that it either was not brought into the process or that any disagreements were not noted. If the report is handled this way, there will be no need for further comment.
5. Filing party(ies) will file a Motion seeking the right to file the report along with the CMS report.

ALJ Gamson asked ED to provide the above information to all parties, and that he would be happy to speak to selected representatives of parties to clear any of this up, or to have a conference call open to all parties if necessary.”

II. DISCUSSION

The CMS Report, compiled by ED and attached hereto and made a part hereof, sets forth issues for resolution, the sponsoring parties’ positions thereon, as well as alternate proposals to ED’s recommendations regarding non-DEER High Impact Measures ex ante values in work papers submitted for Phase 1 review and ED’s proposed review and approval process of utility custom application/project ex ante values consistent with the direction and guidance set forth above.

III. CONCLUSION

SDG&E on behalf of itself and the Sponsoring Parties, respectfully asks the Commission to grant this Motion to accept into the record of this proceeding the CMS Report attached hereto as Attachment A.

Dated this 18th day of February, 2011.

Respectfully submitted,

/s/ Steven D. Patrick

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ATTACHMENT A

CASE MANAGEMENT STATEMENT

Application 08-07-022 and Related Matters

Freezing Non-DEER and Custom Project Ex Ante Values February 17, 2011

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Participating Parties

Pacific Gas & Electric Company (PG&E), Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E), Southern California Gas Company (SCG), Division of Ratepayer Advocates, The Utility Reform Network, Natural Resources Defense Council, and Third-party Implementers¹.

¹Party’s that have signed on to the positions listed for “Third-party Implementers” include Ecology Action, EnerNOC, Inc., Global Energy Partners, LLC, Lockheed Martin, NAESCO (National Association of Energy Service Companies), Onsite Energy Corp., and Wildan Energy Solutions

Summary

This document summarizes parties' positions and alternate proposals to the Energy Division's recommendations regarding non-DEER High Impact Measures (HIM) ex ante values in workpapers submitted for Phase 1 review and Energy Division's proposed review and approval process of utility custom application/project ex ante values.

Part 1: Non-DEER HIM Workpaper Assumptions

1. *Broad Issues that Apply to Several HIM Workpapers*

A. **Net-To-Gross Ratio (NTGR) Ex Ante Values**

Background: The frozen DEER 2008.2.05 contains many measure-specific NTGR values as well as some NTGR values labeled as "default." The measure-specific values were developed by the DEER team based upon published studies available prior to December 2008. The DEER 2008.2.05 default values were included to provide a NTGR value to be used when there is no measure specific NTGR in DEER 2008.2.05. A measure-specific NTGR was not included into DEER 2008.2.05 for cases where the DEER team was not able to identify a reliable or appropriate study from which a NTGR value could be drawn. After the completion of its DEER 2008.2.05 work, the Energy Division published 2006-08 EM&V reports which include NTGR values for many measures not included in DEER 2008.2.05 as well as new NTGR results for specific measures included in DEER 2008.2.05. The 2006-08 EM&V reports were published in draft form in December 2009 and final form in February 2010.

Issue: There is disagreement on the source of NTGR values to be utilized for the ex ante freeze --i.e., whether the ex-ante values for NTGR should be restricted to only those contained within DEER 2008.2.05 or should applicable results from 2006-08 EM&V be utilized. This disagreement is further divided into two sub-issues below.

- (1) Issue: When DEER 2008.2.05 contains no NTGR value for a specific Non-DEER measure, but the 2006-2008 Energy Division EM&V reports do contain NTGR values for that specific measure, should the ex ante NTGR value be frozen using the DEER 2008.2.05 "default" NTGR value or the 2006-2008 measure-specific NTGR value?

Energy Division recommendation: The DEER default NTG values were intended for use when no measure-specific values were available in relevant or appropriate recent studies. Energy Division recommends that measure-specific NTGR values from the 2006-08 EM&V studies be used rather than DEER 2008.2.05 as the 2006-08 EM&V values are the best information available at the time the 2010-12 program implementation activities started in early 2010. Energy Division does not believe the DEER 2008 "default" NTGR is appropriate to apply to non-DEER measures for which measure specific NTGR results are now available.

Positions of Parties:**PG&E:**

PG&E recommends continued use of the default NTGR where there is not an applicable NTG ratio in DEER 2008.2.05. PG&E's position is based on four principles that apply to a number of the outstanding issues presented in this case management statement and to be decided by the Commission in this proceeding.

- 1) The 2006-2008 EM&V evaluation results were not available for planning the 2010-2012 EE Portfolio cycle, were not published until after the start of the portfolio cycle and have not been adopted by the Commission.
- 2) ED recommendations conflict with Energy Division staff's disposition letter dated October 21, 2010, that approved PG&E's Energy Efficiency Compliance Advice Letter (AL) 3065-G-A&B/3562-E-A&B, stating that Energy Division staff had reviewed PG&E's filing for compliance with D.09-09-047, including changes in energy savings forecast in the E3 calculator and determined that PG&E's advice letter complied with D. 09-09-047. (see also D.09-09-047 p. 43 "Energy Division must provide utilities further details and clarifications on the proper application of DEER so that the utilities are able to correct these problems.")
- 3) ED's Recommendations conflict with the Commission's policy as articulated in D.09-09-047 and as modified in D.10-12-054 ("Both DEER 2008 and non-DEER measure ex ante values established for use in planning and reporting accomplishments for 2010-2012 energy efficiency programs shall be frozen. ~~based upon the best available information at the time the 2010-2012 activity is starting.~~ 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.")
- 4) ED's recommendations are in conflict with the Commission's policy stated in D. 09-09-047 that it is the Commission's "duty to ensure that administrative costs are reasonable and limited to those overhead and labor costs that are truly required to implement quality programs," (p. 51)

PG&E objects to the Energy Division's position that these values should change based on the 2006-2008 EM&V results, or any results for that matter, as this proposed revision violates the principle that DEER 2.05 values are frozen as of January 1, 2010. It also ventures away from Energy Division's own approval of PG&E's compliance advice letter in October 2010.

Making the changes will require considerable time and resources for PG&E to implement in its measure tracking database. In addition, PG&E does not believe that this is a wise use of public funds as this change is not required to implement quality programs."

For all of these reasons it is inappropriate to disregard Commission policies and prior direction and now revise the NTGR away from the default frozen values that were available at the time the portfolio was planned, implemented and approved. It is

inappropriate to use values that resulted from 2006-2008 EM&V evaluation results that were not available until after the start of the portfolio and not adopted by the Commission.

SCE:

SCE recommends using the default NTG ratio contained in DEER 2008.2.05, where there is not an applicable NTG ratio in DEER 2008.2.05. Commission Decision 10-12-054 adopts DEER version 2008.2.05, dated December 16, 2008, as the frozen data source for use in reporting accomplishments for 2010-2012 energy efficiency programs (O.P. #1). The DEER 2008.2.05 data set contains a complete listing of NTG ratios for IOU programs and measures, and where there is not an applicable value for a specific measure, it contains a default value. As such, the Commission has adopted such values for use in the 2010-2012 program cycle. Furthermore, the use of default NTG ratios is rooted in past Commission and Energy Division precedent.

SCE began the 2010-2012 cycle using the “best available information at the time the 2010-2012 activity is starting.” – D. 09-09-047 OP 48. That is, information that was available prior to 2010 and available in July 2009 when the Application was filed. The values used by SCE currently are in-line with the policy adopted in D.09-09-047 and D.10-12-054, of freezing values prior to the start of a program cycle and holding them steady for the duration of that same program cycle.

In addition, ED, the Commission and the utilities all understand that values used in portfolio planning must be available a year prior to the portfolio beginning for planning purposes. Therefore, a data set must be available near or at the beginning of 2009 to be available at the time 2010-2012 program activity including portfolio planning, goal setting, application, and subsequent reporting.

Objections to these values being presented now, over a year after the programs began, are not in-line with D.09-09-047 and D.10-12-054 and do not appropriately allow EE implementers to plan and operate their portfolios, as was the intent of D. 09-09-047.

These values, approved by the Commission in Decisions 09-09-047 and 10-12-054, were contained in SCE’s Compliance Advice Letter 2410-E and subsequently approved by Energy Division on April 8, 2010 via disposition letter. To venture away from these values is in complete opposition of the intent of D.09-09-047 and D.10-12-054 as well as Energy Division’s prior approval.

SDG&E, SoCalGas:

SDG&E and SoCalGas’ basic principle in the application of the 2008 DEER (version 2.05) is as follows:

If DEER 2008 (version 2.05) has the necessary information on the measure or provides a methodology by which to calculate specific parameters, SDG&E and

SoCalGas will apply the values and methodologies from 2008 DEER as directed by the Commission:

“There is a need to ensure that our DEER values reflect the most recent technical information gathered in our EM&V processes while fairly addressing concerns that the utilities must be offered a reasonable opportunity to meet their goals and that the goals themselves cannot become constantly moving targets. Consistent with this, in the goals section of this Decision, *we commit to holding constant the 2008 DEER ex ante values and methodologies for the purpose of measuring portfolio performance against goals* (emphasis added) contingent upon essential corrections in the utilities’ compliance filings. (D.09-09-047, page 303)”

This is consistent with the Commission’s acknowledgement that it has aligned the goals with DEER 2008:

“Therefore, we agree with Energy Division’s analysis and the view held by various parties that the Commission should take steps to align current portfolio goals with DEER 2008. This is consistent with our commitment in D.04-06-090 to keep goals updated and reflective of potential available to the utilities. (D.09-09-047, page 36)

Given this basic principle to adhere to DEER 2.05, SDG&E and SoCalGas disagree with ED’s recommendation that is “the DEER 2008 “default” NTGR is inappropriate to apply to non-DEER measures for which measure specific NTGR results are now available.” This ED recommendation is not consistent with the Commission’s commitment, cited above, “*to holding constant the 2008 DEER ex ante values and methodologies.*”

DRA/TURN:

DRA and TURN agree with ED’s recommendation to use the 2006-2008 EM&V studies, which represent the most up-to-date measurement of energy savings likely to be achieved by the 2010-2012 energy efficiency portfolios. This recommendation is consistent with D.09-09-047, which found 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 the freeze until early 2010 is a reasonable approach to better ensure that the maximum amount of updates is captured before the freeze takes effect.” [D.09-09-047, pp. 42-43; *see also* Conclusion of Law 26 and Ordering Paragraph 48.]

NRDC:

The Commission's adopted policy in D.10-12-054 on this issue is clear. Ex ante values are required to be frozen based on DEER 2008.2.05. The possibility that more recent, more relevant, or more appropriate values have become available since the publication of DEER 2008.2.05 is not material. The use of values from the 2006-08 studies would conflict with clear Commission policy and would reignite the substantial controversy of the 06-08 studies. Therefore, default values from DEER 2008.2.05 should be used rather than more recent results whenever possible.

Third-party Implementers²:

Default values from DEER 2008.2.05 should be used. This is consistent with the Commission's policy in D.10-12-054. IOUs and implementers were directed to use DEER 2008.2.05 values, which were to be frozen for the duration of the program cycle. Successful program planning and delivery requires a reasonable degree of certainty, and using values other than DEER 2008.2.05 is not appropriate for this program cycle. EM&V results that are released and approved after January 1, 2010 should apply to the following program cycle.

- (2) Issue: When DEER 2008.2.05 contains a NTGR value for a specific measure, but the 2006-2008 Energy Division EM&V reports also contain NTGR values for that specific measure, should the ex ante NTGR value be frozen using the DEER 2008.2.05 measure-specific value or the 2006-2008 EM&V measure-specific value?

Energy Division Recommendation: Energy Division recommends that measure specific NTGR values from the 2006-08 EM&V studies be used rather than DEER 2008.2.05 as the 2006-08 EM&V values are the best information available at the time the 2010-12 program implementation activities started in early 2010. However, Energy Division would accept the use of DEER 2008.2.05 NTGR values may when they differ from the 2006-08 EM&V NTGR results by less than five percent (i.e., a DEER 2008.2.05 value of 0.60 can be retained if the 2006-08 EM&V result is greater than 0.55 and less than 0.65.)

Positions of Parties:**PG&E:**

Planning of the 2010-2012 program portfolios began well before the beginning of program implementation. Portfolio implementation activities began January 1, 2010. (see background section B of this document). The final form of the 2006-2008 EM&V values were not finalized until February, 2010. (see background section on part 1 section A). The use of the 2006-2008 EM&V values contradicts the commissions decision that, "Both DEER 2008 and non-DEER measure ex ante values established for use in planning and reporting accomplishments for 2010-2012 energy efficiency programs shall be frozen."

PG&E submitted all of its workpapers by March 31 and has relied on those workpapers for implementation of its portfolio to date.

Any revisions to the workpapers should apply going forward and the portfolio cannot be revised retroactively. Any revisions should apply prospectively. Therefore, PG&E does not agree with ED's recommendation to freeze ex ante values for Phase 1

² Third-party Implementers that have signed on to these positions include Ecology Action, EnerNOC, Inc., Global Energy Partners, LLC, Lockheed Martin, NAESCO (National Association of Energy Service Companies), Onsite Energy Corp., and Wildan Energy Solutions

reviewed workpapers January 1, 2010. Rather, these revised workpapers should become effective upon Commission approval.

PG&E has put substantial labor and effort into implementing its approved portfolio and any changes that are made will require substantial additional administrative costs to comply with.

SCE:

SCE recommends using the DEER 2008.2.05 NTGR values for all NTGR values for the program cycle. D.10-12-054 adopts DEER version 2008.2.05, dated December 16, 2008, as the frozen data source for use in reporting accomplishments for 2010-2012 energy efficiency programs (O.P. #1). The DEER 2008.2.05 data set contains a complete listing of NTG ratios for IOU programs and measures, and where there is not an applicable value for a specific measure, it contains a default value. As such, the Commission has adopted such values for use in the 2010-2012 program cycle.

Additionally, the DEER 2008.2.05 values represent the best available information at the start of the program cycle, as previously stated. Furthermore, the impact evaluations that Energy Division is recommending were not released until February 2010, two months after the start of the program cycle and over a year after they were needed if they were to be used in portfolio planning and measuring. The Commission states, "We concur with NRDC's comments that the use of these frozen ex ante values is only for this portfolio planning proceeding and implementation management... the decision here to hold constant measure ex ante values for the purpose of measuring performance against goals." D. 09-09-047 pg. 44. Moreover, in D.10-12-054, O.P. #1, the Commission freezes the values in DEER 2008.2.05 for the purpose of planning and reporting accomplishments of 2010-2012 energy efficiency programs. As such, the Energy Division's proposal violates established Commission policy.

SDG&E and SoCalGas:

SDG&E and SoCalGas recommend using the DEER 2.05 values. Please see response to Part 1:1.A.(1) above.

DRA/TURN:

DRA and TURN agree with ED's recommendation to use the 2006-2008 EM&V studies, which represent the most up-to-date measurement of energy savings likely to be achieved by the 2010-2012 energy efficiency portfolios. DRA and TURN also agree that relying on DEER 2008.2.05 values where the difference with 2006-08 EM&V-produced values is less than five percent is a reasonable accommodation to simplify the process without unduly sacrificing accuracy.

NRDC:

The Commission's adopted policy in D.10-12-054 on this issue is clear. Ex ante values are required to be frozen based on 2008 DEER version 2.05. Information that only became available after the publication of DEER 2008.2.05 is not relevant and should not be used when DEER 2008.2.05 values are available. The use of values

from the 2006-08 studies would conflict with clear Commission policy and would reignite the substantial controversy of the 06-08 studies. Therefore, default values from DEER 2008.2.05 should be used rather than more recent results whenever possible.

Third-party Implementers:

The DEER 2008.2.05 specific and default NTGRs should be used. D.10-12-054 required ex ante values to be frozen based on DEER 2008.2.05 for the 2010-12 program cycle; it is not reasonable to use information that only became available after the publication of DEER 2008.2.05 for this cycle.

B. Effective Date of Energy Division Reviewed and Approved Ex Ante Values that Differ from Utility Proposed Ex Ante Values:

Background: As directed by the 18 November 2009 ALJ Ruling in A.08-07-021 (“Administrative Law Judge’s Ruling Regarding Non-DEER Measure Ex Ante Values”) 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 the above referenced ALJ Ruling. Energy Division did not approve most of the workpapers reviewed but Energy Division recommended certain changes prior to approval. Many of the items in this document address disagreements on the Energy Division recommendations on those workpapers.

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. As outlined in this document, 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.

Issue: What should be the effective date of freezing of the ex ante workpaper values for non-DEER measures reviewed by Energy Division?

Energy Division recommendation: Energy Division recommends that the effective date for freezing ex ante values based upon the final disposition of Phase 1 reviewed workpaper be January 1, 2010. The utilities must apply these frozen ex ante values for their savings claim starting January 1, 2010, and thus the frozen values should be effective for all implementation activities for the 2010-12 cycle including those already completed.

Positions of Parties:

PG&E:

PG&E submitted all of its workpapers by March 31, 2010 and has relied on these workpapers for implementation of its portfolio to date. In addition, PG&E has put substantial labor and effort into implementing its approved portfolio and the portfolio cannot be revised retroactively. Any revisions should apply prospectively. Therefore, PG&E does not agree with Energy Division's recommendation to freeze ex ante values for Phase 1 reviewed workpapers 1-1-10. Rather, these revised workpapers should become effective upon commission approval.

In addition, changes will require substantial additional administrative effort to implement, contradictory to commission order in D. 09-09-047 to limit administrative costs.

SCE:

SCE recommends that ex ante values in place as of January 1, 2010 should be the values used for existing measures for the program cycle. If a future Decision should make subsequent changes to some values, then these changes should only apply for activity occurring after the date of any such Decision, allowing for 60 business days to implement the changes.

In D.10-12-054, the Commission stated "measure ex ante values established for use in planning and reporting accomplishments for 2010-2012 shall be frozen" (O.P.#2). SCE has submitted workpapers that are consistent with this Commission policy. The Commission established the ex-ante values available at the start of the program cycle as the values to be used and stated that it should be frozen from the beginning of the program cycle, January 1, 2010.

Energy Division is now proposing that changes should be made to workpapers that were initially reviewed approximately five months after the program cycle began. The Energy Division was actively involved during the portfolio planning process. SCE provided its planning values as part of the Application process. Prior to submittal of its Compliance Advice Letter 2410-E, Energy Division Management (Natalie Walsh) instructed the utilities to use the values contained in their July 2009 Applications. This was consistent with D.09-09-047 and later D.10-12-054. As a result, the Commission indicated that the values used for planning and reporting shall be frozen. However, the Energy Division now proposes to make changes to workpapers that were submitted in early 2010; clearly this timing does not comport with the language, spirit, and intent of the Commission.

SCE feels that if any changes are made, they should not apply retroactively because incentives were offered under different assumptions, and third party implementer contracts were based upon the assumptions in place at the start of 2010. These payments cannot be reversed as has been proposed for the related savings values. If significant changes are to be made, incentive levels and contracts may need to be adjusted accordingly.

SDG&E and SoCalGas:

SDG&E and SoCalGas disagree with ED's recommendation to freeze non-DEER ex ante values based on the final disposition of Phase 1 reviewed work papers starting January 1, 2010. During the utilities' and ED's discussion in first quarter 2010, SDG&E and SoCalGas had agreed to freeze ex ante values in 2010. However, due to this prolonged process, the full year of 2010 has passed and the utilities have provided customer incentives/rebates based on information in the pending work papers and proceeded under the assumption that its workpaper assumptions are reasonable. Therefore, there is no opportunity to make program changes that impact the 2010 savings and cost effectiveness at this point.

SDG&E and SoCalGas recommend the following alternative, the utilities will be allowed to freeze the 2010 assumptions based on the work paper assumptions (see Attachment 1—Energy Division Review of Investor-Owned Utility Non-DEER HIM Workpaper Ex Ante Values of the Case Management Statement) that were submitted in 2010 but were not approved in 2010. In other words, no more changes will be made to the 2010 measure assumptions. SDG&E and SoCalGas are willing to update their assumptions to the final Commission-approved values for the measures in Attachment 1, retroactive to January 1, 2011. SDG&E and SoCalGas, further 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 business days of the Commission's decision to provide adequate time to notify program participants and market actors.

DRA/TURN:

DRA and TURN agree with Energy Division that the ex ante values should be frozen effective January 1, 2010.

Freezing the ex ante values effective January 1, 2010 will achieve the Commission's intent to ensure that "ex ante values used for planning and reporting accomplishments for 2010-2012 are known and stable" (D.09-09-047, Finding of Fact 5, p. 335) and that the values should be frozen "based on the best available information at the time the 2010-2012 activity is starting." (D.09-09-047, Conclusion of Law 26 p. 356.) The results of 2006-2008 EM&V studies were generally available at the beginning of the 2010 program cycle (see e.g. Residential Retrofit Draft Evaluation Report, posted 12/10/2009, final posted 2/9/2010; Upstream Lighting Draft Evaluation Report posted 12/10/2009, final posted 2/9/2010; PG&E Fabrication, Process and Manufacturing Draft Report posted 12/10/2009, final posted 2/9/2010.)

While it is true that the utilities submitted workpapers on and around March 31, 2010, in some instances those workpapers were based on outdated studies. ED appropriately rejected such workpapers, but DRA and TURN understand that in most instances the "rejection" of workpapers came with recommended changes that, if adopted by the utilities, would have resulted in ED-approved workpapers.

The Commission must avoid creating even the appearance or suggestion that a regulated entity can achieve its desired outcome through delay or intransigence.

Here, even if there is a disagreement between two arguably reasonable positions when comparing the utility-provided workpapers and the ED-proposed recommended changes, permitting the utilities to use their workpapers rather than the workpapers with ED-recommended changes would signal that delay might achieve the outcome the utility prefers.

Third-party Implementers:

IOUs and implementers deliver programs offering a mix of measures based on the best available workpaper data at the time, and then make subsequent program adjustments as relevant new information or studies on those measures are released. Therefore the effective date for freezing IOU ex ante workpaper values should be the date upon which Phase 1 workpapers are fully approved, with those values applied going forward from that date. Previously submitted IOU workpaper values should be used for the period from January 1, 2010 through the date that any differing workpaper ex-ante values are officially adopted.

C. Application of Installation Rate to Utility Measure Installation Claims:

Background: 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 installation to utility ex ante claimed installation is the “installation rate.” 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 overall accomplishments the installation rate has been much lower than 1.0 and thus obtaining an accurate representation of those installation rates is important.

An installation rate can be lower than 1.0 for several reasons. For example, some purchased items could have been broken, lost, diverted to locations outside the utility service area, found to be non-working, or the customer may simply have decided not to use the item after applying for and receiving a rebate. Such events lead to a permanent reduction in the utility’s claimed installation rate, and no savings are claimed by the utilities for the non-installed items. However, the installation rate may also be lower than 1.0 result due to a delay in installation rather than a permanent reduction in the number of installations. For example, for upstream screw-in CFLs, the utilities may claim 90-92% installation of incandescent 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. 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.

The utility workpapers for some measures, including upstream screw-in CFLs, have included an installation rate adjuster into their kW, kWh and therm savings values rather

than applying an installation rate to the number of installation units claimed. This practice makes it difficult to identify the installation rate being utilized by the utilities and it also makes it very difficult to accurately account for the fraction of delayed unit installations as described above. In addition, accurate reporting with respect to delay of installation can also have a significant impact on the net-benefits for the program due to the discount rate applied to utility avoided costs in years following installation.

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.

- (3) Issue: 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. What is the mechanism for applying installation rates to adjust gross savings?

Energy Division recommendation: Energy Division recommends that the installation rate for any deemed 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 that the 2006-08 EM&V results for all measure installation rates as well as delayed installations for upstream screw-in CFLs should be utilized for the utilities 2010-12 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 recommendation be implemented as soon as possible.

Positions of Parties:

PG&E:

The installation rates were built into DEER 2.05 and consistent with OP 48 of D. 09-09-047 should be frozen for existing measures. For new measures, the installation rate should be effective the date the workpapers are approved. We agree with Energy Division’s point that the installation rate should be called out more clearly and recommend this change be made in the version of the DEER that is used for planning and reporting the next program cycle.

We agree with Energy Division that IOU’s should get credit for delayed installations.

In addition to the decision language, PG&E has put substantial labor and effort into implementing its approved portfolio and any changes that are made will require substantial additional administrative costs to comply with. These costs will be compounded if changes are to be applied retro-actively, as PG&E will have further system and infrastructure changes to implement. We believe changing these values to be an ineffective use of ratepayer funds given decision orders have been followed.

SCE:

SCE believes that installation rates related to measures with a significant storage component mechanism should be established before the program cycle and locked down for the duration of the program cycle. This is consistent with Commission policy established in D.09-09-047 and D.10-12-054. “Both DEER 2008 and non-DEER measure ex ante values established for use in planning and reporting accomplishments for 2010-2012 energy efficiency programs shall be frozen.” (D.10-12-054, O.P #1)

SCE agrees with Energy Division that measures with a storage component should be credited at the appropriate time when the installations would have occurred as the measures are brought out of storage. However, SCE reporting infrastructure does not currently track installation rates separately from energy savings values, so infrastructure changes would be required before this could be implemented if the values are separated, as ED proposes.

Verifying a portion of the values ex post while the majority of the values rely on ex ante assumptions is not in-line with the Commission’s policy to freeze” values at the start of the program cycle. Further, utilizing both ex post and ex ante values creates unnecessary and burdensome complexity. The rationale for freezing ex ante DEER and non-DEER values also applies to freezing the ISR.

SDG&E, SoCalGas:

SDG&E and SoCalGas agree that for any deemed measure, they will not embed the installation rate in the calculation of the gross savings. They will also provide a separate adjustment that will be applied as necessary to the actual number of installations claimed. For the purpose of freezing ex ante assumptions and consistent with the Commission’s commitment to freeze assumptions, SDG&E and SoCalGas disagree to update the ex ante installation rate.

Consistent with their recommendation above, SDG&E and SoCalGas request that all necessary database system changes be implemented within 60 business days from the Commission’s final decision.

DRA/TURN:

DRA and TURN fully support the underlying principle that program savings must be based on measures that are actually installed, rather than using an approach that fails to accurately reflect the fact that some measures are not yet installed and therefore are not producing any savings. To that end, DRA and TURN agree that the installation

rate for deemed measures should be calculated separately rather than embedded in the gross savings for a particular measure. DRA and TURN agree that delayed installations should be credited at the time they are expected to occur, and that 2006-2008 EM&V results for installation rates, included delayed installation of upstream, CFLs should be used for 2010-12 ex ante reporting of measure installations. DRA and TURN agree that installation rates be trued up at the end of the cycle, including delayed installation of upstream CFLs or any other measures not installed at the time of rebate. DRA and TURN agree that the cost-effectiveness tools should be modified as soon as feasible to reflect these recommendations.

Third-party Implementers:

Current IOU practice should be maintained regarding 1) which deemed measures are subject to application of default installation rates, and 2) embedding the installation rate values within those specific measure workpapers and applying them throughout the 2010-12 program cycle, rather than splitting them off as another separate adjustment factor subject to further in-cycle revision.

D. Dual Baseline for Early Retirement:

Background: CPUC policy requires that a “dual baseline” be utilized for early retirement measures (see Rule IV.2)³ 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 equipment replacement. At the later date, when the equipment would have been replaced due to normal turnover for reasons such as imminent failure or remodeling, an alternate equipment efficiency baseline should be utilized. Building codes, industry regulations and market conditions will dictate the replacement equipment efficiency rather than the pre-existing equipment. This “dual baseline” thus requires two savings calculation periods:

- (4) The remaining useful life (or 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.
- (5) 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

³ Energy Efficiency Policy Manual v.4, Page 8, Footnote 9.

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 the single baseline case. 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 portfolio deemed measures, since 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 deemed measures and the utility tracking systems do not currently include a mechanism to identify and report the information required for dual baseline measures.

Issue: CPUC Policy Rule IV.2⁴ requires the use of a “Dual Baseline” for calculating cost-effectiveness of early retirement measures. This policy requires that a “Dual Baseline” approach apply to all measures that are claimed by the utilities as early retirement. What is the mechanism for including the dual baseline in claims?

Energy Division recommendation: Energy Division recommends that current CPUC Policy 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.

Positions of Parties:

PG&E:

PG&E agrees that the dual baseline approach is appropriate, but that current infrastructure, including the cost-effectiveness E3 calculator, workpapers, calculation tools, and tracking and reporting systems are not configured to do this. PG&E recommends that a plan be put into place to initiate dual baselines for implementation in the next program cycle, and recommends the first step in this process should be the completion of the new cost-effectiveness calculator.

PG&E would like to clarify that PG&E cannot put systems into place to track and report the dual baseline until it is entirely clear as to how this is to be done. The development of the revised cost-effectiveness calculator, which ED had planned to release to the IOUs in early 2009, has not been released to date.

⁴ Energy Efficiency Policy Manual v.4, Page 8, Footnote 9

In the interim, PG&E recommends utilizing a modified measure life in the current systems from this Decision date going forward for this program cycle to report measures. The adjustments would not be made retroactively. Implementation would require 60 business days to implement both within the systems and to communicate to customers as these changes could impact measure cost effectiveness and the related incentives that would be offered.

SCE:

SCE agrees that the dual baseline approach is appropriate, but that current infrastructure, including the cost-effectiveness E3 calculator, workpapers, calculation tools, and tracking and reporting systems are not configured to do this. SCE recommends that a plan be put into place to initiate dual baselines for implementation in the next program cycle, and recommends the first step in this process should be the completion of the new cost-effectiveness calculator.

SCE would like to clarify that SCE cannot put systems into place to track and report the dual baseline until it is entirely clear as to how this is to be done. The development of the revised cost-effectiveness calculator, which ED had planned to release to the IOUs in early 2009, has not been released to date. It will take approximately 18 months to implement the IT changes required to meet the requirements of the new cost-effectiveness tool once released.

In the interim, SCE supports a simplified calculation methodology from this Decision date going forward for this program cycle to report measures. The adjustments would not be made retroactively. Implementation would require 60 business days to implement both within the systems and to communicate to customers as these changes could impact measure cost effectiveness and the related incentives that would be offered.

SDG&E and SoCalGas:

SDG&E and SoCalGas agree that the calculation of the baseline savings for early retirement measures be done consistent with the DEER 2.05 "Summary of EUL-RUL Analysis for the April 2008 Update to DEER", prepared by KEMA, for all residential and commercial non-lighting equipment that are subject to Title 20 and Title 24 codes. For all other measures, SDG&E and SoCalGas recommend that savings be calculated based solely on the customer's existing equipment. Furthermore, the EUL will be equal to that of the replacement equipment.

DRA/TURN:

DRA and TURN agree with the Energy Division's recommendations. Given that the use of "Dual Baseline" is reflected in Policy Rule IV.2, the utilities were on notice of the need to accommodate such dual reporting in their systems. Energy Division's recommendation of development of a simplified calculation methodology in order to permit compliance with the Policy Rule even in the face of utility assertions that such

compliance would unduly tax their record-keeping systems is a very reasonable middle ground.

NRDC:

NRDC agrees with Energy Division that a dual baseline calculation should be used. However, NRDC is concerned that even the proposed "short term fix" will take a long time to implement. In addition, an insistence on a "full correct calculation" for each measure is likely to be overly burdensome as it would effectively require collection of as-yet unspecified additional data and development of a measure-specific counterfactual scenario for each measure.

Therefore, NRDC recommends that the Commission direct Energy Division and the utilities to collaboratively develop a simplified methodology that can be implemented in a timely manner, does not excessively burden program implementation, and that can be used both for applications and for 2011 claims

The baseline approach proposed by Energy Division would adopt a presumption that there is no remaining useful life (RUL) for all measures. Alternative scenarios could only be used if there is compelling evidence to the contrary. This presumption would impose a large downward bias on savings estimates that is not reflective on the current recessionary market conditions. NRDC recommends that the baseline determination instead be designed to provide an accurate estimate of savings on average that accurately reflects current market conditions.

Third-party Implementers:

It is true that the current policy manual calls for using a dual baseline in these cases, but due to the considerable costs and complexities required this has not yet been built into IOU and stakeholder tracking and reporting systems and calculation models. While implementing a dual baseline is somewhat simpler for "100% DEER" deemed measures, we believe that Energy Division understates the work involved; for example, many, if not most, deemed measure workpapers actually do not include NEW/ROB savings values, as a quick review of their At-A-Glance Measure List tables will attest. However, we feel that Energy Division's "short term fix" interim option points toward a better solution.

Given the considerable reengineering and ongoing expense that would be required to implement and manage a dual baseline system, we believe that Policy Rule IV.2 should be reexamined with an eye toward practicality and minimization of embedded overhead and administration burdens. Third-party Implementers suggest that a simplified methodology that can be implemented in a timely manner without such implementation burdens should be explored jointly by Energy Division and stakeholders.

Parties have already proposed adjusting measure EULs as a potential solution. Such an approach could accomplish the purpose of a dual baseline (i.e., discounted future savings) without burdening IOUs, programs and implementers with added costs and

complexity. We note that implementing either approach – dual baseline or some simpler alternative – will impact program cost effectiveness, and this should be factored into the review process.

E. Treatment of Unidentified HIMs Relative to the Ex-Ante Freeze:

Background: The November 18, 2009, ALJ Ruling includes a process for Phase 2 retrospective review of non-DEER measures not originally identified as HIMs in Phase 1, but identified as HIMs in subsequent utility accomplishment filings. Energy Division will undertake this review when a utility claim indicated that an existing measure is likely to become a HIM.

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.

Issue: What should be the effective date for any revised ex-ante values for non-DEER measures identified as HIMs during Phase 2 retrospective review?

Energy Division recommendation: Energy Division believes that the effective date of all phase 2 retrospective or new measure reviews is January 1, 2010.

Positions of Parties:

PG&E:

PG&E believes the effective date for any revised workpaper values should be the date in which the revision is approved. To retro-actively change the values is to go against the plain language of “frozen” and ex ante. Once those values are reviewed and modified, the new modified values should begin on the adoption date of the new workpapers.

Additionally the term ‘revised ex-ante values’ should not be used. Values should be discussed as ex ante or ex post. As it stands now a 'revised ex ante value' is either an ex post value or an ex ante based on a revised date. To declare things as 'revised ex ante' is a loose interpretation and similar to revising "frozen" values - a practice that D. 09-09-047 strictly opposes.

SCE:

SCE believes the effective date for any retrospective Phase 2 HIM ex-ante values should be the date at which the Phase 2 workpaper is approved and should apply for activity after that point for the duration of the program cycle. To retroactively change the values is to go against the Commission policy of frozen ex ante values. Additionally, D.10-12-054 states that, "Both DEER 2008 and non-DEER measure ex ante values established for use in planning and reporting accomplishments for 2010-2012 energy efficiency programs shall be frozen." (O.P.#1) In line with this policy, we believe values established at the beginning of a program cycle or when the

measure was first submitted for review, shall be frozen up to the point in which they are modified as required by the November 18, 2009 ruling. Additionally, these changes should not apply retroactively because programs were implemented according to Commission policy, incentives were offered, and third party implementer contracts were established using the assumptions in place at the start of the cycle when the measure was offered

SCE clarifies that per the November 18, 2009, ALJ Ruling, if Phase 2 reviews are not completed in a timely manner, then the submitted measures would not need to be revised and the ex ante values would be established at the end of the allotted review window.

SDG&E and SoCalGas:

Please refer to SDG&E and SoCalGas' recommendation in response to Issue Part1: 1.B. above.

DRA/TURN:

DRA and TURN agree with the Energy Division's recommendations. The Commission should afford consistent treatment to phase 2 retrospective or new measure reviews as compared to the measures identified as HIMs for purposes of phase 1.

Third-party Implementers:

The effective date of all Phase 2 retrospective or new measure reviews should be the date upon which the workpapers for these measures are officially adopted, with those values being applied from that point forward. Previously submitted IOU workpaper values should be used for the period from January 1, 2010 through the date that any differing Phase 1 workpaper ex-ante values were officially adopted.

F. Issue: How and Where Will "Official" Frozen DEER and Non-DEER Values Be Archived

Background: 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 that utility reporting of portfolio accomplishments can be shown to be utilizing the official frozen values.

Energy Division recommendation: Energy Division recommends a database of ex-ante values is needed that encompasses all deemed measures (both DEER and non-DEER measures.) This database, which will be publically available, will contain all the values that are frozen and are to be utilized by the utilities for reporting of all portfolio accomplishments. Energy Division recommends that the official database of frozen ex ante values should be maintained by Energy Division on a public website.

Positions of Parties:

PG&E:

PG&E has submitted all of its workpapers to Energy Division that once approved, will be made publically available. It would be redundant at this point for the IOU's to translate the workpapers into a new central database and far more efficient to plan for this type of database to be used in the future for the next program cycle.

SCE:

SCE agrees there should be a single database for energy efficiency resources (DEER). Unless otherwise directed, this database should be DEER 2008.2.05, which should be posted on the DEER website, which is publically accessible. SCE agrees that non DEER measures should also be included. For the non DEER measures, each of the supporting documents (work papers) should also be made publically accessible on a public site. This issue is probably of lesser importance than others presented.

DEER has multiple versions; however, the Commission has approved DEER 2008.2.05 as the frozen version for use in reporting ex ante 2010-2012 results (D.10-12-054 O.P #1). As new 'non-DEER' items are introduced they should be added to DEER, not added to a separate database which will cause additional confusion, administrative expense, and an increased likelihood of misinterpretation by Utilities, third parties or Energy Division. Versioning should be consistent with D. 09-09-047 and D.10-12-054, but allow for new measure addition.

SCE believes that requiring an additional database that is redundant and potentially confusing is not necessary to implement quality programs and is not an effective use of ratepayer funds. D. 09-09-047 strictly states, "Administrative costs are necessary to well-functioning programs, it is our duty to ensure that administrative costs are reasonable and limited to those overhead and labor costs that are truly required to implement quality programs, so that ratepayer funds are used to the greatest degree possible for the programs themselves." (pg. 51).

SDG&E and SoCalGas:

SDG&E and SoCalGas recommend that all DEER and Non-DEER assumptions be incorporated into a single database (for example, the Non-DEER measures can be appended to the existing DEE measures). Non-DEER work papers can also be made available through the same website, e.g., <http://www.deeresources.com/>. However, all custom work papers should not be made available to the public as many of these work papers have confidential customer information.

DRA/TURN:

DRA and TURN agree with the Energy Division's recommendations. The database and public access proposed by Energy Division will likely enhance transparency and accountability both of the energy efficiency programs generally and the EM&V effort specifically.

Third-party Implementers:

Third-party Implementers agree with Energy Division's recommendation above, so long as "publicly available" explicitly includes access by all program implementers. We also believe that the database should include associated workpapers and calculators.

2. *Issues on Individual Non-DEER HIM Workpapers Reviewed by Energy Division:*

Attachment I shows Energy Division's specific recommendations for all non-DEER HIM workpapers reviewed.

Energy Division recommendation: Energy Division recommends that all the individual workpaper revision recommendations presented in Attachment I 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 18 November 2009 ALJ Ruling.

Positions of Parties:

PG&E:

The Commission should reject the ED's revisions to the workpapers shown on Attachment I as this is in line with D. 09-09-047 Ordering Paragraph 48.

However, if the commission decides that changes are warranted, PG&E has provided comments on Attachment I indicating its agreement or disagreement with ED's recommended changes. (see PG&E's comments attached)

SCE:

SCE recommends that ex ante values in place as of January 1, 2010, including these workpapers, should be the values used for existing measures for the program cycle. SCE began the 2010-2012 cycle using the "best available information at the time the 2010-2012 activity is starting." – D. 09-09-047 OP 48. For the reasons cited in the decision, we believe ex ante values used have followed that language and the intent behind the language. SCE believes the language of the Decision established the ex-ante values available at the start of the program cycle as the values to be used and stated that it should be frozen from the beginning of the program cycle, January 1, 2010.

ED worked with SCE and the other utilities to re-review many of these workpapers in January 2011. While the recently proposed changes are more workable than the initial comments, they still effectively unfreeze the database and would require significant time and effort to implement. These changes are also not in-line with Commission language stating, " it is our duty to ensure that administrative costs are

reasonable and limited to those overhead and labor costs that are truly required to implement quality programs" (p.51).

While SCE proposes to make these changes in a subsequent program cycle, SCE has also addressed its position in Appendix I if changes are made sooner. If changes are made sooner, they should not be applied retroactively and a minimum of 60 business days would be required to make the changes. While SCE agrees with the need for the work paper reviews, SCE feels that the timing was not properly executed with respect to the freeze period. SCE supports the ongoing improvement for future work papers submitted as part of the Phase 2 review.

SDG&E and SoCalGas:

Please refer to the Party Position column in Attachment I for SDG&E and SoCalGas' recommendations. For measures that impact SDG&E and SoCalGas and Attachment 1 only references either PG&E or SCE only, SDG&E and SoCalGas also provide their comments.

DRA/TURN:

DRA and TURN agree with the Energy Division's recommendations. The Energy Division has proposed a compromise position that enables important elements of the "freeze" that the utilities have called for, but with an important accommodation that should ensure that yet-to-emerge HIMs do not escape an appropriate level of review once it becomes clear that a measure is indeed an HIM. DRA and TURN are reluctant to embrace an outcome that permits the utilities to freeze values in workpapers that have not been reviewed, as it creates at least the possibility that submitting workpapers in a format that is unreviewable is being rewarded. However, as a compromise position to permit the staff and the Commission to move forward on these issues and as part of the entire package put forward by Energy Division at this time, DRA and TURN will not oppose this approach.

Part 2: Custom Project and Measure Process

Background: 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. The efforts are by definition unique, each with their own characteristics. 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. Attachment II contains the Energy Division proposed process for review and approval of utility ex ante values for custom calculated projects.

Energy Division, the utilities, and several utility implementers have had discussions on several versions of the Energy Division proposed process since early in 2010. The document included as attachment II is the most recent version of the proposed process Energy Division shared with the utilities and other parties. Several issues remain in disagreement between Energy Division and the utilities and other parties.

1. Gross Realization Rate (GRR) to be applied to custom projects which are not reviewed by Energy Division:

Energy Division will not have the time or resource to review most of the custom projects that result in utility savings claims. The Energy Division process proposes that a GRR multiplier be applied to all projects which Energy Division does not review.

Energy Division recommendation: Energy Division recommends that all projects not reviewed have a GRR multiplier applied to those projects. As a result of its most recent meeting with the utilities and some of their third party implementers Energy Division proposes the following revision to its table of GRR, labeled as table 1 in attachment II. Energy Division makes these upwards adjustments as it is believed the review process, if implemented as proposed, will improve the ex ante calculations both for reviewed and non-reviewed projects. Energy Division also notes that D.09-09-047 directed the utilities to utilize a GRR of 0.80 for all custom measure ex ante estimates utilized in their planning filings⁵. The Energy Division current GRR values recommendation is an update to the D.09-09-047 0.80 GRR value based upon 2006-08 EM&V study results adjusted upwards, as mentioned above.

⁵ OP 15g of D.09-09-047 states "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 Division shall notify the assigned Administrative Law Judge and Commissioner of significant deviations from the modified E3 calculators." The referenced E3 calculators contain a 0.80 GRR adjustment for custom measures.

Table 1: Default Custom Measure Gross Realization Rates

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
SCG			0.75

Positions of Parties:**PG&E:**

PG&E believes a GRR of 1 is appropriate and the default GRR's in table 1 are arbitrary and that ED has not provided a justification for those values.

PG&E delivered to Energy Division and the Commission our proposed portfolio plan using a GRR of 1.0. This plan was approved by Energy Division in a letter dated October 21, 2010. "PG&E submitted a second, supplemental AL 3065-g-B/3562-E-B on September 17, 2010. Energy Division has reviewed this filing for compliance with D. 09-09-047, the protests regarding cost effectiveness and changes to energy savings forecast in the E3 calculators, major budget reductions to particular Strategic Planning programs, and budget amounts relating to direct implementation, non-resource program (DINI) expenditures. Energy Division has determined that PG&E's supplemental Advice Letter 3065-G-A&B/3562-E-A&B complies with D. 09-09-047." This letter clearly states Energy Divisions approval of PG&E's portfolio which included a GRR of 1 for custom measures. There is certainly no justification for use of .7 for PG&E while as late as 10/10 when the disposition letter was issued ED stated it used .8.

PG&E believes ED's proposed GRR is based on past programs that had large discrepancies with baseline issues and have been continuously improved over the past few years. PG&E has discussed with ED and has exemplified how we have continuously improved our programs over the past few years by adding new programs, removing older programs and improving how we review and analyze potential custom projects. Also, PG&E has worked with ED and changed our methods for baseline determination, a major point of past discrepancy, which with these changes dramatically increase GRR from the suggested ED values. Lastly, ED will now be reviewing and providing consistent updates to Utilities regarding their custom measures. For all of the above reasons, ED's proposed GRR is not a substantiated number and the previously ED approved GRR of 1 should be used.

There is nothing in the rules that obligates Energy Division to review the top 20% of calculated measures. Therefore, if the commission decides to implement a GRR below 1 it should not apply to the top 20% of our custom projects process.

SCE:

SCE believes that a gross realization rate (GRR) of 1.0 is the most appropriate value to use as an ex ante parameter. SCE recognizes that in ex post evaluations, a

realization rate is often applied; sometimes less than 1.0 and sometimes greater than 1.0. However, the ex post impact evaluations are used to frame future program planning and processes to narrow the gap between ex ante and ex post claims. This is precisely the diligence that SCE undertook prior to the implementation of the 2010-2012 programs; processes were improved, inspections protocols were modified, calculation tools were updated, and program baselines were changed – significantly enough that a GRR based off of a past program’s performance is not a comparable benchmark of future performance.

From a policy perspective, the application a GRR of less than 1.0 would again create a fundamental mismatch between the Commission’s energy goals and the measurement of performance towards those goals. The Commission expressed its strong desire to overcome this past problem by freezing the ex ante measure assumptions values.

However, in the interest of compromise, SCE would agree to a GRR of 0.90 for retrofit programs. This represents a balance between the Energy Divisions request to discount ex ante calculations using prior ex post evaluation results with the fact that SCE’s programs and processes have been improved to reduce the gap between ex ante and ex post calculations. SCE has improved inspection protocols, refined calculation tools and inputs, developed new calculation guidelines, tightened vendor controls, implemented a new quality control process, revised baseline estimates and are involving Energy Division and their EM&V contractors in the program review process.

SCE also believes that should the Commission adopt a GRR different from 1.0, then new construction programs should be treated differently than retrofit programs. In the historical period that the Energy Division purports to draw its information from, new construction programs typically have a GRR well in excess of 1.0. For example, SCE recommends that its new construction programs should receive GRR of 1.2, based on evaluations that indicated a higher GRR for this sector. (Page 22 of RLW Analytics "An Evaluation of the 2004-2005 Savings By Design Program". CALMAC Study ID SCE0221.1. October 2008.)

ED’s recommendation that applying a GRR will “...will improve the ex-ante calculations both for reviewed and non-reviewed projects...” supposes that they know what the results will be for each customized project. In fact this adjustment is based on broad assumptions that do not necessarily apply and also has nothing to do with the calculations for any individual project.

SDG&E and SoCalGas:

SDG&E and SoCalGas support NRDC’s recommendation and restates it below for clarity:

SDG&E and SoCalGas oppose the application of any kind of arbitrary downward bias to unreviewed projects for the following reasons.

First, the GRR cannot possibly achieve Energy Division's goal of improved ex ante calculations or more accurate applications. On the one hand, suppose hypothetically that utilities, implementers and customers are complicit in a widespread submittal of project applications that are consistently biased upward by a quarter or even a third on average as the ED proposal assumes. If this were the case, then applicants could easily inflate their applications further by the necessary amount to compensate for the GRR. As a result, the ex ante applications will get worse, not better.

On the other hand, if utilities, implementers and customers are submitting applications that are generally reasonably accurate given the inherent uncertainty in efficiency measurement, then application of the GRR will simply exclude some projects that should have been funded. The ex ante applications don't get better but utility customers lose valuable energy savings.

Second, there is absolutely no analytical support of any kind for the specific values proposed. Energy Division has offered nothing in support of the proposed values, other than a vague reference to 2006-08 study results. Moreover, the proffered revisions to Energy Division's previously proposed GRR values gives the impression that the GRR is nothing more than a bald attempt to negotiate the largest politically feasible reduction to the project estimates of energy savings. Adoption of the proposed GRR discount, particularly if it is applied to projects that have already been approved now that we are more than one third of the way into the program cycle, would be arbitrary, capricious, and punitive.

Third, at the recent workshop, Energy Division staff acknowledged that the GRR was intended to account, at least in part, for a perceived upward bias in savings estimates due to failure to use the dual baseline. If the Commission provides clear guidance on the baseline issue to ensure estimates aren't biased high or low, see response to Part 1:1.D. above and Part 2:3 below, then the proposed GRR values need to be adjusted upwards significantly to compensate.

Fourth, SDG&E and SoCalGas disagree with Energy Division's interpretation of D.09-09-047 that the Commission has directed the utilities to use a GRR of 0.80 for all custom measure ex ante estimates. As the decision clearly states, utilities are only required to use the E3 calculators as a starting point. All that is required to change the calculations is that the Assigned ALJ and Commissioner be notified. However, if D.09-09-047 did require the use of a GRR of 0.80, the utilities should use a GRR of 0.80 rather than the substantially lower GRR values proposed by Energy Division.

DRA/TURN:

If the Commission intends to adopt a one-size-fits-all default GRR for each utility, DRA and TURN believe that Energy Division has put forward a reasonable middle ground position. The Commission could also reasonably adopt the lower figures reflected in the corresponding table in Attachment II, as they are based on the 2006-08 EM&V study results, and adoption of those figures would be consistent with using

those study results as the “best available information at the time the 2010-12 activity is starting.” (D.09-09-047, Conclusion of Law 48.) The Commission must reject any figure higher than those in the table above; a GRR of 1.0 or anything more closely approaching that figure is not justifiable, as it implicitly presumes that every custom measure achieves 100% of the expected savings, an outcome that does not comport with actual experience. In fact, the Appendices of the 2006-2008 Energy Efficiency Evaluation Report show that for a variety of reasons, including the retirement of a facility or closure of a production line, realization rates were as low as .31. (Appendix F of 2006-2008 Energy Efficiency Evaluation Report, p. 38.)

DRA and TURN recommend that the Commission consider development of more granular default GRRs. The use of a one-size-fits-all for each utility means that program implementers who achieve the highest levels of performance will not see the full benefit of their efforts, while other implementers that perform more poorly see a windfall from the use of a GRR that exceeds their actual experience. While it may not be reasonable to expect that ED could develop a GRR for each custom measure due to resource constraints, it may be feasible to calculate more precise default figures that would better fit the actual experience of the custom measures and the measure and program implementers.

However, given the level of utility and NRDC resistance to the earlier-proposed figures in particular, and given Energy Division’s stated belief that its proposed review process, if implemented as proposed, will likely yield results supporting figures higher than the 2006-08 EM&V study results, the proposed revision appears to be a reasonable compromise. It is important for the Commission to heed Energy Division’s reminder that a 0.80 gross realization rate figure was embedded in D.09-09-047. The figures Energy Division now proposes are either the same as that earlier figure, or a reasonable figure between the 2006-08 study results and the earlier 0.80 figure.

NRDC:

NRDC opposes the application of any kind of arbitrary downward bias to unreviewed projects. NRDC believes the Commission should reject the Energy Division's proposed GRR downward bias for the following reasons.

First, the GRR can not possibly achieve Energy Division's goal of improved ex ante calculations or more accurate applications. On the one hand, suppose hypothetically that utilities, implementers and customers are complicit in a widespread submittal of project applications that are consistently biased upward by a quarter or even a third on average as the ED proposal assumes. If this were the case, then applicants could easily inflate their applications further by the necessary amount to compensate for the GRR. As a result, the ex ante applications will get worse, not better.

On the other hand, if utilities, implementers and customers are submitting applications that are generally reasonably accurate given the inherent uncertainty in efficiency measurement, then application of the GRR will simply exclude some

projects that should have been funded. The ex ante applications don't get better but utility customers lose valuable energy savings.

Second, there is absolutely no analytical support of any kind for the specific values proposed. Energy Division has offered nothing in support of the proposed values, other than a vague reference to 2006-08 study results. Moreover, the proffered revisions to Energy Division's previously proposed GRR values gives the impression that the GRR is nothing more than a bald attempt to negotiate the largest politically feasible reduction to the project estimates of energy savings. Adoption of the proposed GRR discount, particularly if it is applied to projects that have already been approved now that we are more than one third of the way into the program cycle, would be arbitrary, capricious, and punitive.

Third, at the recent workshop, Energy Division staff acknowledged that the GRR was intended to account, at least in part, for a perceived upward bias in savings estimates due to failure to use the dual baseline. If the Commission provides clear guidance on the baseline issue to ensure estimates aren't biased high or low, as both ED and NRDC recommend (see 2D above and 3 below), then the proposed GRR values need to be adjusted upwards significantly to compensate.

Fourth, NRDC disagrees with Energy Division's interpretation of D.09-09-047 that the Commission has directed the utilities to use a GRR of 0.80 for all custom measure ex ante estimates. As the decision clearly states, utilities are only required to use the E3 calculators as a starting point. All that is required to change the calculations is that the Assigned ALJ and Commissioner be notified. However, if D.09-09-047 did require the use of a GRR of 0.80, the utilities should use a GRR of 0.80 rather than the substantially lower GRR values proposed by Energy Division.

Third-party Implementers:

Third-party Implementers are acting in good faith and adhering to the highest possible ethical standards of professional conduct and competence, and we believe that this is also true of IOUs and their engineering staff and subcontractor reviewers. Given that, we do not support the application of an arbitrary GRR multiplier to projects that the Energy Division does not select for its review. We urge the Commission to reject this proposal for several reasons.

1. The proposed GRR multipliers are completely arbitrary. Third-party Implementers are unaware of any analysis to support these numbers for custom projects.
2. Significant portfolio funding is being used to 1) preemptively review calculation tools and methodologies, and 2) independently review these projects and validate the results prior to IOU claims. These reviews utilize both internal and external resources, such as independent technical firms, and are extensive. In addition, the initial program designs are reviewed and revised extensively prior to implementation to ensure a process of proper documented savings impacts. After implementation begins, program implementers incorporate IOU suggestions to further improve systems, fine-tune calculation assumptions and incorporate new studies and EM&V findings to further improve the

accuracy of delivered program impacts. These measures will result in improved ex ante calculations and more accurate applications. It is not necessary to subject these programs to reduced savings estimates.

3. Program implementers and participants must be allowed to maintain their revenue forecasts and not be exposed to the undue risk of an arbitrary 10-30% reduction in projected revenue in spite of best efforts to complete quality work in conjunction with extensive engineering review. The only GRR that allows the necessary revenue certainty is a GRR multiplier of 1.0, which Third-party Implementers would support.
4. The Energy Division's proposed GRRs appear to assume customers should be operating at a current Title 24 baseline. This assumption ignores the fact that many customers are not and for many measures they will continue to maintain an equipment baseline that may be at least 20 years or old (comprising the "repair indefinitely" category identified in recent analysis on this issue). This assumption appears short-sighted considering the state of our existing "built" environment, and the potential savings of this sector that have been documented by the Department of Energy.
5. Arbitrary GRRs will increase customer confusion and dissatisfaction. Assuming the proposed GRRs are applied in real-time, they will effectively discount customer incentives for custom projects that are not reviewed by the Energy Division. However, only projects that are reviewed will have the opportunity to receive 100% of their projected revenue even though all projects should reflect quality work and receive 100% of their projected revenue. This disparity between projects that are reviewed and those that are not reviewed introduces a bias that the Commission surely did not intend. In addition, customers and program implementers who were paid for installed and verified projects after January 1, 2010 are potentially at risk of having to refund portions of their rebates if a GRR of less than 1.0 is applied. This will cause undue burdens for customers who have already received and made other use of these funds.
6. Arbitrary GRRs will propagate additional inaccuracy instead of promoting better up-front methodologies. The arbitrary application of GRRs generically to all projects not reviewed by Energy Division provides the wrong incentives for all parties to perform and document accurate calculations. While the incentives and goals and project costs for these projects are unchanged, the payback to customers is now significantly longer. This will result in lost sales, thereby slowing the adoption of efficient technologies and degrading performance.
7. Arbitrary, highly punitive GRRs will significantly decrease the cost effectiveness of proposed programs and have the unintended consequence of requiring the IOUs to increase implementation funding to maintain a stable pool of reliable and effective program implementation. IOUs will need to increase program incentives in order to ensure customer acceptance of arbitrarily-discounted projects. Implementers and customers, in turn, will be forced to utilize their limited resources in other more cost-effective, transparent programs/projects, thereby reducing comprehensiveness and stranding savings.

Third-party Implementers are concerned that the Energy Division is proposing revised GRR multipliers in this draft to “improve the ex ante calculations both for reviewed and non-reviewed projects,” but then only changes the numbers by a small percentage. The implication is that Energy Division’s proposed review process is only expected to improve delivered portfolio savings by 5-10 percent, at best. This assumption is not substantiated by any analysis and begs the question of why undertake such a rigorous process for relatively small benefits. Further, the proposed GRRs assume that despite the knowledge gained by an IOU and IOU-subcontracted reviewing engineers as a result of Energy Division’s parallel review, they will nonetheless be incapable of delivering vetted project savings values that are as accurate as Energy Division’s values. This is an illogical assumption.

Third-party Implementers disagree with Energy Division's interpretation that D.09-09-047 directed the utilities to use a GRR of 0.80 for all custom measure ex ante estimates. We do not believe that the Commission’s directive also mandates application of a GRR to the IOUs’ actual installations. The issue of whether or not to apply GRRs to delivered savings from calculated measures that have already passed both pre- and post-install engineering review is still an open issue and needs full stakeholder input and involvement. Application of a GRR for any custom project presumes that the estimated savings that are developed through the existing process, which entails a rigorous, independent, and extensively-reviewed engineering analysis, are systematically overstated. This is simply not the case. All proposed projects undergo a careful review by qualified engineers.

2. Effective Date of Custom Measure Gross Realization Rate (GRR) Adjustments and Energy Division Reviewed and Approved Ex Ante Values that Differ from Utility Proposed Ex Ante Values:

The utilities began portfolio implementation activities on January 1, 2010, and have since been approving and paying incentives on custom measures and projects in many of their portfolio of programs. During the implementation process to date, the utilities have relied upon their own proposed custom calculated ex ante values. As outlined in attachment II, Energy Division has proposed changes to the custom ex ante values currently being relied upon by the utilities. If any Energy Division recommended changes to the ex ante values are adopted an effective date for the changes resulting from the Energy Division recommendations must be specified.

Issue: What should be the effective date of the custom measure ex ante values review process, including application of GRR adjustments, proposed by Energy Division?

Energy Division recommendation: Energy Division recommends that the effective date for the custom measure ex ante review process be January 1, 2010. The utilities must apply the GRR adjustment to non-reviewed projects ex ante values for their savings claims starting January 1, 2010, and thus the GRR values should be effective for all implementation activities for the 2010-12 cycle including those already

completed. Additionally, the custom measure review process should commence immediately so as to allow Energy Division the opportunity to being review projects not yet completed as soon as possible.

Positions of Parties:

PG&E:

PG&E believes it is inappropriate to apply a GRR that is less than 1. However, if the Commission decides to include a GRR below 1 the GRR should be applied on a prospective basis as of the date of a Commission decision on this PFM. It is inappropriate to retroactively apply a GRR to applications that have already been processed and/or paid that is different from the level already approved by the Commission and ED's staff.

SCE:

If the Commission decides to include a GRR, SCE believes that that GRR should be applied only on a prospective basis for new projects from the date of this Decision. SCE has completed many projects under the assumption of a GRR of 1.0 and has entered into contract for many more under that assumption. Retroactively applying a GRR that was not communicated to utilities or customers for applications that already have signed agreements and/or have been paid is inappropriate as utilities were not informed of this until October, 2010, when this was first proposed by Energy Division. Retroactive adjustments not only impact utilities, but impact customers and third party providers that are paid on a performance basis.

SDG&E and SoCalGas:

Please refer to SDG&E and SoCalGas' response to Part 1:.1.B above.

DRA/TURN:

DRA and TURN agree with Energy Division that the effective date for the custom measure ex ante review process should be January 1, 2010, and that the review process should commence immediately.

Third-party Implementers:

If GRRs are ultimately adopted, they should not apply retroactively. We believe this is inherently unfair and would have a disastrous effect on all implementers of custom projects. We have developed an alternative proposal for the 2010-2012 program cycle that would establish and apply GRRs via a carefully planned pilot process. We have included this proposal as Attachment 3 to this document.

The GRR multipliers included in the Energy Division's recommendation are arbitrary and were not under consideration when contracts were negotiated. Program implementers negotiated contracts in good faith with the utilities under a different set of assumptions. Implementers proposed programs to IOUs under a certain framework and set of parameters and signed contracts with those IOUS to deliver these programs with an understanding that the parameters would remain generally consistent. Program Implementers have made business decisions, set staffing levels, and

forecasted revenue based on these parameters. To inflict punitive GRRs on projects that are not reviewed by the Energy Division mid-way through this cycle completely undermines our contracts with IOUs and jeopardizes projects already in the sales pipeline.

3. Dual Baseline for Early Retirement:

Background: This is the same issue as presented in Part 1, item 1.D. above. CPUC policy requires that a “dual baseline” be utilized for early retirement measures (see Rule IV.2)⁶ This “dual baseline” thus requires two savings calculation periods:

- (6) The remaining useful life (or 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.
- (7) 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.

Issue: CPUC Policy Rule IV.2⁷ requires the use of a “Dual Baseline” for calculating cost-effectiveness of early retirement measures. This policy requires that a “Dual Baseline” approach apply to all measures that are claimed by the utilities as early retirement. What is the mechanism for including the dual baseline in claims?

Energy Division recommendation: Energy Division recommends that current CPUC Policy 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.

Positions of Parties:

PG&E:

⁶ Energy Efficiency Policy Manual v.4, Page 8, Footnote 9.

⁷ Energy Efficiency Policy Manual v.4, Page 8, Footnote 9

PG&E agrees that the dual baseline approach is appropriate, but that current infrastructure, including the cost effectiveness calculator, calculation tools, and tracking and reporting systems are not configured to do this. PG&E recommends that a plan be put into place to initiate dual baselines in the next program cycle, and recommends the first step in this process should be the completion of the new cost-effectiveness calculator.

PG&E would like to clarify that PG&E cannot put systems into place to track and report the dual baseline until it is entirely clear as to how this is to be done. The development of the revised cost-effectiveness calculator, which ED had planned to release to the IOUs in early 2009, has not been released to date.

In the interim, PG&E recommends utilizing a modified measure life in the current systems from this Decision date going forward for this program cycle to report measures. The adjustments would not be made retroactively. Implementation would require 60 business days to implement both within the systems and to communicate to customers as these changes could impact measure cost effectiveness and the related incentives that would be offered.

SCE:

SCE agrees that the dual baseline approach is appropriate, but that current infrastructure, including the cost effectiveness calculator, calculation tools, and tracking and reporting systems are not configured to do this. SCE recommends that a plan be put into place to initiate dual baselines in the next program cycle, and recommends the first step in this process should be the completion of the new cost-effectiveness calculator.

SCE would like to clarify that SCE cannot put systems into place to track and report the dual baseline until it is entirely clear as to how this is to be done. The development of the revised cost-effectiveness calculator, which ED had planned to release to the IOUs in early 2009, has not been released to date. It will take approximately 18 months to implement the IT changes required to meet the dual baseline requirements of the new cost-effectiveness tool once released.

In the interim, SCE supports a simplified calculation methodology from this Decision date going forward for this program cycle to report measures. The adjustments would not be made retroactively. Implementation would require 60 business days to implement both within the systems and to communicate to customers as these changes could impact measure cost effectiveness and the related incentives that would be offered.

SDG&E and SoCalGas:

Please refer to SDG&E and SoCalGas' response to Part 1:.1.D

DRA/TURN:

DRA and TURN agree with the Energy Division's recommendations for the same reasons described in the "dual baseline" section earlier.

NRDC:

NRDC agrees with Energy Division that a dual baseline calculation should be used. However, NRDC is concerned that even a "short term fix" will take a long time to implement and that an insistence on a "full correct calculation" for each measure is likely to be overly burdensome. Therefore, NRDC recommends that the Commission direct Energy Division and the utilities to collaboratively develop a simplified methodology that can be implemented in a timely manner, does not excessively burden program implementation, that can be used both for applications and for 2011 claims, and that is reflective of the current recessionary market conditions.

Third-party Implementers:

- 1) With regard to Energy Division setting a standard procedure for dual baselines, we believe that these proposed approaches simply do not apply for all of our projects, as articulated in the points below:
 - a. Industrial measures are never subject to early retirement: The CPUC draft policy that requires a "dual baseline" be utilized for early retirement measures is not relevant for custom industrial measures. Industrial customers typically operate equipment well past the EUL and often repair, refurbish, or replace with equipment from stock rather than purchasing new equipment. Indeed, in a recent peer-reviewed manuscript from the 2010 ACEEE Summer Study,⁸ the authors provide compelling evidence that such practices are commonly adopted by end-use customers and that retrofit measures should use the existing measure efficiency as the baseline when calculating savings, rather than the required energy code.
 - b. There is no industry standard practice for industrial customized measures: It is not possible for Energy Division staff or any other party to define an "industry standard practice" since each measure is unique and customized for that application within that industry. No "industry standard practice" exists and thus it is unreasonable to place the burden of proof on the industrial customer to determine the "industry standard practice".
 - c. It is not possible to document hypothetical project costs for industrial projects: Finally, from our experience, it is not possible for vendors supplying the industrial market to provide project cost documentation for a hypothetical installation as would be required in most cases using the "dual baseline" approach. Since most industrial customers typically repair or refurbish old inefficient equipment, there is no basis by which to estimate project costs for what would have been installed in the absence of

⁸ McHugh, J., Mahone, D., Bruceri, M., Eilert, P. "A New Class of Retrofits: "Repair Indefinitely." Paper No. 876. American Council for an Energy-Efficient Economy (ACEEE), 2010 Summer Study on Energy Efficiency in Buildings. August 2010.

the high efficiency measures. As such, in the effort to better refine custom industrial project energy estimates, the “dual baseline” approach would result in more engineering judgment that would be subject to additional validation and varying opinions. ; using on non-specific information; which all leads to less accurate energy calculations. Furthermore, as cited in the ACEEE paper referenced above, these same arguments apply to several other types of “repair indefinitely” measures, including many commercial lighting systems, and residential windows. They also apply to certain types of efficiency upgrades, such as skylights and daylight harvesting controls for commercial roof upgrade projects.

- 2) With regard to “clear and compelling evidence”:
 - a. Third-party implementers request that the clear and compelling evidence” language in the Energy Division proposal be added to the list of issues under the Dual Baseline for Early Retirement category. While Energy Division’s proposal does allow use of an existing equipment baseline, the “clear and compelling evidence” text is a new addition that does not exist in current policy. This raises the bar against a retrofit/early retirement approach by effectively assuming a default code minimum baseline unless you can convince Energy Division otherwise. “Clear and compelling evidence” is not defined by Energy Division, and this lack of definition will lead to IOU/stakeholder confusion and improper attribution of legitimate Retrofit/Early Retirement measures as New/Replace on Burnout. This misattribution would artificially erase actual real-world savings and would “kill” otherwise solid RET/ER proposals and programs.
 - b. Third-party implementers believe Energy Division’s “clear and compelling” language should be stricken.
 - c. If the parties cannot agree we would ask that the ALJ rule to decide the matter; we believe the language below would preserve a legitimate RET/ER savings and the successful retrofit and early retirement programs that deliver them:

“Upgrades, retrofits and early replacements of functioning existing equipment shall use the existing equipment as the baseline for determining first-year energy savings, except in cases such as major remodels, system failures, etc. where the program is demonstrably not the motivating factor. ”

- 3) With regard to dual baselines for RET/ER measures: It is true that the current policy manual calls for using a dual baseline in these cases, but due to the considerable costs and complexities required this has not yet been built into IOU and stakeholder tracking and reporting systems and calculation models. Given the considerable reengineering and ongoing expense that would be required to do so, we believe that Policy Rule IV.2 should be reexamined with an eye toward practicality and minimization of embedded overhead and administration burdens.

Third-party implementers believe that more workable alternatives to the dual baseline should be explored jointly by Energy Division and stakeholders. Parties have already proposed adjusting measure EULs as a potential solution; third-party implementers agree that such an approach could accomplish the purpose of a dual baseline (i.e., discounted future savings) without burdening IOUs, programs and implementers with added costs and complexity. We note that implementing either approach – dual baseline or some simpler alternative – will impact program cost effectiveness, and this should be factored into the review process.

4. Other Issues Pertaining to the Energy Division Proposed Custom Measure Review Process:

Energy Division recognizes that the utilities and other parties may have additional issues with details of the proposed Energy Division's review and approval process.

Issues/Positions of Parties:

PG&E:

See Attachment II Alternate 1.

SCE:

See Attachment II Alternate 2.

SCE believes that while that significant progress has been made over the last month in working out a compromise on the many DEER/Non-DEER and customized process issues, we would like to respectfully suggest that the Commission review an agreement already worked out between Energy Division and the IOUs. This agreement was codified in a document embedded below and contained in Attachment III. Our first proposal is to utilize the agreed upon approach for both the custom and deemed measures that was agreed upon by Energy Division management (Natalie Walsh) on May 21, 2010. An email excerpt from her is appended below:

“From ED's perspective, the attached doc is pretty much ready to go subject to any final edits from the IOUs. Let us know if you'd like to schedule time next week to meet to discuss. Otherwise, we can just finalize the doc via email, and send it to the ALJ and assigned Commissioner when its ready. “



SCEEmbedDocument
CMS.doc

(Note: The embedded doc is a track changes format.)

SCE's desire is to adopt this document, which includes both customized and DEER/Non –DEER issues, in total. If not adopted, then please consider our position found in Attachment III Alternate 2. SCE feels that the custom issues presented after

the ED proposed customized process in Attachment II are the most critical issues that must be addressed.

SDG&E:

Issue: There are no specific Information Security provisions in place for the Customer Measure and Project Archive (CMPA) to protect customer confidential information for custom projects.

SDG&E and SoCalGas Position:

SDG&E and SoCalGas recommend that until ED and the IOUs develop a mutually agreed upon Information Security provisions, the IOUs will submit the necessary project work papers directly to a designated ED staff person under the confidentiality provisions of General Order 66-C and PUC Code 583, with the proviso that these customer-specific information and workpapers cannot be distributed to ED consultants without fully executed NDAs between the consultant and the respective IOU. Under no circumstances, must these customer-specific work papers and project-specific information be made available to third parties, including ED consultants without the explicit approval of the utility.

DRA/TURN:

Attachment II (page 41) states “Thus Energy Division will have a minimum of approximately two weeks to decide if a new application measure or project will be subject to review and included into its review ‘sample.’” Some implementers have expressed their concern that the word “minimum” should be replaced with “maximum.” DRA and TURN disagree, because it is their understanding that even if ED takes longer than two weeks to decide if a new measure or project is subject to review, any such delay would not slow down the review process undertaken by the utilities, but would require ED to begin and complete its review within the otherwise applicable timeframes.

NRDC:

There are a significant number of problems with the proposed review process that were raised in comments on earlier drafts and/or discussed at the workshop but that were not included in the preceding summary of issues.

NRDC recommends adoption of the following additional changes to the proposed process:

- DEER 2008.2.05 should be the primary source for custom measure and project calculation methodologies.
- Energy Division should be responsible for effective record keeping and documentation of its analyses and recommended changes to savings calculations.

- Energy Division should be given a maximum amount of time that is consistent with the needs of the market to determine whether a project will be reviewed, rather than a minimum that suggests onerous delays are likely.
- As detailed above, the proposed Gross Realization Rate is counterproductive, unjustified, and arbitrary.
- Energy Division should not be given unilateral authority to require the utilities and implementers to adopt savings estimates. Disputes should be resolved, not submerged.
- The proposed IOU claim review is duplicative of standard Commission review of applications and imposes unproductive costs and delays on an already burdensome process.
- If Energy Division provides early guidance to utilities, it shall abide by that guidance for the remainder of the ex ante review process.
- Unreviewed claims shall not be subsequently reviewed and energy savings adjusted for purposes of the ex ante review.
- The proposed baseline methodology has a strong downward bias and would result in baselines that are inconsistent with current market conditions. The proposed baseline determination methodology should be deleted and replaced with Commission direction to Energy Division and the utilities to collaboratively develop a simplified methodology that can be implemented in a timely manner, does not excessively burden program implementation, can be used both for applications and for 2011 claims, and that is reflective of the current recessionary market conditions.

NRDC has appended a revised draft of the proposed process for review of custom measure ex ante values which implements the recommended changes detailed above.

Third-party Implementers:

Third-party Implementers on Guiding Principle #2:

The proposed Review Plan does not accommodate a “parallel review” unless the Energy Division’s review will be completed within the timeframes currently associated with the IOU project review. If it is expected that the Energy Division review will be completed within the same parameters, the IOU timeline should be included in the Custom Project Review Plan. If that is not the expectation, timelines need to be clearly articulated for each phase of the review so that parties can make informed business decisions based on realistic processes. Having language in this plan such as “approximately” and “a minimum” amount of time does not provide any clarity for program implementers or customers.

Third-party Implementers on the position that “Energy Division has a minimum of approximately two weeks to decide if a new measure or project will be subject to review and included in its sample.” (page 5)

To accommodate a “parallel review” this needs to be changed to reflect that the Energy Division’s project selection and pre-installation review will be completed within two weeks. Timelines should be associated with each step of the review so that all parties understand the implications to project implementation.

Third-party Implementers on the proposed dispute resolution process:

Energy Division places unreasonable constraints on projects that are eligible for the dispute resolution process. ALL projects from program implementers that are in dispute need to be included in the dispute resolution process.

Program implementers with projects in dispute need to be included in the dispute resolution process.

Energy Division should not have unilateral ability to decrease ex ante values by up to 30% if implementers and/or IOUs disagree with the Energy Division's methodology and assumptions. Implementing this review process without such an appeal process sets a dangerous precedent. It is not clear that the workshop proposal will be sufficient in such cases.

Position of Third-party Implementers on an alternative to the proposed Custom Project Review Process for the remainder of the 2010-2012 program cycle:

As instructed by ALJ Gamson at the January 5, 2011 Workshop, Third-party Implementers have developed an alternative proposal for the 2010-2012 Custom Project Review process. We introduced our alternative proposal at the January 28, 2011 Workshops.

See Attachment II Alternate 3.

Attachment I

Energy Division Review of Investor Owned Utility Non-DEER HIM Workpaper Ex Ante Values

Summary

In April and May of 2010 Energy Division reviewed the following workpapers for high impact measures (HIMs) identified by 1) Energy Division review of IOU E3 compliance filings, or 2) lists of “consensus HIMs” provided by the utilities. The comprehensive archive containing all related files to the initial Energy Division review can be downloaded from the following link:

<ftp://ftp.deeresources.com/pub/WorkpaperReview/10-12Phase1/NonDEERWorkpaperReviewPhase1.exe>

In January 2011, Energy Division and the utilities held over a dozen conference calls to further review recommendations and discuss possible areas of agreement. The table below contains a summary of the April-May 2010 Energy Division comments on each group of workpapers as well as refinement of those comments as a result of meetings with the utilities in January 2011. Further clarification on the information contained in the tables is provided below.

Measure Disposition: The disposition represents the Energy Division’s recommendations based on the information provided by the utilities during the workpaper review process. There are three possible dispositions:

Approved: Approval recommended at this time.

Approval Upon Inclusion of Revisions: Approval recommended after revisions listed in the review documents are incorporated into the workpaper.

No Approval at This Time: The measure or group of measures should not be approved at this time. Documentation supporting this recommendation is provided in the comprehensive archive.

0608 EM&V Considerations: Energy Division undertook over \$60 million of EM&V efforts for the 2006-08 program cycle. In some cases, the evaluations indicated to Energy Division the need to substantially revise savings parameters contained in the utilities workpapers submitted for the 10-12 program cycle. Energy Division has chosen to recommend areas where it believes 2006-08 EM&V results represent the best available information that should be considered in the review and revision of the utilities non-DEER HIM workpapers..

The table below lists all nonDEER HIM workpapers that were reviewed by Energy Division in April and May of 2010. The table is divided by sub-headings that list workpaper titles by utility. In some cases, Energy Division reviewed groups of workpapers. Grouped workpapers are listed in a single sub-heading.

Explanation of columns in table below:

Consensus: Indication (“YES” or “NO”) if there is consensus on workpaper resolution among all parties with positions.

Original Energy Division Position: The original disposition and recommendations submitted by Energy Division based on the reviews performed in April and May of 2010.

Party: The party advancing the “Final Party Position”, or Energy Division’s final recommendation.

Final Party Position as of 2/10/2011: This column lists the final position of any party or Energy Division as of February 10, 2011. Since May of 2010, PG&E, SGC and SDG&E have revised some of their workpapers and resubmitted them to Energy Division. Energy Division has also performed further review of all non-DEER HIM workpapers submitted during Phase 1. In January of 2011, Energy Division met with utilities to further review recommendations and discuss possible areas of agreement. As a result, Energy Division has revised a number of its positions on workpapers. These revised positions are listed in this column. If Energy Division’s recommendations has not been revised “No change in disposition” or “No change in recommendation” will be listed as the Energy Division final recommendation in this column. Parties’ positions are relative to ED’s position as of February 10, 2011.

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
YES	PGE PGECOREF101 Night Covers for Display Cases		
	Disposition: No approval at this time.	ED	Disposition: Not subject to Phase 1 review
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	
		SCE	
		SDGE/ SCG	
	1. Energy Division has concerns that the general calculation approach for estimating commercial refrigeration system energy use is incorrect. Energy Division has provided a review of the calculation approach that documents those concerns and also suggests acceptable alternative methods.	ED	In consultation with the utilities Energy Division has determined that this measure is not likely to become a HIM and thus this workpaper review is being withdrawn and this work paper is moved into the group of non-HIM workpapers. It will only be subject to Phase 2 retrospective review if its HIM status is determined, at a later date, to have changed.
		DRA/	DRA and TURN agree with the Energy Division’s

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
		TURN	recommendations.
		PGE	Agree
		SCE	SCE: Agreed
		SDGE/ SCG	Agree, that the measure will not be a HIM and not subject to Phase 1 review.
YES	SCE WPCNRRN0011	Evaporator Fan Motors	
	Disposition: No approval at this time.	ED	Disposition: Not subject to Phase 1 review
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	
		SDGE/ SCG	
	1. Energy Division has concerns that the general calculation approach for estimating commercial refrigeration system energy use is incorrect. Energy Division has provided a review of the calculation approach that documents those concerns and also suggests acceptable alternative methods.	ED	In consultation with the utilities Energy Division has determined that this measure is not likely to become a HIM and thus this workpaper review is being withdrawn and this work paper is moved into the group of non-HIM workpapers. It will only be subject to Phase 2 retrospective review if its HIM status is determined, at a later date, to have changed.
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	SCE: Agreed
		SDGE/ SCG	Agree, that the measure will not be a HIM and not subject to Phase 1 review.
NO	SDGE WPSDGENRL018	Door Gaskets	
	PGE PGECOREF105	Door Gaskets	
	Disposition: No approval at this time.	ED	Disposition Approval upon inclusion of the following revisions:
		DRA/ TURN	
		PGE	

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
		SCE	
		SDGE/ SCG	
	<p>1. Energy Division has concerns that the general calculation approach for estimating commercial refrigeration system energy use is incorrect. Energy Division has provided a review of the calculation approach that documents those concerns and also suggests acceptable alternative methods.</p>	ED	<p>Energy Division recommends that general calculation methods be addressed via the recommendation below for an overall UES reduction factor. Energy Division recommends that a more refined calculation procedure be adopted for the next program cycle.</p>
		DRA/ TURN	<p>DRA and TURN agree with the Energy Division's recommendations.</p>
		PGE	<p>This measure has been eliminated from the PG&E portfolio and is not likely to become a HIM and should not be subject to Phase 1 review. It will only be subject to Phase 2 retrospective review if its HIM status is determined, at a later date, to have changed.</p>
		SCE	<p>SCE: As discussed in the meetings with ED, SCE has reviewed the impact evaluation studies and took the appropriate steps to remove this measure from the portfolio in approximately Q3 of 2010.</p>
		SDGE/ SCG	<p>This measure has been eliminated from the SDG&E's portfolio and is not likely to become a HIM and should not be subject to Phase 1 review. It will only be subject to Phase 2 retrospective review if its HIM status is determined, at a later date, to have changed.</p>
	<p>Door Gaskets</p> <p>1. Measure qualifications should be revised so that only badly misaligned doors or the total area of missing gasket exceeds 12-24 linear inches per door are eligible for incentives.</p>	ED	<p>Reduce all UES values by 85%.</p>
		DRA/ TURN	<p>DRA and TURN agree with the Energy Division's recommendations.</p>
		PGE	
		SCE	<p>SCE: Assuming that the Decision is to unfreeze the data and revise the work papers that were in place at the beginning of the program cycle, prior to the finalization of the impact studies, SCE</p>

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
			accepts that this is the most practical method to adjust this workpaper, given time restraints.
		SDGE/ SCG	
YES	PGE PGECOREF103 Strip Curtains		
	Disposition: No approval at this time.	ED	Disposition Approval upon inclusion of the following revisions:
		DRA/ TURN	
		PGE	
		SCE	
		SDGE/ SCG	
	<p>1. Energy Division has concerns that the general calculation approach for estimating commercial refrigeration system energy use is incorrect. Energy Division has provided a review of the calculation approach that documents those concerns and also suggests acceptable alternative methods.</p>	ED	<p>Energy Division recommends general calculation methods be addressed via the recommendation below for adoption of SCE's strip curtain workpaper. Energy Division recommends a more refined calculation procedure be adopted for the next program cycle. Alternatively, ED recommends approval of SCE's workpaper on Strip Curtains "WPSCNRRN0002 Revision 4". Energy Division also recommends that all utilities adopt SCE's workpaper or revise their workpapers to be consistent with SCE's workpaper.</p> <div style="text-align: right;">  2.4 - Infiltration Barriers.doc Approved SCE Workpaper: </div>
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	Agreed
		SDGE/ SCG	Agree
	<p>Strip Curtains: 1. Intentionally removed or shortened strip curtains should not be eligible.</p>	ED	

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	
		SDGE/ SCG	
	2. Freezer and cooler savings calculations should be separated.	ED	
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	
		SDGE/ SCG	
	3. Revise calculations to consider interactive compressor effects between coolers, freezers and dock or comfort conditioned spaces that are common in grocery stores and warehouses.	ED	
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	
		SDGE/ SCG	
NO	SCE WPSCNRRN0008 LT/MT Display Cases w/Doors PGE PGECOREF104 LT/MT Display Cases w/Doors PGE PGECOREF112 LT/MT Display Cases w/Special Doors		
	Disposition: No approval at this time.	ED	Disposition Approval upon inclusion of the following revisions:
		DRA/ TURN	
		PGE	
		SCE	
		SDGE/	

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
		SCG	
	<p>1. Energy Division has concerns that the general calculation approach for estimating commercial refrigeration system energy use is incorrect. Energy Division has provided a review of the calculation approach that documents those concerns and also suggests acceptable alternative methods.</p>	ED	Energy Division recommends that consideration of general calculation methods be deferred at this time and a more refined calculation procedure be adopted for the next program cycle.
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	SCE: While SCE has some concerns related to the initial comments that were made and never fully resolved due to timing and difference of opinion, SCE is amenable to refining the calculation approach for the next program cycle.
		SDGE/ SCG	Agree
	<p>Display Case Replacements:</p> <p>1. The baseline for display case replacement measures assumes early replacement of operating fixtures, yet most research indicates the display cases are replaced on burnout or as part of a store remodeling project. This means the baseline should be revised to represent the NEW fixture that the customer would install absent utility incentives.</p>	ED	<p>Energy Division makes the following recommendations:</p> <ol style="list-style-type: none"> 1. Salvage, disposal or photographic records of replaced equipment should be part of program application requirements when early replacement or open-to-closed case conversion savings are being utilized to ensure the correct baseline is assumed for these measures. 2. Display case replacements that are part of large-scale store remodels and any new construction projects should be revised to be custom measures. Large-scale remodels are defined as any project involving 50% of the linear feet of refrigerated casework or 32 linear feet of casework replacements, whichever is less.
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	<ol style="list-style-type: none"> 1. Agree 2. 50% of the linear feet of refrigerated casework is not always large scale. This requirement should read "whichever is

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
			more”, not less.
		SCE	SCE: Assuming that the Decision is to unfreeze the data and revise the work papers that were in place at the beginning of the program cycle, SCE is comfortable with the additional requirement for project documentation, assuming that there is approximately 3 months lead time to allow for implementation from the date of this Decision so that all stakeholders can be informed and appropriate processing changes made. For the second point, while SCE conceptually agrees with this approach to address large chains through the custom process, the language should be clarified so that the measures are revised as custom measures only for chains with more than 5 store locations at the time of application.
		SDGE/ SCG	<ol style="list-style-type: none"> 1. Agree 2. To eliminate confusion in the market associated with the definition of a large project, SDG&E recommends that a large projects will be defined as any project that replaces 32 linear feet of casework or more without reference to a percentage. This way small customer site will not be impacted.
NO	SCE WPSCNRRN0019 Vert Reach-in Display Cases SCE WPSCNRRN0021 Horiz Multi Deck Display Cases		
	Disposition: No approval at this time.	ED	Disposition: Approval upon inclusion of the following revisions:
		DRA/ TURN	
		PGE	
		SCE	
		SDGE/ SCG	
	1. Energy Division has concerns that the general calculation approach for estimating commercial refrigeration system energy use is incorrect. Energy Division has provided a	ED	Energy Division recommends that general calculation methods be addressed via the recommendation below for an overall UES reduction factor. Energy Division recommends

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
	review of the calculation approach that documents those concerns and also suggests acceptable alternative methods.		that a more refined calculation procedure be adopted for the next program cycle.
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	SCE: While SCE has some concerns related to the initial comments that were made and never fully resolved due to timing and difference of opinion, SCE is amenable to refining the calculation approach for the next program cycle.
		SDGE/ SCG	Agree
	Display Case Replacements: 1. The baseline for display case replacement measures assumes early replacement of operating fixtures, yet most research indicates the display cases are replaced on burnout or as part of a store remodeling project. This means the baseline should be revised to represent the NEW fixture that the customer would install absent utility incentives.	ED	Energy Division believes UES values for Energy Star display case measures should be reduced by 25% to account for a likely higher baseline efficiency than utilized in the Energy Star calculator.
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	SCE: Assuming that the Decision is to unfreeze the data and revise the work papers that were in place at the beginning of the program cycle, prior to the finalization of the impact studies, SCE accepts that this is the most practical method to adjust this workpaper, given time restraints. SCE feels that this adjustment factor is arbitrary and that utilizing an analysis approach documented by the US Department of Energy should be adequate for savings claims.
		SDGE/ SCG	SDG&E disagrees. The likely higher baseline is speculative. The DEER should address this issue in the next cycle.

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
NO	PGE PGECOAPP104 Energy Efficient Televisions SCE WPSCREOE0002 Energy Efficient Televisions		
	Disposition: Approval upon inclusion of the following revisions:	ED	Disposition (PG&E): Approve Disposition (SCE): Approval upon inclusion of the following revisions:
		DRA/ TURN	
		PGE	
		SCE	
		SDGE/ SCG	
	1. Revision of first year program baseline to consider most recent Energy Star retailer data for non-qualifying appliances.	ED	Approve PG&E workpaper uploaded to Basecamp on 6/4/2010 for ex-ante values for the 2010 program cycle year. NOTE: PG&E has recently uploaded a revised workpaper that removes incentives for EnergyStar v4.1 televisions and provide incentives for only EnergyStar v5.1 and EnergyStar v5.1+20%. This workpaper is effective January 1, 2011. Energy Division anticipates future review of the newly uploaded workpaper in the first quarter of 2011.
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	Agree
	2. Consideration of HVAC interactive effects.	ED	Approve PG&E workpaper uploaded to Basecamp on 6/4/2010
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	Agree
	3. (SCE only) Revisions to make consistent with PGE revised savings calculations.	ED	SCE to revise workpaper to have consistent UES values and costs with approved PG&E workpaper.

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	SCE: SCE is in the process of updating its workpaper to be consistent with the most recent version from PG&E, which is version 4. It should be noted that SCE's delivery for this program is different than SCE's (residential focus only), and as such this portion of the workpaper analysis is different. It also should be noted that while SCE has added interactive effects for the 2010 and 2011 set of savings values, the approach keeps changing due to a lack of a consistent approach at the time the measure was being created. For the measures used in the 09 Bridge period there were no interactive effects applied. For measures used from 1/1/10 to 3/31/11 interactive effects from DEER08 v2.05 were applied. Measures starting 4/1/11 will use the interactive effects from DEER v3.02 based on the previous statements made by SCE. It should be noted that the latter interactive effects are not part of DEER 2.05.
		SDGE/ SCG	
YES	PGE PGECOCOM102 Energy Star Computers		
	Approval upon inclusion of the following revisions:	ED	No change in disposition. Energy Division and utilities held a conference call in January 2011. As a result of discussions in that call, Energy Division believes PG&E is addressing all recommendations in a revised workpaper.
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	
		SDGE/ SCG	
	1. Consideration of HVAC interactive effects.	ED	No change in recommendation

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
		DRA/ TURN	
		PGE	Agree
		SCE	
		SDGE/ SCG	Agree
YES	PGE PGECOCOM104 Energy Star Monitors		
	Approval upon inclusion of the following revisions:	ED	No change in disposition. Energy Division and utilities held a conference call in January 2011. As a result of discussions in that call, Energy Division believes PG&E is addressing all recommendations in a revised workpaper.
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	
		SDGE/ SCG	
	1. Consideration of HVAC interactive effects.	ED	No change in recommendation
		DRA/ TURN	
		PGE	Agree
		SCE	
		SDGE/ SCG	Agree
YES	PGE PGECOALL101 Occ Sens Power Strips		
	Approval upon inclusion of the following revisions:	ED	No change in disposition. Energy Division and utilities held a conference call in January 2011. As a result of discussions in that call, Energy Division believes PG&E is addressing all recommendations in a revised workpaper.
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
		SCE	
		SDGE/ SCG	
	1. Revise NTGR to 0.70	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	Agree
	2. Revise EUL to 8 years	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	Agree
	3. Consideration of HVAC interactive effects	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	Agree
NO	PGE PGECOBLD101 Attic Insulation PGE PGECOBLD105 Wall Insulation		
	Disposition: Approve (with consideration of 0608 EM&V results)	ED	Approval upon inclusion of the following revisions:
		DRA/ TURN	
		PGE	
		SCE	
		SDGE/	

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
		SCG	
	<p>0608 EM&V Considerations:</p> <p>1. The DEER08 NTGR Of 0.7 (From the 2008 NTGR table for “Residential/Single Family/Building Shell Measures/Incentives/Wall and Ceiling Insulation”) appears quite high. The 0608 Residential Retrofit evaluation reports NTGR in the range of 0.25-0.35 depending on program implementation year.</p>	ED	<p>Recommend NTGR values from 0608 EM&V:</p> <p>PGE: 0.29</p> <p>SCG: 0.33</p> <p>SDGE: 0.27</p>
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	This issue is covered in the case management statement 1.A
		SCE	
		SDGE/ SCG	SDG&E and SoCalGas disagree. See response to Part 1: 1.A.(1).
	<p>2. The 0608 Residential Retrofit evaluation report identifies significant numbers of sites where installed insulation should have been ineligible for incentives. Workpaper savings do not include adjustments for this effect and are likely overestimating the savings.</p>	ED	Based on joint review of 0608 EM&V results, Energy Division retracts its recommendation for any adjustments to savings.
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	Agree
YES	PGE PGECOPUM102 Pool Pump		
	Disposition: Approval upon inclusion of the following revisions:	ED	Disposition: Approve PG&E workpaper uploaded to Basecamp on 7/16/2010.
		DRA/ TURN	
		PGE	
		SCE	

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
		SDGE/ SCG	
	1. Revise program requirements to include installation requirements for measure pump high and low speed flow rates. Savings calculations are based on measure operating criteria that are specific to each individual installation and must be implemented by the installer. These requirements should be included in the program requirements.	ED	Revised workpaper addresses recommendation.
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	Agree
	2. Revise baseline pump efficiency to reflect a population of two-speed pumps, not just the worst performing pump in the CEC database.	ED	Revised workpaper addresses recommendation.
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	Agree
	3. Revise reference load shape to be the conventional pool pump load shape.	ED	Revised workpaper addresses recommendation.
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	Agree
YES	PGE PGECOHV133 Evaporative Cooling		
	Disposition: Approval upon inclusion of the following revisions:	ED	Disposition: Not subject to Phase 1 review

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
		DRA/ TURN	
		PGE	
		SCE	
		SDGE/ SCG	
	1. Revise baseline to be only fully ducted, central air conditioning systems that where equipment is completely removed from service.	ED	After further review of expected accomplishments provided by utilities, ED determined this measure is not a HIM. Workpaper is not subject to Phase 1 review, but will be subject to Phase 2 Retrospective Review if status changes to HIM during program cycle.
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	SCE: Agreed
		SDGE/ SCG	
	2. Include Title 24 duct system requirements when heating equipment is included in the installation.	ED	
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	
	3. Revise measure criteria to be central, fully-ducted, evaporative cooling systems only.	ED	
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	
	4. Revise incremental costs to consider the likely	ED	

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
	inclusion of heating systems, ductwork improvements and/or the installation of a complete additional distribution system for the evaporative cooling system.		
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	
NO	PGE PGECOHC134	Whole House Fan	
	Disposition: No approval at this time	ED	Disposition: Not subject to Phase 1 review
		DRA/ TURN	
		PGE	
		SCE	
		SDGE/ SCG	
	1. Measure is currently in DEER database. Current values should be used.	ED	After further review of expected accomplishments provided by utilities, ED determined this measure is not a HIM. Workpaper is not subject to Phase 1 review, but will be subject to Phase 2 Retrospective Review if status changes to HIM during program cycle.
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	SCE: Agreed
		SDGE/ SCG	Agree
	2. PG&E may be recommending that an additional DEER measure is needed, PG&E used incorrect results from an older version of the DEER05 database that did not include the energy use of the whole house fan, only the savings attributable to its operation. PG&E	ED	

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
	should provide analysis, based on DEER calculation methods, to support a measure that is defined differently from the current DEER measure.		
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	Based on webinar comments from ED's consultants, it is clear that ED needs to work with the IOUs to re-evaluate the way whole house fans are used in California and the associated saving.
NO	SCE WPSCREHC0001 Room Air Conditioners SDGE WPSDGEREL1060 Room Air Conditioners		
	Disposition: Approval upon inclusion of the following revisions:	ED	Disposition: Approval upon inclusion of the following revisions: Energy Division and utilities held a conference call in January 2011. As a result of discussions in that call, Energy Division believes SCE and SDG&E are addressing all recommendations in revised workpaper.
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	SCE: Assuming that the Decision is to unfreeze the data and revise the work papers that were in place at the beginning of the program cycle, prior to the finalization of the impact studies, SCE accepts that these recommendations hesitantly with the concerns indicated below.
		SDGE/ SCG	Agree
	1. Require capacity and rated efficiency in rebate application to facilitate future tracking and EM&V efforts.	ED	No change in recommendation. As part of its initial review in April 2010, Energy Division provided a workbook to the utilities that included several acceptable extrapolation methods and resulting UES values. This workbook is included in the comprehensive archive.

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	
		SDGE/ SCG	
	2. IOUs cooperatively develop uniform incremental costs.	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	SCE: Discussions held in 2011 indicate that while the prices differ somewhat from IOU to IOU, the revised values were close enough to those expected by ED and were acceptable.
		SDGE/ SCG	
	3. Revise extrapolated energy estimates to be based on RASS room AC UECs by climate zone, or mapped to DEER single family central AC results by climate zone.	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	SCE: The initial UES discrepancy was noted in 2009 by ED before program start, at which time SCE took the appropriate steps to revise the work paper to the data available at that time. SCE still feels that the CDD extrapolation approach better matches the data than RASS.
		SDGE/ SCG	
	0608 EM&V Considerations: 1. The DEER 08 default NTGR of 0.7 is intended to be used for measures where no current applicable NTGR data or research is available. The 0608 Residential Retrofit evaluation reports NTGRs ranging from 0.31-0.41,	ED	Recommend NTGR values from 0608 EM&V: PGE: 0.42 SCE: 0.37 SDGE: 0.31

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
	depending on building type and IOU service territory, indicating a high degree of saturation of Energy Star room ACs. The NTGR should be revised to reflect the most recent applicable research.		
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	SCE: Comments addressed in overarching concerns.
		SDGE/ SCG	SDG&E disagrees. See response to Part 1: 1.A.(1).
NO	PGE PGECOAGR110 Wine Tank Insulation SDGE WPSDGENRL019 Wine Tank Insulation		
	Disposition: Approval upon inclusion of the following revisions:	ED	No change in disposition. Energy Division and utilities held a conference call in January 2011. As a result of discussions in that call, Energy Division believes PG&E is addressing all recommendations in a revised workpaper.
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	
		SDGE/ SCG	
	1. Revise Base Case thermal properties of the tank to have an emissivity of 0.08 instead of 0.8.	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	SCE: SCE agreed to initiate changes in the SPC tool to change the emissivity value from 0.8 to 0.08.
		SDGE/ SCG	Agree
	2. Current cooling system efficiency is likely the	ED	No change in recommendation

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
	lowest that would be encountered. Revise the assumed refrigeration plant efficiency from 1.2 kW/ton to 0.8 kW/ton. Assume the unit is water-cooled, not air-cooled.		
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	SCE: SCE agreed to use a kW/ton of 0.8 rather than 1.2 based on input from ED and PG&E.
		SDGE/ SCG	Agree
	3. Expand the SPC calculator software to either an hourly analysis, an expanded bin analysis that includes coincident solar and wet-bulb data, or abandon the SPC method for standard energy analysis software.	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	SCE: If feasible SCE agreed to initiate changes in the SPC tool to change the analysis to an hourly analysis.
		SDGE/ SCG	Agree
	0608 EM&V Considerations: 1. The DEER 08 default NTGR of 0.7 is intended to be used for measures where no current applicable NTGR data or research is available. Revise the assumed NTGR from 0.7 to 0.52 to be consistent with current 0608 EM&V evaluation effort for similar custom projects.	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	This issue is covered in the case management statement 1.A
		SCE	SCE: Comments addressed in overarching concerns.
		SDGE/ SCG	SDG&E disagrees. See response to Part 1: 1.A.(1).

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
		SCG	
NO	PGE PGEOPRO102 Steam Trap Replacement SCE & SCGWP100310A Steam Trap Replacement SDGE		
	Disposition: Approval upon inclusion of the following revisions:	ED	No changed in disposition. PG&E submitted a draft proposal for industrial steam traps. Energy Division and utilities held a conference call in January 2011. As a result of discussions in that call, Energy Division believes PG&E is developing a revised workpaper for industrial steam traps.
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	
		SDGE/ SCG	
	1. Large industrial steam trap replacement programs should be handled as custom projects because of the variability in hours of operation, pressure and steam trap size.	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	SDG&E and SoCalGas agree with PG&E's approach to a hybrid custom implementation strategy of a fixed rebate and calculated savings based on site specific steam trap survey data. SDG&E and SoCalGas would implement the survey requirement for customers with 300 total traps or more and steam pressure > 15 psig. Customers with fewer than 300 total traps and steam pressure > 15 psig will not be required to have a survey. Savings for those participants will be the average of the surveyed customers. This implementation approach will allow small industrial customers to participate. These

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
			customers typically replace only a few traps and the cost of a survey would be prohibitive.
	2. An adjustment should be made to the assumed operating pressures used to estimate leaking steam trap losses to account for the presence of control valves. A 0.67 multiplier is recommended.	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	Agree
	3. Improved documentation on steam trap replacement should be a mandate for incentives. Insufficient documentation precluded accurate assessment of program benefits in the last round of M&V efforts.	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	Agree
	4. The DEER 08 default NTGR of 0.7 is intended to be used for measures where no current applicable NTGR data or research is available. The DEER default NTGR is only acceptable if large industrial customers are treated as custom projects. If not, the value should be reduced to a lower value to account for the free-ridership associated with large industrial customers.	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
		SDGE/ SCG	SDG&E and SoCalGas disagree. See response to Part 1: 1.A.(1).
YES	PGE PGECOHC104 Pipe Insulation		
	Disposition: Approval upon inclusion of the following revisions:	ED	No changed in disposition. Energy Division and utilities held a conference call in January 2011. As a result of discussions in that call, Energy Division believes PG&E is addressing all recommendations in a revised workpaper.
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	
		SDGE/ SCG	
	1. Specific language should exclude the application of this measure to hot water piping or tanks covered by current Title 24 and OSHA standards.	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	
	2. Modify program description to exclude the replacement of damaged existing insulation as the heat loss of a system with damaged insulation is unknown.	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	
	3. (Pipe insulation) Revise the assumed pipe	ED	No change in recommendation

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
	diameter for pipe greater than 1" from the assumed 2" to 1.7".		
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	
	4. Insulation conductivity should be based on the assumed operating temperature of the steam or hot water.	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	
	5. The average fluid temperature of the hot water cases should be changed from 160°F to 150°F.	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	
	6. The 15 year tank insulation EUL recommended by PG&E for tank insulation (PG&E Work Paper Tank Insulation PGECOPRO103) should also be used for pipe insulation.	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
		SCG	
YES	PGE PGECOHC103 Hot Water Tank Insulation		
	Disposition: Approval upon inclusion of the following revisions:	ED	No change in disposition. Energy Division and utilities held a conference call in January 2011. As a result of discussions in that call, Energy Division believes PG&E is addressing all recommendations in a revised workpaper.
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	
		SDGE/ SCG	
	1. Specific language should exclude the application of this measure to hot water piping or tanks covered by current Title 24 and OSHA standards.	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	
	2. Modify program description to exclude the replacement of damaged existing insulation as the heat loss of a system with damaged insulation is unknown.	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	
	3. Insulation conductivity should be based on the assumed operating temperature of the steam	ED	No change in recommendation

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
	or hot water.		
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	
	4. The average fluid temperature of the hot water cases should be changed from 160°F to 150°F.	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	
NO	SCG & WPSDGENRL1006 Pipe Insulation SDGE		
	Disposition: Not reviewed in first quarter of 2010	ED	Per request of SDGE/ SCG, ED reviewed the workpaper in January, 2011. Disposition: Approval upon inclusion of the following revisions:
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	
		SDGE/ SCG	
		ED	1. Specific language should exclude the application of this measure to hot water piping covered by current Title 24 and OSHA standards.
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
		SDGE/ SCG	Agree except for cases where the installed material increases the energy efficiency above that achieved under OSHA. For adding pipe insulation as opposed to an installed barrier.
		ED	2. Modify program description to exclude the replacement of damaged existing insulation as the heat loss of a system with damaged insulation is unknown.
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	
		SDGE/ SCG	Agree, except for custom.
		ED	3. Revise the assumed pipe diameter for pipe greater than 1" from the assumed 2" to 1.7" .
		DRA/ TURN	
		PGE	
		SCE	
		SDGE/ SCG	Disagree since the workpaper already assumes a conservative pipe diameter. Pipes in excess of 1" can be up to 8". The most common sizes are 2" to 8" and SDG&E and SoCalGas used the lower bound of the common range.
		ED	4. Revise boiler efficiencies to be combustion efficiency estimates rather than overall boiler efficiency. Changes should account for smaller boilers as well as errors in the CEC boiler database. Steam boilers should assume a combustion efficiency of 83% as found in the 06-08 EM&V effort for steam trap replacements.
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
		SDGE/ SCG	Disagree since combustion efficiency does not reflect the overall efficiency. Thermal efficiency as used by SDG&E and SoCalGas is more representative.
		ED	5. The actual value of pipe insulation used in analyses should be provided in the working paper write-up. The assumed pipe insulation conductivity should be based on the assumed operating temperature of the steam or hot water.
		DRA/ TURN	
		PGE	
		SCE	
		SDGE/ SCG	
		ED	6. Jacket properties (paper or metal) should be an average based assuming 50% of each type of jacket.
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	
		SDGE/ SCG	Agree
		ED	7. Hot water process temperatures differ in Tables 2 and 3. The 150°F value is seen as appropriate.
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	
		SDGE/ SCG	Agree for typical commercial hot water applications only.
		ED	8. One would expect that savings values for fittings would be a consistent fraction of that for piping insulation for a given pipe size (only

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
			variable that changes between the fitting and pipe calculations would be the assumed surface area). It is not. Recommended savings values are included in the attached workbook "SDGE_Fittings_Insulation.xls."  SDGE_Fittings_Insulation.xls
		DRA/TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	
		SDGE/SCG	SDG&E and SoCalGas disagree but may agree after further review.
		ED	9. A sink temperature of 65°F is not reasonable for indoor locations. Revise calculations based on a 75°F sink temperature.
		DRA/TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	
		SDGE/SCG	Disagree because the eventual heat sink is based on the ambient temperature which is 65 degrees in Southern California.
NO	PGE PGECOAGR101 Greenhouse Thermal Curtains		
	Disposition: Approval upon inclusion of the following revisions:	ED	No changed in disposition
		DRA/TURN	
		PGE	
		SCE	
		SDGE/SCG	
	2. DEER05 calculations assume that thermal curtain and greenhouse floor area are the	ED	Program documentation and rebate applications should be revised so that it is clear that the floor

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
	<p>same, however, incentives are often paid based on the thermal curtain area alone. It is common thermal curtains to be installed in a tent or semi-circular shape inside the greenhouse. In these cases the thermal curtain area is greater than the floor are of the greenhouse. If incentives were paid based on the area of the thermal curtain, then, by definition, savings estimates will be too high. Savings estimates should be adjusted down by the average of the greenhouse floor area to thermal curtain area across the population of greenhouses where thermal curtains are installed.</p>		<p>area is the basis for the rebate.</p>
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	Agree
	<p>0608 EM&V Considerations: 1. (All measures) Observations from 0608 PG&E Agricultural and Food Processing evaluation indicate DEER05 savings are at least twice the actual savings, such as: a. Billing analysis and measurements indicate that air temperature stratification is much less, which will decrease the baseline heat loss through the roof. b. Ground level steam or hot water radiant heating is the predominant heating source, not high-mounted radiant heaters assumed for the DEER05 savings calculations.</p>	ED	<p>DEER UES values may be used only under the following conditions:</p> <ul style="list-style-type: none"> • greenhouse must be equipped with an overhead heating system • not combined, or installed in a greenhouse, with IR film <p>The following UES adjustments are recommended:</p> <ul style="list-style-type: none"> • UES values reduced by 37% when installed in greenhouse with heating system other than overhead • UES values reduced by 20% when combined with heat curtains or installed in a greenhouse with existing IR film
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	Agree
		SCE	

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
		SDGE/ SCG	<p>Disagree. SDG&E and SoCalGas utilize the frozen DEER values. Based on webinars, ED required the same rules for DEER. ED should update DEER in the next cycle.</p> <p>Disagree. SDG&E and SoCalGas had significant problems with this study. The ED’s consultants believed that the study was very good. Later re-review of the study showed that ED’s consultants on the call actually worked on the study. This conflict of interest should not be ignored. Given that, it is recommended that the DEER values remain without adjustment.</p>
	<p>2. (Thermal Curtains)Revise benefit and incentives to account for program area reporting errors noted in the 0608 PG&E Agricultural and Food Processing evaluation. The evaluation observed that incentives and benefits were often calculated based on the area of thermal curtains installed, when the workpaper and programs savings are based on the square footage of the greenhouse. Savings and incentives should be adjusted downward to reflect the average ratio of greenhouse floor area to installed heat curtain area.</p>	ED	<p>Program documentation and rebate applications should be revised so that it is clear that the floor area is the basis for the rebate.</p>
		DRA/ TURN	<p>DRA and TURN agree with the Energy Division’s recommendations.</p>
		PGE	<p>Agree</p>
		SCE	
		SDGE/ SCG	<p>Agree</p>
	<p>3. The DEER 08 default NTGR of 0.7 is intended to be used for measures where no current applicable NTGR data or research is available. NTGRs should be revised to reflect 0608 PG&E Agricultural and Food Processing evaluation reported NTGR ratios of 0.46 (for IR film) and 0.63 (for thermal curtains).</p>	ED	<p>Recommend 2006-08 EM&V NTGR study value of 0.63.</p>
		DRA/ TURN	<p>DRA and TURN agree with the Energy Division’s recommendations.</p>

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
		PGE	This issue is covered in the case management statement 1.A
		SCE	
		SDGE/ SCG	SDG&E and SoCalGas disagree. See response to Part 1: 1.A.(1).
NO	PGE PGECOAGR102 Greenhouse IR Film		
	Disposition: Approval upon inclusion of the following revisions:	ED	No changed in disposition
		DRA/ TURN	
		PGE	
		SCE	
		SDGE/ SCG	
	1. (IR Film) DEER05 measure definition is for only the replacement of double layer roofs with another double layer plus IR film. Clarify in program criteria that only roof replacement measures are covered and that walls are specifically excluded. PG&E should provide additional analysis in support of an additional measure intended for replacement of walls.	ED	
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	Disagree. SDG&E and SoCalGas utilize the frozen DEER values. Based on webinars, ED required the same rules for DEER. ED should update DEER in the next cycle. Furthermore, IR film provides thermal benefits on walls as well as roofs. The DEER values do not impose such a restriction.
	0608 EM&V Considerations: 1. (All measures) Observations from 0608 PG&E Agricultural and Food Processing evaluation	ED	DEER UES values may be used only under the following conditions: <ul style="list-style-type: none"> greenhouse must be equipped with an

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
	<p>indicate DEER05 savings are at least twice the actual savings, such as:</p> <p>a. Billing analysis and measurements indicate that air temperature stratification is much less, which will decrease the baseline heat loss through the roof.</p> <p>b. Ground level steam or hot water radiant heating is the predominant heating source, not high-mounted radiant heaters assumed for the DEER05 savings calculations.</p>		<p>overhead heating system</p> <ul style="list-style-type: none"> not combined, or installed in a greenhouse, with thermal curtains <p>The following UES adjustments are recommended:</p> <ul style="list-style-type: none"> UES values reduced by 61% when installed in greenhouse with heating system other than overhead UES values reduced by 20% when combined with heat curtains or installed in a greenhouse with existing heat curtains
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	Disagree. SDG&E and SoCalGas had significant problems with this study. The ED’s consultants believed that the study was very good. Later re-review of the study showed that ED’s consultants on the call actually worked on the study. This conflict of interest should not be ignored. Given that, it is recommended that the DEER values remain without adjustment.
	<p>3. The DEER 08 default NTGR of 0.7 is intended to be used for measures where no current applicable NTGR data or research is available. NTGRs should be revised to reflect 0608 PG&E Agricultural and Food Processing evaluation reported NTGR ratios of 0.46 (for IR film) and 0.63 (for thermal curtains).</p>	ED	<p>Recommend 2006-08 EM&V NTGR study value: PG&E: 0.6 All other utilities: 0.46.</p>
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	This issue is covered in the case management statement 1.A
		SCE	
		SDGE/ SCG	SDG&E and SoCalGas disagree. See response to Part 1: 1.A.(1).

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
NO	<p>PGE PGECOFST100 Combination Oven</p> <p>PGE PGECOFST101 Convection Oven</p> <p>PGE PGECOFST109 Rack Ovens</p> <p>PGE PGECOFST117 Conveyor Oven</p> <p>SCG SCGWP080331B Conveyor Oven</p> <p>PGE PGECOFST102 Fryer - Electric and Gas</p> <p>PGE PGECOFST114 Large Vat Fryer</p> <p>PGE PGECOFST104 Steam Cookers</p>		
	Disposition: No approval at this time Energy Division provides the following summary concerns related to all food service measures:	ED	Disposition: Approval upon inclusion of the following revisions:
		DRA/ TURN	
		PGE	
		SCE	
		SDGE/ SCG	The following applies to all food service measures: The IOUs used the leading expert on the food service industry to develop their workpapers and calculations. ED's consultants without any data made ad hoc, unsupported recommendations .
	1. The base case is taken from the 2002 study conducted by the Food Service Technology Center (FSTC). The models used for the base case have not been specified in that report. PG&E claims that manufacturers do not have any incentive to improve their products over time (on a CC) and the old data holds. Energy Division, however, found that the FSTC had tested a 2005 model and the same model offered in 2008 and found the cooking efficiency had increased from 47% to 54% because of product improvements. The baseline the IOUs used is always the least efficient equipment that was tested in 2002, not the market share weighted baseline. This practice assumes that absent the program, all customers will buy the same inefficient model and that manufacturer will have 100% market share without the program.	ED	Energy Division believes that operating hours, food production rates and baseline efficiencies contribute to overly optimistic UES calculations and recommend a 30% reduction in UES values for this group of measures.
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
		PGE	<p>Work Papers FST100, FST109, FST114, FST117 are not likely to become a HIM and should not be subject to Phase 1 review. It will only be subject to Phase 2 retrospective review if its HIM status is determined, at a later date, to have changed.</p> <p>No change to Work Papers FST101, FST102, FST104 submitted to the Energy Division on March 30, 2010.</p>
		SCE	<p>SCE: Energy Division dropped all the food service measures from the HIM review except the top 3 impactful measures in the food service measure list.</p>
		SDGE/ SCG	<p>Work Papers FST100, FST109, FST114, FST117 are not likely to become a HIM and should not be subject to Phase 1 review. It will only be subject to Phase 2 retrospective review if its HIM status is determined, at a later date, to have changed.</p> <p>No change to Work Papers FST101, FST102, FST104 submitted to the Energy Division on March 30, 2010.</p>
	<p>2. Most incremental costs are based on 2006 prices. Current prices tend to be slightly lower than the 2006 prices. When the incremental cost difference is small (five to nine percent or about \$200 to \$400 for commercial conveyor ovens), the uncertainty around pricing makes that measure questionable. For commercial conveyor ovens, after adjusting the price of just one measure case model and eliminating another non-qualified measure case model, the incremental cost difference was negative, i.e. the measure became less expensive than the baseline. There is no justification for rebating commercial conveyor ovens where the measure case is as- or less-expensive than the base case model.</p>	ED	<p>No change in recommendation</p>
		DRA/ TURN	<p>DRA and TURN agree with the Energy Division's recommendations.</p>
		PGE	<p>Work Papers FST100, FST109, FST114, FST117 are not likely to become a HIM and should not be</p>

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
			<p>subject to Phase 1 review. It will only be subject to Phase 2 retrospective review if its HIM status is determined, at a later date, to have changed.</p> <p>No change to Work Papers FST101, FST104 submitted to the Energy Division on March 30, 2010.</p> <p>We will submit a revised workpaper FST102 as part of the phase 2 process.</p>
		SCE	
		SDGE/ SCG	<p>Work Papers FST100, FST109, FST114, FST117 are not likely to become a HIM and should not be subject to Phase 1 review. It will only be subject to Phase 2 retrospective review if its HIM status is determined, at a later date, to have changed.</p> <p>No change to Work Papers FST101, FST102, FST104 submitted to the Energy Division on March 30, 2010.</p>
	<p>3. The FSTC efficiency tests are conducted at the highest or heavy load, not typical load in a food service establishment. Since the efficiency falls at light loads (in the base and measure case), current savings estimates are not accurate. The heavy load scenario would result in the least amount of production time and the most amount of idle time where the majority of losses occur. In a typical operation, the production time will increase and the idle time will decrease. So savings would be more realistic, perhaps less than currently estimated.</p>	ED	<p>Energy Division believes that operating hours, food production rates and baseline efficiencies contribute to overly optimistic UES calculations and recommend a 30% reduction in UES values for this group of measures.</p>
		DRA/ TURN	<p>DRA and TURN agree with the Energy Division's recommendations.</p>
		PGE	<p>Work Papers FST100, FST109, FST114, FST117 are not likely to become a HIM and should not be subject to Phase 1 review. It will only be subject to Phase 2 retrospective review if its HIM status is determined, at a later date, to have changed.</p>

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
			No change to Work Papers FST101, FST102, FST104 submitted to the Energy Division on March 30, 2010.
		SCE	
		SDGE/ SCG	<p>Work Papers FST100, FST109, FST114, FST117 are not likely to become a HIM and should not be subject to Phase 1 review. It will only be subject to Phase 2 retrospective review if its HIM status is determined, at a later date, to have changed.</p> <p>No change to Work Papers FST101, FST102, FST104 submitted to the Energy Division on March 30, 2010.</p>
	<p>4. PG&E does not provide substantiated evidence for the assumptions made on production output per day, claiming that food service establishments do not disclose such proprietary data. Production output per day is an important parameter that significantly influences savings estimates</p>	ED	Energy Division believes that operating hours, food production rates and baseline efficiencies contribute to overly optimistic UES calculations and recommend a 30% reduction in UES values for this group of measures.
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	<p>Work Papers FST100, FST109, FST114, FST117 are not likely to become a HIM and should not be subject to Phase 1 review. It will only be subject to Phase 2 retrospective review if its HIM status is determined, at a later date, to have changed.</p> <p>No change to Work Papers FST101, FST102, FST104 submitted to the Energy Division on March 30, 2010.</p>
		SCE	
		SDGE/ SCG	<p>Work Papers FST100, FST109, FST114, FST117 are not likely to become a HIM and should not be subject to Phase 1 review. It will only be subject to Phase 2 retrospective review if its HIM status is determined, at a later date, to have changed.</p> <p>No change to Work Papers FST101, FST102, FST104 submitted to the Energy Division on March 30, 2010.</p>

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
	5. The IOUs accept DEER EUL of 12 years; then, cite a vibrant used equipment market to support their claim of a 20-30 year EUL. If there is a used equipment market, the removed equipment is likely still in the system. There is no adjustment for this factor in the work papers.	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Work Papers FST100, FST109, FST114, FST117 are not likely to become a HIM and should not be subject to Phase 1 review. It will only be subject to Phase 2 retrospective review if its HIM status is determined, at a later date, to have changed. PG&E will remove language referring to 20 to 30 year EUL in work papers FST101, FST102 and FST104.
		SCE	
		SDGE/ SCG	Work Papers FST100, FST109, FST114, FST117 are not likely to become a HIM and should not be subject to Phase 1 review. It will only be subject to Phase 2 retrospective review if its HIM status is determined, at a later date, to have changed. No change to Work Papers FST101, FST102, FST104 submitted to the Energy Division on March 30, 2010.
	6. The DEER 08 default NTGR of 0.7 is intended to be used for measures where no current applicable NTGR data or research is available. The IOUs accept DEER08 default NTGR of 0.7, as opposed to 0.5 from the 2004-2005 food service program evaluation, and then cite first cost barriers from an outdated 1993 study to lay a case for a higher NTGR. The first cost differential has declined over the past 17 years and disappeared for measures such as commercial conveyor ovens.	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
		PGE	<p>Work Papers FST100, FST109, FST114, FST117 are not likely to become a HIM and should not be subject to Phase 1 review. It will only be subject to Phase 2 retrospective review if its HIM status is determined, at a later date, to have changed.</p> <p>PG&E will use the DEER08 NTG Default value of 0.70.</p>
		SCE	
		SDGE/ SCG	<p>Work Papers FST100, FST109, FST114, FST117 are not likely to become a HIM and should not be subject to Phase 1 review. It will only be subject to Phase 2 retrospective review if its HIM status is determined, at a later date, to have changed.</p> <p>No change to Work Papers FST101, FST102, FST104 submitted to the Energy Division on March 30, 2010. SDG&E and SoCalGas disagree. See response to Part 1: 1.A.(1).</p>
	<p>7. In the case of steam cookers, PG&E has challenged the DEER estimate and substituted it with the results from the 2002 FSTC study, which is outdated.</p>	ED	<p>Energy Division believes that operating hours, food production rates and baseline efficiencies contribute to overly optimistic UES calculations and recommend a 30% reduction in UES values for this group of measures.</p>
		DRA/ TURN	<p>DRA and TURN agree with the Energy Division’s recommendations.</p>
		PGE	<p>Work Papers FST100, FST109, FST114, FST117 are not likely to become a HIM and should not be subject to Phase 1 review. It will only be subject to Phase 2 retrospective review if its HIM status is determined, at a later date, to have changed.</p> <p>No change to Work Papers FST101, FST102, FST104 submitted to the Energy Division on March 30, 2010.</p>
		SCE	
		SDGE/ SCG	<p>Work Papers FST100, FST109, FST114, FST117 are not likely to become a HIM and should not be subject to Phase 1 review. It will only be subject to Phase 2 retrospective review if its HIM status is</p>

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011												
			determined, at a later date, to have changed. No change to Work Papers FST101, FST102, FST104 submitted to the Energy Division on March 30, 2010.												
NO	<table border="0"> <tr> <td>PGE</td> <td>PGECOFST103</td> <td>Griddles</td> </tr> <tr> <td>PGE</td> <td>PGECOFST112</td> <td>GTO Production Line</td> </tr> <tr> <td>PGE</td> <td>PGECOFST115</td> <td>Flexible Batch Broiler</td> </tr> <tr> <td>SCG</td> <td>SCGWP080630A</td> <td>Flexible Batch Broiler</td> </tr> </table>	PGE	PGECOFST103	Griddles	PGE	PGECOFST112	GTO Production Line	PGE	PGECOFST115	Flexible Batch Broiler	SCG	SCGWP080630A	Flexible Batch Broiler		
PGE	PGECOFST103	Griddles													
PGE	PGECOFST112	GTO Production Line													
PGE	PGECOFST115	Flexible Batch Broiler													
SCG	SCGWP080630A	Flexible Batch Broiler													
	Disposition: No approval at this time Energy Division provides the following summary concerns related to all food service measures:	<table border="1"> <tr> <td data-bbox="829 688 927 804">ED</td> <td data-bbox="927 688 1500 804">Disposition: Not subject to Phase 1 review</td> </tr> <tr> <td data-bbox="829 804 927 884">DRA/ TURN</td> <td data-bbox="927 804 1500 884"></td> </tr> <tr> <td data-bbox="829 884 927 936">PGE</td> <td data-bbox="927 884 1500 936"></td> </tr> <tr> <td data-bbox="829 936 927 989">SCE</td> <td data-bbox="927 936 1500 989"></td> </tr> <tr> <td data-bbox="829 989 927 1073">SDGE/ SCG</td> <td data-bbox="927 989 1500 1073">SDG&E and SoCalGas agree to the disposition assuming it applies to items 1 through 6.</td> </tr> </table>	ED	Disposition: Not subject to Phase 1 review	DRA/ TURN		PGE		SCE		SDGE/ SCG	SDG&E and SoCalGas agree to the disposition assuming it applies to items 1 through 6.			
ED	Disposition: Not subject to Phase 1 review														
DRA/ TURN															
PGE															
SCE															
SDGE/ SCG	SDG&E and SoCalGas agree to the disposition assuming it applies to items 1 through 6.														
	1. The base case is taken from the 2002 study conducted by the Food Service Technology Center (FSTC). The models used for the base case have not been specified in that report. PG&E claims that manufacturers do not have any incentive to improve their products over time (on a CC) and the old data holds. Energy Division, however, found that the FSTC had tested a 2005 model and the same model offered in 2008 and found the cooking efficiency had increased from 47% to 54% because of product improvements. The baseline the IOUs used is always the least efficient equipment that was tested in 2002, not the market share weighted baseline. This practice assumes that absent the program, all customers will buy the same inefficient model and that manufacturer will have 100% market share without the program.	<table border="1"> <tr> <td data-bbox="829 1073 927 1797">ED</td> <td data-bbox="927 1073 1500 1797"> After further review of expected accomplishments provided by utilities, ED determined these measures are not HIMs. Workpapers are not subject to Phase 1 review, but will be subject to Phase 2 Retrospective Review if status of any measure changes to HIM during program cycle. </td> </tr> <tr> <td data-bbox="829 1797 927 1875">DRA/ TURN</td> <td data-bbox="927 1797 1500 1875">DRA and TURN agree with the Energy Division's recommendations.</td> </tr> </table>	ED	After further review of expected accomplishments provided by utilities, ED determined these measures are not HIMs. Workpapers are not subject to Phase 1 review, but will be subject to Phase 2 Retrospective Review if status of any measure changes to HIM during program cycle.	DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.									
ED	After further review of expected accomplishments provided by utilities, ED determined these measures are not HIMs. Workpapers are not subject to Phase 1 review, but will be subject to Phase 2 Retrospective Review if status of any measure changes to HIM during program cycle.														
DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.														

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
		PGE	Agree
		SCE	SCE: Agreed
		SDGE/ SCG	Agree
	<p>2. Most incremental costs are based on 2006 prices. Current prices tend to be slightly lower than the 2006 prices. When the incremental cost difference is small (five to nine percent or about \$200 to \$400 for commercial conveyor ovens), the uncertainty around pricing makes that measure questionable. For commercial conveyor ovens, after adjusting the price of just one measure case model and eliminating another non-qualified measure case model, the incremental cost difference was negative, i.e. the measure became less expensive than the baseline. There is no justification for rebating commercial conveyor ovens where the measure case is as- or less-expensive than the base case model.</p>	ED	
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	
		SCE	
		SDGE/ SCG	Agree
	<p>3. The FSTC efficiency tests are conducted at the highest or heavy load, not typical load in a food service establishment. Since the efficiency falls at light loads (in the base and measure case), current savings estimates are not accurate. The heavy load scenario would result in the least amount of production time and the most amount of idle time where the majority of losses occur. In a typical operation, the production time will increase and the idle time will decrease. So savings would be more realistic, perhaps less than currently estimated.</p>	ED	

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	
		SDGE/ SCG	
	<p>4. PG&E does not provide substantiated evidence for the assumptions made on production output per day, claiming that food service establishments do not disclose such proprietary data. Production output per day is an important parameter that significantly influences savings estimates</p>	ED	
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	
		SDGE/ SCG	
	<p>5. The IOUs accept DEER EUL of 12 years; then, cite a vibrant used equipment market to support their claim of a 20-30 year EUL. If there is a used equipment market, the removed equipment is likely still in the system. There is no adjustment for this factor in the work papers.</p>	ED	
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	
		SDGE/ SCG	
	<p>6. The DEER 08 default NTGR of 0.7 is intended to be used for measures where no current applicable NTGR data or research is available. The IOUs accept DEER08 default NTGR of 0.7, as opposed to 0.5 from the 2004-2005 food service program evaluation, and then cite first</p>	ED	

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
	cost barriers from an outdated 1993 study to lay a case for a higher NTGR. The first cost differential has declined over the past 17 years and disappeared for measures such as commercial conveyor ovens.		
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	
		SCE	
		SDGE/ SCG	SDG&E and SoCalGas disagree. See response to Part 1: 1.A.(1).
NO	PGE WPSCREL G0001 Exterior screw-in CFL		
	Disposition: Approval upon inclusion of the following revisions:	ED	No change in disposition
		DRA/ TURN	
		PGE	
		SCE	
		SDGE/ SCG	
	1. The multi-family common area operating hours should be revised to match observations from 0608 Residential Retrofit evaluation.. Workpaper and past DEER values were based on a 1999 HMG study for security applications. It is not appropriate to use those values for all exterior lighting. The 0608 Residential Retrofit report provides results of significant field monitoring of multifamily outdoor cfls. It is more important to use current data than to past data, used on the basis of judgment alone.	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	
		SCE	SCE: SCE believes that the HMG study is more detailed to CFL control type than the 0608 results

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
			which contain a single operating hour value for all CFL control types, on-off switch, photocell, and motion control.
		SDGE/ SCG	SDG&E will defer to SCE’s comments on this topic.
	<p>2. For screw-in CFLs, the workpaper installation rate of 1.0 assumes that all CFLs are installed and operating in the field and is not reasonable. Reduce installation rates to reflect instances where incentives were paid but lamps were never installed. The 0608 Residential Retrofit and Upstream Lighting Program evaluations are a reasonable source of this information.</p>	ED	No change in recommendation. Note, during conference calls held in January of 2011, Energy Division and utilities agreed that installation rates should be raised as an “over-arching issue” covering all measures. Energy Division has not changed its recommendation that installation rates should be properly applied to lighting measures, the discussion of installation rates is now covered in the Case Management Statement.
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	
		SCE	
		SDGE/ SCG	
	<p>0608 EM&V Considerations: 1. (Screw-in) The 0608 Residential Retrofit and Upstream Lighting evaluations show that installation rate, invoice verification and leakage rate (leakage rate applies to upstream programs only) are almost always less than 1.0. Estimated savings should be adjusted to reflect these observations.</p>	ED	No change in recommendation. Note, during conference calls held in January of 2011, Energy Division and utilities agreed that installation rates should be raised as an “over-arching issue” covering all measures. Energy Division has not changed its recommendation that installation rates should be properly applied to lighting measures, the discussion of installation rates is now covered in the Case Management Statement.
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	
		SCE	
		SDGE/ SCG	
	<p>2. Average operating hours should be based on 0608 Upstream Lighting Program and Residential Retrofit evaluation results that show slightly higher exterior screw-in cfl use</p>	ED	No change in recommendation

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
	in single family applications (compared to 05 KEMA lighting study), but much lower usage for multi-family common areas (compared to HMG report).		
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	
		SDGE/ SCG	
NO	PGE WPSCREL G0007 Exterior CFL Fixture		
	Disposition: Approval upon inclusion of the following revisions:	ED	No change in disposition
		DRA/ TURN	
		PGE	
		SCE	
		SDGE/ SCG	
	1. The multi-family common area operating hours should be revised to match observations from 0608 Residential Retrofit evaluation.. Workpaper and past DEER values were based on a 1999 HMG study for security applications. It is not appropriate to use those values for all exterior lighting. The 0608 Residential Retrofit report provides results of significant field monitoring of multifamily outdoor cfls. It is more important to use current data than to past data, used on the basis of judgment alone.	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	SCE: SCE believes that the HMG study is more detailed to CFL control type than the 0608 results which contain a single operating hour value for all

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
			CFL control types, on-off switch, photocell, and motion control.
		SDGE/ SCG	SDG&E will defer to SCE's comments on this topic.
	<p>Specific revisions (Exterior CFL Fixture):</p> <ol style="list-style-type: none"> 1. Revise code description to reflect T24 requirements that exterior fixtures in residential applications are required to be either high efficacy luminaires or have photosensor AND motion control. 	ED	
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	
		SDGE/ SCG	
	<ol style="list-style-type: none"> 2. Revise incremental fixture costs to account for the included control features as required by code. 	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	SCE: As SCE recalls, fixture costs from DEER for the non-control fixtures were more expensive than for the control type fixtures so we defaulted to the more expensive DEER values.
		SDGE/ SCG	SDG&E will defer to SCE's comments on this topic.
	<p>0608 EM&V Considerations:</p> <ol style="list-style-type: none"> 2. Average operating hours should be based on 0608 Upstream Lighting Program and Residential Retrofit evaluation results that show slightly higher exterior screw-in cfl use in single family applications (compared to 05 KEMA lighting study), but much lower usage for multi-family common areas (compared to HMG report). 	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
		PGE	
		SCE	
		SDGE/ SCG	
YES	PGE PGECOLTG134 Fixture Integrated Occ Sens <150 Watts PGE PGECOLTG135 Fixture Integrated Occ Sens >=150 Watts		
	Disposition: Approval upon inclusion of the following revisions:	ED	No change in disposition
		DRA/ TURN	
		PGE	
		SCE	
		SDGE/ SCG	
	1. Savings calculations revised to be per controlled fixture watt	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	Agree
	2. Energy savings from the workpaper should be limited to those buildings not already covered in the DEER05 update.	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree – OTR is the PG&E default building type
		SCE	
		SDGE/ SCG	Agree – OTR is the PG&E default building type
	0608 EM&V Considerations (The following recommendations are based on the 0608 Small Commercial Contract Group Direct Impact Evaluation)	ED	

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
	<p>1. The evaluation included a review of a significant number of high bay applications in a number of different programs. Data from these studies could be used to provide a better estimate for fixture wattage that is currently recommended in the workpaper. The weighted average should be used for the wattage of the fixture based on field observations, rather and simply basing this important variable on the wattage of one “common” fixture type, then savings should be normalized on a per controlled watt basis</p>		
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	No change to Work Papers PGECOLTG134 and PGECOLTG135 submitted to the Energy Division on March 30, 2010.
		SCE	
		SDGE/ SCG	No change to Work Papers PGECOLTG134 and PGECOLTG135 submitted to the Energy Division on March 30, 2010.
	<p>2. The CPUC 06-08 evaluation programs referenced earlier also collected “percentage off-time” data from high-bay fixtures with integrated occupancy sensors in a wide variety of high-bay applications. It is recommended that this data be analyzed and potentially utilized to update percentage off-time assumptions for typical high-bay applications (ie manufacturing, storage, etc).</p>	ED	
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	
		SCE	
		SDGE/ SCG	SDG&E recommends that the percentage off-time in the workpapers be adopted, since DEER does not have other data. The DEER should be updated in the next cycle.

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
YES	SCG & SCGWP100303B Low Flow Shower Head SDGE		
	Disposition: Approval upon inclusion of the following revisions:	ED	Approved
		DRA/ TURN	
		PGE	
		SCE	
		SDGE/ SCG	
	1. Reduce baseline water consumption to levels supported by current available research, which will reduce savings. Energy Division calculations for SDG&E and SCG show that baseline gas use for shower+bath lav+kitchen sink is greater than reported in RASS for all DHW enduses.	ED	Energy Division approves revised workpaper for low-flow showerheads uploaded to Basecamp on 1/20/2011.
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	
		SDGE/ SCG	
	2. Use water heater recovery efficiency to calculate energy use instead of energy factor.	ED	Energy Division approves revised workpaper for low-flow showerheads uploaded to Basecamp on 1/20/2011.
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	
		SDGE/ SCG	
NO	SCG & SCGWP100303A Therm Saver Kit SDGE		
	Disposition: Approval upon inclusion of the following revisions:	ED	No change in disposition

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
		DRA/ TURN	
		PGE	
		SCE	
		SDGE/ SCG	
	<p>1. Reduce baseline water consumption to levels supported by current available research, which will reduce savings. Energy Division calculations for SDG&E and SCG show that baseline gas use for shower+bath lav+kitchen sink is greater than reported in RASS for all DHW enduses.</p>	ED	<p>Revised workpaper 'WPSDGEREL1063 Rev2' uploaded to Basecamp on 1/21/2010 does not include revision to baseline DHW use. Revise to be consistent with low-flow showerhead workpaper.</p>
		DRA/ TURN	<p>DRA and TURN agree with the Energy Division's recommendations.</p>
		PGE	
		SCE	
		SDGE/ SCG	<p>SDG&E and SoCalGas are reviewing a document provide very recently by ED. We will continue to work with ED to reach agreement. The submitted workpaper is reasonable. The savings calculated a based on 400 site specific surveys. The outlier values were omitted. The savings are reasonable at approximately 10% of the water heater usage.</p>
	<p>2. Use water heater recovery efficiency to calculate energy use instead of energy factor.</p>	ED	<p>Revised workpaper 'WPSDGEREL1063 Rev2' uploaded to Basecamp on 1/21/2010 does not include revision to DHW efficiency. ED recommends approval once DHW consumption is revised to be consistent with revised low-flow showerhead workpaper.</p>
		DRA/ TURN	<p>DRA and TURN agree with the Energy Division's recommendations.</p>
		PGE	
		SCE	
		SDGE/ SCG	
YES	SCG & SCGWP100309A		Thermostatic Restrictor Valve

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
	SDGE		
	Disposition: Approval upon inclusion of the following revisions:	ED	No change indisposition
		DRA/ TURN	
		PGE	
		SCE	
		SDGE/ SCG	
	2. Use water heater recovery efficiency to calculate energy use instead of energy factor.	ED	Revised workpaper uploaded on 1/21/2011 includes revision of primary water heating efficiency. ED recommends approval if revised recommendation on tub/shower combinations is also incorporated.
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	
		SDGE/ SCG	
	3. Limit installations of thermostatic restrictor valves to shower-only applications, not tub plus shower applications.	ED	Reduce UES of measure by 20% to account for some installations in tub+shower combinations.
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	
		SDGE/ SCG	Agree
YES	PGE PGECODHW113 Low-Flow Showerhead, Low-Flow Showerhead w/Thermostatic Valve		
	Disposition: Approval upon inclusion of the following revisions:	ED	No change in disposition
		DRA/ TURN	
		PGE	

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
		SCE	
		SDGE/ SCG	
	1. Reduce baseline water consumption to levels supported by current available research, which will reduce savings. Energy Division calculations for SDG&E and SCG show that baseline gas use for shower+bath lav+kitchen sink is greater than reported in RASS for all DHW enduses.	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	
	2. Use water heater recovery efficiency to calculate energy use instead of energy factor.	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	
	3. Limit installations of thermostatic restrictor valves to shower-only applications, not tub plus shower applications.	ED	Reduce UES of measure by 20% to account for some installations in tub+shower combinations.
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	
		SDGE/ SCG	
NO	SCE	WPSCNRLG0086.2	Linear Fluor. Interior Fixture
	SCE	WPSCNRLG0087.2	Linear Fluorescent

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
	<p>SCE WPSCNRLG0092.1 Fluor. Lamp to Fluor. Lamp</p> <p>SCE WPSCNRLG0095.2 Fluorescent De-lamping</p> <p>PGE PGECOLTG114 Linear Fluor. Interior Fixture</p> <p>PGE PGECOLTG116 Low/Red. Wattage T8 Lamps</p> <p>PGE PGECOLTG122 T8/T5 Lin. Fl. Lamps w/elec bal.</p> <p>PGE PGECOLTG132 R1 Permanent T12 De-lamping</p> <p>PGE PGECOLTG159 Lin. Fluor. w/NEMA Prem Bal</p> <p>SDGE SDGEWPNRL0044 Linear Fluor. Interior Fixture</p> <p>SDGE WPSDGENRL0120 T8 32w Lin Fluor Repl w/T8 28w or 25w</p>		
	Disposition: Approval upon inclusion of the following revisions:	<p>ED</p> <p>DRA/ TURN</p> <p>PGE</p> <p>SCE</p> <p>SDGE/ SCG</p>	No change in disposition
	1. Establish second baseline for early retirement measures based on currently enacted codes and standards that will be in effect at the end of the RUL.	<p>ED</p> <p>DRA/ TURN</p> <p>PGE</p> <p>SCE</p> <p>SDGE/ SCG</p>	<p>No change in recommendation. Note, during conference calls held in January of 2011, Energy Division and utilities agreed that applicability of the “dual baseline” should be raised as an “over-arching issue” covering all measures. Energy Division has not changed its recommendation that a “dual baseline” should be properly applied to early retirement lighting measures, the discussion of the dual baseline is now covered in the Case Management Statement.</p> <p>DRA and TURN agree with the Energy Division’s recommendations.</p> <p>Agree</p> <p>SCE: Comments addressed in overarching concerns.</p> <p>SDG&E will defer to SCE’s comments on this topic.</p>
	2. Establish code baselines for ROB based on 2008 DEER code baseline mappings as well as current and incoming federal standards, Title 20 requirements and Title 24 Section 146.	ED	No change in recommendation. Note, during conference calls held in January of 2011, Energy Division and utilities agreed that applicability of the “dual baseline” should be raised as an “over-arching issue” covering all measures. Energy

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
			Division has not changed its recommendation that a “dual baseline” should be properly applied to early retirement lighting measures, the discussion of the dual baseline is now covered in the Case Management Statement.
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	Agree
		SCE	SCE: SCE fundamentally agrees with the concept of the dual baseline however until infrastructure is in place to track and account for dual baselines SCE recommends continuing with the existing method for tracking and accounting for savings. See overarching concern comments..
		SDGE/ SCG	
	3. Determine different baselines for each delivery mechanism. Direct install and energy service companies may have a very high level of early retirement and the post-RUL baseline will include a mixture of spaces that are and are not subject to Title 24 Section 146. Other downstream rebate mechanisms should have lower early retirement applications and will also have a mixture of spaces that are and are not subject to Title 24 Section 146.	ED	No change in recommendation. Note, during conference calls held in January of 2011, Energy Division and utilities agreed that applicability of the “dual baseline” should be raised as an “over-arching issue” covering all measures. Energy Division has not changed its recommendation that a “dual baseline” should be properly applied to early retirement lighting measures, the discussion of the dual baseline is now covered in the Case Management Statement.
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	Agree
		SCE	SCE: SCE agrees that install type should be linked to different program delivery methods and has taken steps to link install types to delivery methods. Concerning the dual baselines see party position on comment 2.
		SDGE/ SCG	SDG&E will defer to SCE’s comments on this topic.
	4. Specify costs for code baseline fixtures for all lamp-plus-ballast and fixture replacement measures based on 2008 DEER code baseline	ED	No change in recommendation

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
	mappings as well as current and incoming federal standards, Title 20 requirements and Title 24 Section 146.		
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	Costs from DEER 2008 v. 2.05 for 09-11 planning should be used.
		SCE	SCE: SCE agrees that code baseline needs to be adjusted with new and developing codes however to address the dual baseline concern. See comment 2.
		SDGE/ SCG	Costs from DEER 2008 v. 2.05 for 09-11 planning should be used.
	5. For all fixture replacement measures, if the measure is limited to projects not covered by Title 24 Section 146, require the submission of pre and post lighting construction documents that clearly identify all enclosed spaces and which fixtures have been replaced.	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	These installations will be covered in the custom application process.
		SCE	SCE: Many linear florescent retrofit projects that are not subject to T24 will have limited “construction documents” since the work is typically performed by a lighting contractor that will probably work by fixture count rather than by formal lighting plans.
		SDGE/ SCG	SDG&E will defer to SCE’s comments on this topic.
	6. Revise savings calculations for early retirement so that savings are based on full, above customer average reduction in fixture watts for the RUL and only above code reduction in fixture watts for the period equal to EUL minus RUL. This is consistent with requirements in the Energy Efficiency Policy Manual. For all fixture replacement measures	ED	No change in recommendation. Note, during conference calls held in January of 2011, Energy Division and utilities agreed that applicability of the “dual baseline” should be raised as an “over-arching issue” covering all measures. Energy Division has not changed its recommendation that a “dual baseline” should be properly applied to early retirement lighting measures, the discussion

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
	<p>covered by Title 24 Section 146, these baseline fixtures are described in Measure Code Implications, section 3.2, above. For lamp-plus-ballast retrofits, the combination of incoming ballast and lamp efficacy requirements will require electronic ballasts and T8 lamps.</p>		<p>of the dual baseline is now covered in the Case Management Statement.</p>
		DRA/ TURN	<p>DRA and TURN agree with the Energy Division’s recommendations.</p>
		PGE	<p>Agree</p>
		SCE	<p>SCE: See comment 2</p>
		SDGE/ SCG	<p>SDG&E will defer to SCE’s comments on this topic.</p>
	<p>7. Determine interactive effects that are consistent across all IOUs that consider air-conditioning and space heat type saturations using one of the following methods:</p> <p>7.1. The adjustment mechanism included in the workbook published for the 2010-2012 decision (posted along with this document). Note that this workbook includes adjustments for residential building types only and must be adapted to nonresidential building types.</p> <p>7.2. The interactive effects workbook published by the CPUC with the final 2006-2008 EM&V results (posted along with this document)</p> <p>7.3. Another method agreed to by all IOUs that determines interactive effects based on saturations of air conditioning systems and space heat type.</p>	ED	<p>ED published the document “Lighting Interactive Effects - 26Jan2011.xls” to Basecamp on 1/26/2011 an acceptable alternative to calculating direct and whole building impacts for linear fluorescent measures. The document is available from the following link: ftp://ftp.deeresources.com/pub/WorkpaperReview/10-12Phase1/Lighting%20Interactive%20Effects%20%2026Jan2011.zip</p>
		DRA/ TURN	<p>DRA and TURN agree with the Energy Division’s recommendations.</p>
		PGE	<p>Lighting Interactive Effects factors developed from DEER 2008 v. 2.05 for 09-11 Planning should be used.</p>
		SCE	<p>SCE: As part of the original discussion with ED in May 2010, SCE is comfortable applying the new interactive effects and/or new workbooks for new</p>

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
			<p>measures; however, applying these for existing measures essentially changes the savings to DEER V..3.02, which was not approved for this program cycle as reaffirmed in the December 16, 2010 Decision. For existing values, SCE feels that the existing interactive effects that SCE reversed engineered from DEER 2008.2.05 due to absence of any documentation in 2009 and early 2010, should be used for the duration of the program cycle. If no other changes are made, making the changes for the sole purpose of revising interactive effects is a large administrative burden that will yield small changes in energy savings. It also unfreezes the previously submitted ex ante values provided at the start of program implementation which is contrary to the language of the Decision.</p> <p>SCE: ED agreed that if interactive effects used in the beginning 2010 are within a couple percent of the new DEER v3.02 interactive effects that there is little to gain from retroactively adjust those values and moving forward it is appropriate to use DEER v3.02 interactive effects.</p>
		SDGE/ SCG	Lighting Interactive Effects factors developed from DEER 2008 v. 2.05 for 09-11 Planning should be used., not values from the ED’s workbooks which are not based on DEER v2.05.
	<p>8. Revise peak demand calculations for early retirement so that savings are based on full, above customer average reduction in fixture watts for the RUL and only above code reduction in fixture watts for the period equal to EUL minus RUL. This is consistent with requirements in the Energy Efficiency Policy Manual. For all fixture replacement measures covered by Title 24 Section 146, these baseline fixtures are described in Measure Code Implications, section 3.2.</p>	ED	No change in recommendation. Note, during conference calls held in January of 2011, Energy Division and utilities agreed that applicability of the “dual baseline” should be raised as an “over-arching issue” covering all measures. Energy Division has not changed its recommendation that a “dual baseline” should be properly applied to early retirement lighting measures, the discussion of the dual baseline is now covered in the Case Management Statement.
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	Agree

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
		SCE	SCE: See comment 2.
		SDGE/ SCG	SDG&E will defer to SCE's comments on this topic.
	9. Revise peak demand calculations for ROB applications to reflect applicable code requirements at the time of replacement.	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	SCE: See comment 4.
		SDGE/ SCG	SDG&E will defer to SCE's comments on this topic.
	10. Revise whole building peak demand calculations to consider saturations of air-conditioning systems and space heat type.	ED	ED published the document "Lighting Interactive Effects - 26Jan2011.xls" to Basecamp on 1/26/2011 an acceptable alternative to calculating direct and whole building impacts for linear fluorescent measures. The document is available from the following link: ftp://ftp.deeresources.com/pub/WorkpaperReview/10-12Phase1/Lighting%20Interactive%20Effects%20-%2026Jan2011.zip
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Lighting Interactive Effects factors developed from DEER 2008 v. 2.05 for 09-11 Planning should be used.
		SCE	SCE: See comments for item # 7.
		SDGE/ SCG	Lighting Interactive Effects factors developed from DEER 2008 v. 2.05 for 09-11 Planning should be used., not values from the ED's workbooks which are not based on DEER v2.05.
	11. Revise all early retirement calculations to be divided into two segments: RUL (one-third of the EUL) and EUL minus RUL (two-thirds of EUL).	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
		PGE	This measure is covered in Case Management Statement section 1.D.
		SCE	SCE: Comments addressed in overarching concerns.
		SDGE/ SCG	This measure is covered in Case Management Statement SDG&E and SoCalGas disagree. See response to Part 1: 1.D.
	12. For SDG&E workpapers, revise EUL to use the same basis as PG&E and SCE workpapers.	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	
		SCE	
		SDGE/ SCG	Agree
	13. Develop costs for fixtures, lamps and ballasts that are not included in 2008 DEER that are consistent across all IOUs or provide additional data or analysis that supports variation in costs between IOUs.	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	Agree
		SCE	SCE: SCE agrees that a statewide approach to cost is appropriate however issues involved in the overarching issues will still apply in this situation. When and if this is accomplished it should apply on a going forward basis.
		SDGE/ SCG	Agree
		ED	14. Correct hours of use and coincident demand factors to be based on DEER 2008 values. These are published in the document “Lighting Interactive Effects - 26Jan2011.xls” to Basecamp on 1/26/2011 an acceptable alternative to calculating direct and whole building impacts for linear fluorescent measures. The document is available from

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
			<p>the following link: ftp://ftp.deeresources.com/pub/WorkpaperReview/10-12Phase1/Lighting%20Interactive%20Effects%20-%2026Jan2011.zip</p>
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	Lighting Interactive Effects factors developed from DEER 2008 v. 2.05 for 09-11 Planning should be used.
		SCE	<p>SCE: As part of the original discussion with ED in May 2010, SCE is comfortable applying the new hours and/or new workbooks for new measures; however, applying these for existing measures essentially changes the savings to DEER 2008.3.02, which was not approved for this program cycle as reaffirmed in the December 16, 2010 Decision. For existing values, SCE feels that the existing hours that SCE extracted from building area types from DEER 2008.2.05 due to absence of any full building hours documentation in 2009 and early 2010, should be used for the duration of the program cycle. If no other changes are made, making the changes for the sole purpose of revising hours is a large administrative burden that will yield minimal changes in cost effectiveness. It also unfreezes the previously submitted ex ante values provided at the start of program implementation which is contrary to the language of the Decision.</p>
		SDGE/ SCG	Lighting Interactive Effects factors developed from DEER 2008 v. 2.05 for 09-11 Planning should be used., not values from the ED’s workbooks which are not based on DEER v2.05.
NO	<p>SCE WPSCRELG0017.4 SCE WPSCNRLG0072 SCE WPSCNRLG0075.1 SCE WPSCNRLG0099 PGE PGECOLTG103 PGE PGECOLTG107 PGE PGECOLTG111 PGE PGECOLTG156</p>		<p>Upstream Screw-in CFL Upstream Special Screw-in CFL Plug-in CFL Lamps Downstream Screw-in CFL Downstream CFL Reflector Upstream Screw-in CFL(Res) Upstream Screw-in CFL(NRes) Downstream CFL Companion</p>

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
	Disposition: Approval upon inclusion of the following revisions:	ED	No change in disposition
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	
		SDGE/ SCG	
	1. For SCE downstream measures, revise lamp wattage reductions to be consistent with 2008 DEER update.	ED	After further review of workpaper and program design with SCE, Energy Division has retracted this recommendation for a specific direct install case. Energy Division agrees that for direct-install CFL measures, where the installation contractor is required by contract to claim savings based on the actual lamp removed and the actual replacement lamp installed, assumptions for wattage reduction will use the actual site specific wattage reduction and not be restricted to the DEER lamp wattage reduction ratio assumptions. However, DEER hours-of-use assumptions will be used unless the activity is changed to be defined as a custom program and subject to the custom project review process.
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	
		SDGE/ SCG	
	2. Revise operating hours for multi-family common areas based on the 2008 DEER values for hotel or motel corridor.	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	Agree
		SCE	SCE: Similar to using the new interactive effects SCE can use the Effective Full Load Hours (EFLHs) from the DEER v3.02 workbooks and incorporate

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
			the changes at that time keeping in mind all concerns brought up in the overarching issues.
		SDGE/ SCG	SDG&E will defer to SCE’s comments on this topic.
	3. Use gross savings adjustments based on 2004-2005 or 2006-2008 evaluations. The ED/Energy Division has prepared a table that summarizes gross savings adjustments by measure group, IOU and evaluation cycle and uploaded it with this review.	ED	No change in recommendation. Note, during conference calls held in January of 2011, Energy Division and utilities agreed that installation rates should be raised as an “over-arching issue” covering all measures. Energy Division has not changed its recommendation that installation rates should be properly applied to lighting measures, the discussion of installation rates is now covered in the Case Management Statement.
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	Agree
		SCE	SCE: Comments addressed in overarching concerns.
		SDGE/ SCG	SDG&E will defer to SCE’s comments on this topic.
	4. Revise residential/nonresidential based on the 2006-2008 Upstream Lighting Program (ULP) evaluation or to 95 percent vs. 5 percent based on decision D.09-09-047 (i.e., OP15g).	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	Agree
		SCE	SCE: Prior to the 06-08 impact studies, the 95/5 split is an arbitrary value selected by the Energy Division while the 90/10 split was based on a bounce back card survey detailed in the SCE work paper. SCE prefers to maintain its 90/10 split.
		SDGE/ SCG	SDG&E will defer to SCE’s comments on this topic.
	5. Determine interactive effects that are consistent across all IOUs that consider air-conditioning and space heat type saturations using one of the following methods: 5.1. The adjustment mechanism included in	ED	ED published the document “Lighting Interactive Effects - 26Jan2011.xls” to Basecamp on 1/26/2011 an acceptable alternative to calculating direct and whole building impacts for CFL measures. The file is available from the

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
	<p>the workbook published for the 2010-2012 decision (posted along with this document). Note that this workbook includes adjustments for residential building types only and must be adapted to nonresidential building types.</p> <p>5.2. The interactive effects workbook published by the CPUC with the final 2006-2008 EM&V results (posted along with this document)</p> <p>5.3. Another method agreed to by all IOUs that determines interactive effects based on saturations of air conditioning systems and space heat type.</p>		<p>following link: ftp://ftp.deeresources.com/pub/WorkpaperReview/10-12Phase1/Lighting%20Interactive%20Effects%20-%2026Jan2011.zip</p> <p>Also, Energy Division revised the Residential Impacts workbook to fix errors identified by utility reviewers. The methods contained in this workbook are also acceptable for calculating CFL direct and whole building impacts. The file is available from the following link: ftp://ftp.deeresources.com/pub/WorkpaperReview/10-12Phase1/DEER2010-2012ResidentialImpacts%20v1_4.zip</p>
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	Lighting Interactive Effects factors developed from DEER 2008 v. 2.05 for 09-11 Planning should be used.
		SCE	<p>SCE: As part of the original discussion with ED in May 2010, SCE is comfortable applying the new interactive effects and/or new workbooks for new measures; however, applying these for existing measures essentially changes the savings to DEER 3.02, which was not approved for this program cycle as reaffirmed in the December 16, 2010 Decision. For existing values, SCE feels that the existing interactive effects that SCE reversed engineered from DEER 2008.2.05 due to absence of any documentation in 2009 and early 2010, should be used for the duration of the program cycle. If no other changes are made, making the changes for the sole purpose of revising interactive effects is a large administrative burden that will yield small changes in energy savings. It also unfreezes the previously submitted ex ante values provided at the start of program implementation which is contrary to the language of the Decision.</p>
		SDGE/	Lighting Interactive Effects factors developed

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
		SCG	from DEER 2008 v. 2.05 for 09-11 Planning should be used., not values from the ED’s workbooks which are not based on DEER v2.05.
	6. Revise whole building peak demand calculations to consider saturations of air-conditioning systems and space heat type. (Refer to recommendation 5, above for calculation method alternatives.)	ED	ED published the document “Lighting Interactive Effects - 26Jan2011.xls” to Basecamp on 1/26/2011 an acceptable alternative to calculating direct and whole building impacts for CFL measures. The document is available from the following link: ftp://ftp.deeresources.com/pub/WorkpaperReview/10-12Phase1/Lighting%20Interactive%20Effects%20-%2026Jan2011.zip
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	Lighting Interactive Effects factors developed from DEER 2008 v. 2.05 for 09-11 Planning should be used.
		SCE	SCE: See comments for item #5
		SDGE/ SCG	Lighting Interactive Effects factors developed from DEER 2008 v. 2.05 for 09-11 Planning should be used., not values from the ED’s workbooks which are not based on DEER v2.05.
		ED	7. Correct hours of use and coincident demand factors to be based on DEER 2008 values. These are published in the document “Lighting Interactive Effects - 26Jan2011.xls” to Basecamp on 1/26/2011 an acceptable alternative to calculating direct and whole building impacts for linear fluorescent measures. The document is available from the following link: ftp://ftp.deeresources.com/pub/WorkpaperReview/10-12Phase1/Lighting%20Interactive%20Effects%20-%2026Jan2011.zip
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	Lighting Interactive Effects factors developed from DEER 2008 v. 2.05 for 09-11 Planning and hours of operation provided by Paul Reeves

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
			ED/DMQC team on 11-19-2008 should be used.
		SCE	SCE: As part of the original discussion with ED in May 2010, SCE is comfortable applying the new hours and/or new workbooks for new measures; however, applying these for existing measures essentially changes the savings to DEER 2008.3.02, which was not approved for this program cycle as reaffirmed in the December 16, 2010 Decision. For existing values, SCE feels that the existing hours that SCE extracted from building area types from DEER 2008.2.05 due to absence of any full building hours documentation in 2009 and early 2010, should be used for the duration of the program cycle. If no other changes are made, making the changes for the sole purpose of revising hours is a large administrative burden that will yield minimal changes in cost effectiveness. It also unfreezes the previously submitted ex ante values provided at the start of program implementation which is contrary to the language of the Decision.
		SDGE/SCG	Lighting Interactive Effects factors developed from DEER 2008 v. 2.05 for 09-11 Planning should be used., not values from the ED's workbooks which are not based on DEER v2.05.and hours of operation provided by Paul Reeves ED/DMQC team on 11-19-2008 should be used.
NO	SCE WPSCREAP0007.3	Recycling of Appliances Preventing Continued Use	
	Disposition: Approval upon inclusion of the following revisions:	ED	No change in disposition
		DRA/TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	
		SDGE/SCG	
	1. (See Section 3.3.3) Include in the measure definition the effects of interceding in the market for used appliances and how that changes available choices to customer who acquire used and new refrigerators. This will	ED	No change in recommendation. Energy Division believes that gross saving must be established based upon the difference between the recycled unit energy use, if left on the grid rather than being recycled, and any unit that is placed into

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
	<p>cause the measure case gross savings to be a non-zero value. (The current workpaper measure definition has measure case as zero energy use, therefore making the unit energy savings (UES) equal to the unit energy consumption (UEC).)</p>		<p>service in place of the recycled unit. Energy Division believes that in some situations no unit is placed into service in place of the recycled unit and thus the recycled unit UEC equals the savings, UES. The utilities believe the only probable case that should be considered is the case where UEC and UES are equal and that all other cases should not be considered. However, Energy Division believes that in many instances another unit is placed into service in place of the recycled unit thus causing a reduction in the savings from preventing the recycled unit from staying in service. The overall effect of the recommended Energy Division gross savings adjustment is approximately a 40% reduction in savings.</p>
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	
		SCE	<p>SCE: As stated in the commentary to the left, there is fundamental disagreement between ED and SCE on how this measure is defined. There is also a fundamental disagreement on how this measure is defined between ED and the evaluators from recent impact studies, in which the ex post UES was equal to the UEC.</p> <p>The disagreement on the definition of this measure, which has lasted for a number of years, illustrates the need for a dispute resolution process as indicated in the custom process comments section.</p>
		SDGE/ SCG	SDG&E disagrees. See response to Part 1: 1.A.(1). These measures are listed the DEER MISer and should be used explicitly.
	<p>2. (See Section 3.3.3) Revise UES calculations to be based upon in-situ energy use by climate zone, rather than statewide or utility-wide UES values reported in evaluations, using one of the following methods:.</p> <p>2.1. Apply in-situ multipliers from the workbook, “Appliance_InSitu_Weighting-</p>	ED	<p>No change in recommendation. Regarding recommendation 2.2, Energy Division revised the Residential Impacts workbook to fix errors identified by utility reviewers. The methods contained in this workbook are also acceptable for calculating ARP direct and whole building impacts. The file is available from the following</p>

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
	<p>100520a.xls” (posted along with this document)</p> <p>2.2. Use direct enduse UES values from the most recent residential impacts workbook, “DEER2010-2012ResidentialImpacts v1_3.xls” (posted along with this document)</p> <p>2.3. Another method agreed to by all IOUs that determines interactive effects based on saturations of air conditioning systems and space heat type.</p>		<p>link: ftp://ftp.deeresources.com/pub/WorkpaperReview/10-12Phase1/DEER2010-2012ResidentialImpacts%20v1_4.zip</p>
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	
		SCE	<p>SCE: SCE followed the direction from the Decision that indicated that IOUs should utilize the study data to update this one specific measure. SCE feels that other adjustments were not a part of this Decision and should not be applied.</p> <p>SCE also agreed mid 2010 that while freezers were not addressed in the 0608 impact study that the freezer values could be reduced by the same ratio that the refrigerator values were reduced to address any unanalyzed reduction in freezer savings.</p>
		SDGE/ SCG	SDG&E disagrees. See response to Part 1: 1.A.(1). These measures are listed the DEER MISer and should be used explicitly. The ED’s workbooks are not based on DEER v2.05 and apply weighting factors that have not been vetted.
	<p>3. (See Section 3.3.4) Determine interactive effects that are consistent across all IOUs that consider air-conditioning and space heat type saturations using one of the following methods:</p> <p>3.1. The adjustment mechanism included in the workbook published for the 2010-2012 decision (posted along with this document). Note that this workbook includes adjustments for residential</p>	ED	<p>No change in recommendation. Regarding recommendation 3.2, Energy Division revised the Residential Impacts workbook to fix errors identified by utility reviewers. The methods contained in this workbook are also acceptable for calculating ARP direct and whole building impacts. The file is available from the following link: ftp://ftp.deeresources.com/pub/WorkpaperReview/10-12Phase1/DEER2010-</p>

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
	<p>building types only and must be adapted to nonresidential building types.</p> <p>3.2. The interactive effects workbook published by the CPUC with the final 2006-2008 EM&V results (posted along with this document)</p> <p>3.3. Another method agreed to by all IOUs that determines interactive effects based on saturations of air conditioning systems and space heat type.</p>		2012ResidentialImpacts%20v1_4.zip
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	
		SCE	SCE: Many refrigerators are located in unconditioned spaces such as garages, even though the house is conditioned While study data exists to indicate what percentage of homes have air conditioning and are included in the interactive effects workbooks, it is not clear that the interactive effects workbooks take the difference of the unconditioned space into account. Also see comments in section 2.
		SDGE/ SCG	SDG&E disagrees. See response to Part 1: 1.A.(1). These measures are listed the DEER MISer and should be used explicitly. The ED’s workbooks are not based on DEER v2.05 and apply weighting factors that have not been vetted.
	<p>4. (See Section 3.3.6) Revise whole building peak demand calculations to consider in-situ performance including HVAC interactive effects, climate zone variability and saturations of air-conditioning systems and space heat type. (Refer to recommendations 2 and 3, above for calculation method alternatives.)</p>	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division’s recommendations.
		PGE	
		SCE	SCE: See comments in sections 2 and 3.
		SDGE/ SCG	SDG&E disagrees. See response to Part 1: 1.A.(1). These measures are listed the DEER MISer and

Con-sensus	Original Energy Division Position	Party	Final Party Position as of 2/10/2011
			should be used explicitly. The ED's workbooks are not based on DEER v2.05 and apply weighting factors that have not been vetted.
	5. (See Section 3.4) Revise EUL to the adopted DEER 2.05 RUL of 5 and 4 years respectively for recycling of refrigerators and freezers.	ED	No change in recommendation
		DRA/ TURN	DRA and TURN agree with the Energy Division's recommendations.
		PGE	
		SCE	SCE: SCE can adopt the revised EUL/RUL value.
		SDGE/ SCG	SDG&E disagrees. See response to Part 1: 1.A.(1). These measures are listed the DEER MISer and should be used explicitly. The ED's workbooks are not based on DEER v2.05 and apply weighting factors that have not been vetted.

Attachment II

Energy Division Process for Review of Investor Owned Utility Custom Measure Ex Ante Values

Introduction:

This document details how the California Public Utilities Commission (Commission) will review the ex ante energy savings claims of Investor-Owned Utilities (IOUs) implementing custom measures or projects in the 2010-2012 Energy Efficiency program cycle.

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 existing and proposed equipment, and an agreement is made with the customer to pay the financial incentive upon the completion and verification of the installation. The efforts are by definition unique, each with their own characteristics. Parameters that determine estimated energy savings from a custom measure or project are more variable and less predictable without a site-specific analysis than the more common deemed measures for which savings parameters can be predetermined. 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.

An effective custom measure and project review process balances the needs of program participants who are investors and beneficiaries, the IOUs who administer the programs, and ratepayers who provide incentive funding contingent on adequate oversight of their investment. The process identified here aims to strike that balance. This review process is intended to be applied consistently throughout the program cycle; however, clarification may be made at the discretion of the Assigned Commissioner or Administrative Law Judge.

Attachment A includes a graphical schematic depicting the process outlined in this document. In addition, the principles guiding this process and supporting resources are defined herein.

Guiding Principles:

1. Energy savings are the paramount priority of custom measures and projects.
2. The Customer Measure and Project Review Process is intended to allow Energy Division (ED) to review customer projects in parallel with the IOUs, thereby allowing for maximum customer convenience and program oversight.
3. When possible and practical custom measure and project calculation methodologies shall be based upon Database Energy Efficiency Resources (DEER) methodologies as frozen for 2008 DEER version 2008.2.05 or upon methodologies documented within the most current Energy Division reviewed and approved IOU non-DEER deemed workpapers.

4. IOUs are responsible for effective record keeping such that calculation tools, documentation of how those tools were applied to custom measures and projects, and documentation of custom project ex ante savings calculations are submitted electronically to the Energy Division.

Supporting Resources:

IOUs are directed to maintain the following supporting resources to enable timely, effective review of custom measures and projects by the Energy Division and their consultants.

Calculation Tool⁹ Archive (CTA):

Each IOU shall maintain an archive of all tools used in calculating ex ante values such that they remain accessible to the Energy Division throughout the program cycle.¹⁰ The archive shall contain all versions of all tools used in the development of ex ante values for custom measures or projects claimed during the current program cycle.

The tool archive shall include:

- a. All manuals and user instructions, where applicable. If the calculation tool is simply a spreadsheet, then all cell formulas and documentation shall be readily accessible from the tool.
- b. A list of technologies, measures or projects for which custom calculations are performed using the tool.

The Calculation Tool Archive shall be updated by the IOUs on an ongoing basis during the 2010-2012 program cycle as tools are revised.

Custom Measure and Project Archive (CMPA):

Each IOU shall keep a complete up-to-date electronic archive of all custom measures and projects. Each project should be added to the Archive as soon as possible after either identified in the pre-application stage or the date of the customer's application to the IOU, whichever is earlier. Each project should be assigned a unique identifier that shall not be re-used or re-assigned to other projects.

The IOUs shall provide a summary list of all projects, in pre-application stage and application stage, in their CMPA. Energy Division will provide the utilities with the format of the summary list. The summary list shall identify each project using its unique identifier and provide a link to the detailed files of each project. The summary list shall also reflect the date of the most recent entry into each project. The summary list shall include for each project the following (Energy Division and the IOUs will work out details of the meaning and specifics of each item below):

- The customer type
- The project type

⁹ Tools, in the context of this document, means software, spreadsheets, "hand" calculation methods with procedure manuals, or any automated methods used for estimating ex ante values for custom measures or projects.

¹⁰ The Utilities must arrange access to any proprietary tools and software used in the development of ex ante values so that Energy Division can perform the review described in this document.

- Industry Type
- Status (pre-application, application received, application in review, agreement signed, completed, paid, claimed, etc.)
- For pre-application stage projects, a best guess at probability the project will become an application (unknown, very low, low, medium, high, very high; or a percentage probability 0-100% for none to definite) with this status updated as new information becomes available)
- Project location (address)
- Utility contact person (Primary IOU review contact and, if appropriate, primary IOU customer interface contact such as marketing representative)
- Customer segment
- Equipment or process involved
- General description of the proposed project and its energy saving premise
- Estimated ex ante energy savings
- the target date when a customer agreement is expected to be issued for customer signature (Agreement Target Date)

The summary list shall be updated at least on the first and third Monday of every month for the duration of the 2010-2012 program cycle, however, the IOU shall provide the updated list more often as necessary to provide Energy Division with information on high priority or fast-tracked applications so as to allow Energy Division to perform reviews of such projects at its sole discretion. The IOUs may provide the summary list by program instead of a consolidated list, should they so desire.

For projects that, within a regular bi-monthly CMPA summary list submission, are projects for which applications have been newly received or projects that have moved from the pre-application state into the application state Energy Division will inform the IOUs of projects which have been selected for review. Such notification shall be before or by the next regularly scheduled CMPA summary list submission. Thus Energy Division will have a minimum of approximately two weeks to decide if a new application measure or project will be subject to review and included into its review "sample." An IOU may request that a project review decision be expedited for high priority or fast tracked projects and Energy Division will make its best effort to accommodate such requests. If Energy Division chooses not to review a project an IOU may request such a project be included in the Energy Division review sample. Energy Division shall consider such decision change requests but will limit such changes based upon available resources to ensure adequate coverage of the full cycle portfolio of measures and projects in its review sample. An IOU request for Energy Division project review may be accepted, denied or deferred into the Early Opinion process at Energy Division's discretion, however, Energy Division shall inform the IOU of its decision as quickly as possible.

For each project sampled for a review, the specific types of documents to be maintained in the CMPA and parameters required to be in the supporting documentation may vary based on the type of project. *Examples* of the expected data elements are listed below.

- Documentation to support Baseline assignment (Code or Standard requirement, Early Retirement, Retrofit, Replace On Burnout, industry standard practice, CPUC policy, etc)¹¹
- Existing system controls and operating status description
- Existing system output capacities – current output and maximum/design capacity
- Pre-installation inspection report
- Post-installation inspection report
- Proposed modifications with schematic as applicable
- Preliminary savings calculations and supporting data with documentation to ensure replicability
- Manufacturer’s cut sheets when used to estimate ex ante savings or when needed to ensure replicability
- Fuel switching considerations and any required analysis per CPUC policy regarding fuel switching projects (see Energy Efficiency Policy Manual)
- Other fuel savings and/or load increases resulting from the project
- Heating, Ventilation, and Air Conditioning (HVAC) interactive effects values and methods used to develop those values, when measures cause a change in HVAC system loads
- Interactions between multiple measures that act to increase or decrease savings relative to a measure stand-alone savings estimate
- Pre/post production output data when used in savings calculations and the source of such records
- Billing history - one-year pre installation, with interval data required when available; when ex ante estimated values rely upon a per-unit-production changes based on multi-year production data, corresponding billing histories are required
- IOU or implementer program manual (a single archive of these documents should be referenced rather than including the documents in each project archive)
- M&V plans, reports and raw data archives, where applicable
- EUL/RUL value, analysis or source

Projects Energy Division selects for review will have their complete documentation from the IOU CMPA placed into an Energy Division Review CMPA which, with the Utility Custom Project Summary List, will be housed on an internet-accessible website that meets reasonable security and legal requirements. The Energy Division will be responsible to establishing and maintaining that website.

Custom Measure and Project Review Process:

There are two categories of Energy Division’s Custom Measure and Project Review Process: general and claims. All reviews are at the Energy Division’s discretion; however, if an IOUs ex ante values are not reviewed by the Energy Division, the IOU shall rely on those values in making energy savings claims before the Commission after adjusting those values using the gross realization rates as shown in Table 1 below.

¹¹ The baseline parameters used are of primary importance in estimating project savings. Appendix I of this document provides the guidelines by which Energy Division will review baseline parameter selection.

IOU	kWh	kW	Therm
PG&E	0.6	0.6	0.7
SCE	0.75	0.75	
SDG&E	0.7	0.7	0.7
SCG			0.7

The **General Review** will include Energy Division's oversight of the CTA and CMPA. Energy Division, at its discretion, will review tools, measures, and projects, as well as inputs to the tools for selected projects. Energy Division may choose to provide the IOUs with input on one or more of the tools, measures, or projects. The tools reviews will be done on a prospective basis. IOUs shall adjust their subsequent use of the tools to conform to Energy Division input.

The more specific **general project reviews** include a close examination of a selected subset of custom projects.

For all custom applications with ex ante values that are not reviewed by the Energy Division, the IOU shall apply an adjustment to the gross savings estimate values using the Default Custom Measure Gross Realization Rates (Table 1) above when making energy savings claims before the Commission.

Energy Division will conduct general project reviews at three stages of the IOU custom project process: concurrent and collaborative pre-installation review, post-installation review, and claim review.

Pre-Installation Review

The objective of the Pre-Installation Review is for Energy Division to perform a parallel review, with the IOUs, and then for Energy Division to provide to the IOUs input on the estimated custom measure or project ex ante savings. The Pre-Installation Review allows Energy Division to supplement the resources and information available through the CTA and CMPA in making its recommendations.

The IOUs shall provide the Energy Division the opportunity to participate in any site visits, pre-installation inspections, customer interviews, pre-installation M&V, or spot measurements that may occur during this and subsequent phases. If such events are scheduled by IOUs more than five days in advance, the IOU shall provide notification to the Energy Division within one business day of scheduling the event; the Energy Division should be immediately notified for events scheduled less than five days away. The Energy Division will notify the IOUs prior to the event if they plan to send a representative.

During the Pre-Installation Review, the Energy Division will coordinate any Measurement & Verification (M&V) activities on these custom projects with the IOU. The Energy Division may choose to use the Utilities' or its own contractors, at Energy Division expense, to perform site inspections or pre-installation M&V.

The Energy Division will provide the IOUs with the results of its Pre-Installation Review, including recommended ex ante values and documentation to support its recommendation, at least ten days before the Agreement Target Date identified by the IOU in the CMPA summary list. However, the IOU shall provide Energy Division with all CMPA documents in a timely manner such that Energy Division has a reasonable ability to meet this timeline. Energy Division and the IOUs agree to work together to allow timely review of expedited and high priority project. If the Energy Division affirms the IOU's estimated ex ante values or suggests values which would result in greater or lower savings than the IOU's estimated ex ante values, then the IOU shall rely on those values when entering into estimated incentive agreements for the project and shall also rely on those values for subsequent energy savings claims before the Commission if no further post-installation adjustments are identified by either the IOUs or Energy Division, as described below.

Post-Installation Review

The objective of the Post-Installation Review is to provide the Energy Division with continued opportunity to review and provide input on the accuracy of ex ante values assumed by the IOU prior to the utility making its final incentive payment to its customer. The IOU shall allow the Energy Division access to site visits, post-installation inspections, customer interviews, post-installation M&V, or spot measurements. IOU and Energy Division notifications for these events should follow the guidelines described above for Pre-Installation Review. The IOUs shall continue maintenance of the CTA and CMPA in accordance with the direction provided above. If the post-installation M&V inspection results in an IOU adjustment of savings for projects that were reviewed by Energy Division during the pre-installation stage, Energy Division shall have the option to review and approve such adjustments. If, as a result of the post-installation inspection, the Energy Division affirms the IOU's estimated ex ante values or suggests values which would result in greater or lower savings than the IOU's estimated ex ante values, then the IOU shall rely on those values for making energy savings claims before the Commission. Otherwise, no deliverables are due to either IOU or Energy Division.

IOU Claim Review

The IOU Claim Review allows the Energy Division to conduct a review of energy savings for custom projects included into the IOU Quarterly Claim¹² to ensure that:

1. appropriate default realization rates were applied to ex ante gross savings estimates for projects that were not reviewed by the Energy Division;
2. recommendations made by Energy Division for reviewed projects were accurately reflected in the claim.

The IOU Claim Review shall commence upon the IOU submittal of a quarterly reporting period claim containing those projects, and end at the later of ninety-days after that submission or the subsequent IOU quarterly submission. Energy Division shall notify the IOU of any errors found in their claim review and the IOU shall comply and revise the claims.

¹² As a component their energy efficiency portfolio reporting requirements each IOU will submit a quarterly filing on EEGA which includes details of all measure ex ante savings values for all individual projects and measures which have been installed prior to that claim.

Custom projects that were not reviewed by the Energy Division prior to appearing in a Quarterly claim may be further reviewed for the purpose of gaining new information and prospective improvements to ex ante estimates and planning, but IOU's will not be held accountable for energy savings adjustments for such reviews for any projects covered by then existing customer agreements or already approved customer applications.

Resolution of Disagreements:

Should Energy Division and a Utility have a technical disagreement on a project's ex ante values, Energy Division and the Utility shall meet to discuss and resolve the differences. If the Energy Division recommended ex ante value is within a small percentage of the utility estimated ex ante value, Energy Division and the utility shall split the difference of the two values. However, this does not apply if the disagreement is where Energy Division determines that savings will not accrue at all or when a CPUC policy has not been followed. Should the value in disagreement be outside of the agreed upon allowable percentage difference, an option for resolution is to defer the freezing of the value until:

1. additional field monitoring is conducted; or
2. the results of a site measurement and verification study are available; or
3. another mutually agreed upon action or activity is completed.

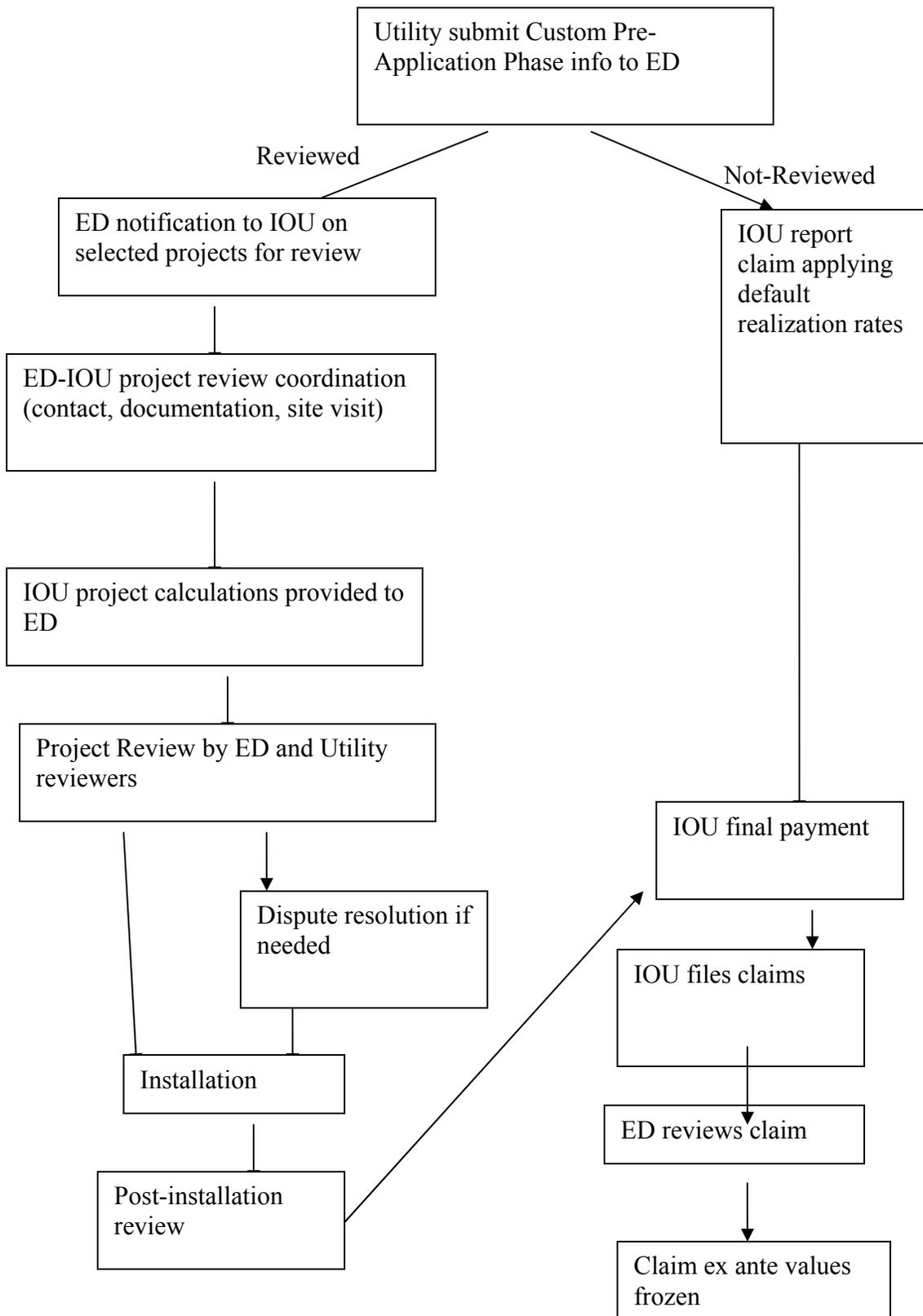
If the above efforts do not result in a resolution, Energy Division and the Utility will have a meeting with Energy Division management to discuss a resolution. If that still does not result in a resolution, the utility may make request for intervention from the assigned ALJ.

To facilitate future communication:

Energy Division and the IOUs shall establish a working group to allow an ongoing dialog on the custom measure and project review process. This working group will provide a forum for all parties to exchange information on their current activities and future plan and to discuss and resolve problems and issues with the process outlined in this document. The working group will also provide a forum for Energy Division to inform the IOUs on issues arising in its custom measure ex ante estimation review process. These issues may include items such as baseline definitions, net versus gross savings definitions and other items as any party deems necessary.

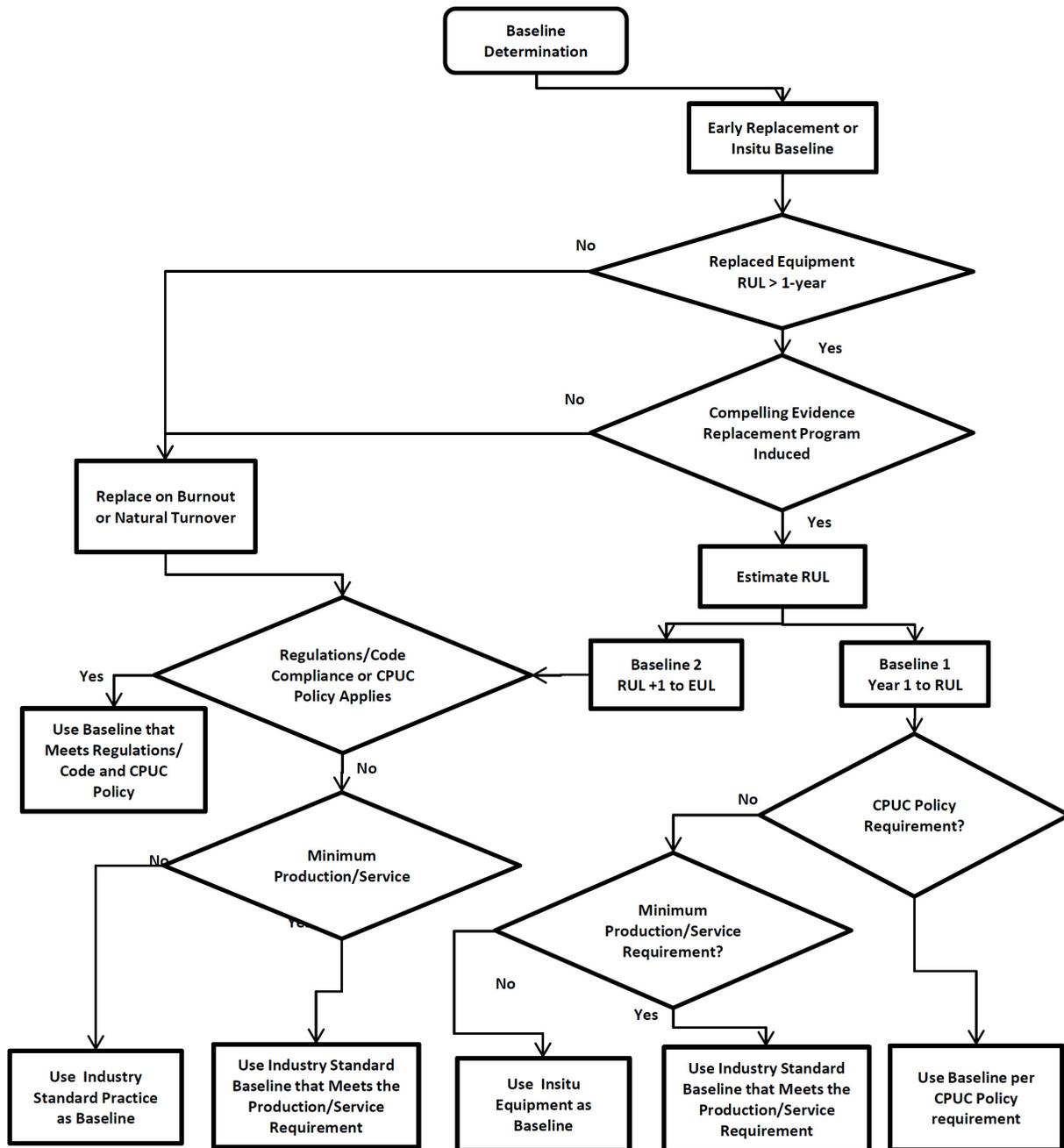
At any time during their development of ex ante estimates for a specific custom measure or project the Utilities may submit to Energy Division a request for an early Energy Division review or opinion on a specific issue. This process has been established by Energy Division issuance of the "Custom Measure Early Opinion Process" document posted as "Custom Measure Early Energy Division Opinion Process v2.docx" on basecamp 9/30/2010 in the "Early Opinion Shared" project area. Energy Division shall respond to that request in as expeditious a manner as possible to provide the IOUs with guidance and to allow the Utilities to complete their ex ante estimates in a timely manner. However, this type of early guidance shall not limit or constrain any later Energy Division review of ex ante claims submitted by the Utilities.

Attachment A



Appendix I

Energy Division Methodology for Determination of Baseline for Gross Savings Estimate



Review of Baseline for Gross Savings Estimates

The estimation of ex ante saving values requires the selection of a baseline performance for every project. The baseline selection and specific baseline parameters are of primary importance to establishing the ex ante savings estimates. The baseline parameters are selected by establishing the project category from the possible alternatives including New Construction or

Major Renovations, program induced Early Retirement, Standard Retrofit or Normal/Natural Replacement/Turnover, and Replace On Burnout. These alternative categories result in the utilization of alternative baseline parameters set by Code or Standard requirements, industry standard practice, CPUC policy, or other considerations. In the review of IOU projects Energy Division will follow the guidelines as presented here in establishing the baseline for all gross savings estimates.

Notes to above flowchart

Pre-existing equipment¹³ baselines are only used in cases where there is clear evidence the program has induced the replacement rather than merely caused an increase in efficiency in a replacement that would have occurred in the absence of the program.

Pre-existing equipment baselines are only used for the portion of the remaining useful life (RUL) of the pre-existing equipment that was eliminated due to the program. These early or accelerated retirement cases may require the use of a “dual baseline” analysis that utilizes the pre-existing equipment baseline during an initial RUL period and a code requirement/industry standard practice baseline for the balance of the EUL of the new equipment.

- A pre-existing equipment baseline is used as the gross baseline only when there is compelling evidence that the pre-existing equipment has a remaining useful life and that the program activity induced or accelerated the equipment replacement. This baseline can only apply for the RUL of the pre-existing equipment.
- A code requirements or industry standard practice baseline is used for replace-on-burnout, natural turnover and new construction (including major rehabilitation projects) situations. This baseline applies for the entire EUL as well as the RUL+1 through EUL period of program induced early retirement of pre-existing equipment cases (the second period of the dual baseline case.)

CPUC policy rules and IOU program eligibility rules govern the baseline

A careful review of utility and third-party program and CPUC policy rules must be undertaken and adjustments applied to gross savings in some cases. Adjustments are indicated for gross when there was clear evidence from program or policy rules that savings claims could not be made nor rebates paid for the baseline in question. Program rules come into play with respect to gross baseline requirements, for example, when those rules specify:

- a minimum required efficiency level;
- a minimum percentage improvement above applicable minimum code requirement;
- a minimum RUL of the existing equipment;
- the type or range of retrofits that are allowed be included in a program.

CPUC policy may apply to establishing gross baseline when Policy Manual Rules, a CPUC Decision or a decision maker Ruling includes special requirements or consideration for the situation or technologies of a measure. For example, projects or sites that involve fuel

¹³ Here the term equipment is intended to cover all technology cases including envelope components, HVAC components and process equipment and may also include configuration and controls options.

switching, co-generation or renewable technologies are usually subject to special baseline considerations (or other considerations) that must be considered in the savings estimates.

Minimum production level or service requirements govern the baseline

In some situations, a measure for which savings might be claimed could be determined to be the only acceptable equipment for an application. In such cases, the baseline must be set at the minimum needed to meet the requirements, which may be the same as the equipment planned for installation. An example would be an industrial process where only a variable-speed drive pumping system could meet the production requirements. For situations where the baseline conditions or requirements were changed (such as production level changes), the baseline equipment is defined as the minimum equipment needed to meet the revised conditions. If the pre-existing equipment is not capable of reliably meeting the new requirement (such as production change) for its remaining life, then a new equipment baseline must be established utilizing either minimum code requirement or industry standard practice equipment, whichever is applicable.

Industry standard practice baselines are established to reflect typical actions absent the program

Industry standard practice baselines establish typically adopted industry-specific efficiency levels that would be expected to be utilized absent the program. Standard practice determination must be supported by recent studies or market research that reflects current market activity. Typically market studies should be less than five years old; however this guideline is dependent on the rate of change in the market of interest relative to the equipment in question. For example, the lighting markets may change significantly in the next two years while larger process equipment markets might change more slowly. Regulatory changes might cause very rapid market practice shifts and must also be considered. For example, forthcoming changes in Federal Standards relating to linear fluorescent ballasts will result in rapid market shifts of equipment use.

Attachment II Alternate 1
PG&E Position on Energy Division Process for Review of
Investor Owned Utility Custom Measure Ex Ante Values

This section contains the PG&E position on the Energy Division process contained in Attachment II.

CMPA/CTA Requirements

Issue: The requirements listed out in the CMPA/CTA section of the custom measure process are

<i>Party</i>	<i>Party Position</i>	<i>Rationale</i>
PG&E	PG&E believes the requirements for the CTA are overly aggressive and should be lowered to not include individual project spreadsheets as those are kept in the CMPA.	The proposed requirements of the CTA for individual project spreadsheets to be stored there is excessive. That information is stored in the CMPA, which ED has access to and can view project details at any time. Additionally, the purpose of the CTA is to store generic tools and processes, not specific items. Storing project specific spreadsheets in the CTA not only goes against the purpose of the CTA, but also creates duplicative

overly burdensome for utilities and in some cases.

	<p>PG&E agrees to updating the CMPA 2 times a month and expediting project information to ED to allow for quick review timing.</p>	<p>administrative costs. This process was discussed at the 1/13 meeting and agreed to but has not showed up in the text. ED had agreed to this in previous meetings as well, although the change was not reflected in the document.</p> <p>To keep our tight review deadlines and pro-actively involve ED PG&E agrees with these additional ED requests.</p>
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Review Process Timing

Issue: The timing for review of a project. What should it be?

<i>Party</i>	<i>Party Position</i>	<i>Rationale</i>
PG&E	PG&E would like to have the review process timeline laid out in a clear manner such that we can reach our aggressive 10 working day (2 week total) review timeframe. Also, a diagram with timing would help all parties understand this more clearly.	<p>Currently the review timeframe allots 2 weeks for ED to choose if they want to review (top of page 5) then ED promises to give us the review 10 days prior to the target agreement date (page 8, paragraph 4) granted there is “a reasonable ability to meet this timeline.” Given that current structure a policy review by ED could take 10 days to choose if they want to review, the time needed to review the project and then them providing review to us 10 days prior to the target agreement date. With that, you have a 20 day review timeframe for projects plus the time it takes to review projects. Also, this process does not include any additional time that will be necessary to discuss ED and IOU calculation differences, if they exist.</p> <p>The process needs to be streamlined such that it can be completed within 2 weeks – in parallel with Utility review – and if not completed within that timeframe Utility proposed values will be locked in as ex ante values for that project.</p> <p>This process is in-line with ED’s goals and aspirations and was widely discussed in our meetings with ED.</p>

Disagreement Resolution

Issue: What should the disagreement resolution process be and what should it involve?

<i>Party</i>	<i>Party Position</i>	<i>Rationale</i>
PG&E	<p>PG&E believes that an alternative to the proposed process would be that professional differences of opinion between two respected parties could be worked out by inviting a third party. That is, party 1 being the utility and their professional opinions and party 2 being ED and their professional opinions. If those opinions differ, a third party to decide differences could be a pre-approved engineering firm in the respective field (e.g. lighting, HVAC, etc.).</p> <p>PG&E would like the option to bring issues to ED management review prior to field studies and data being collected.</p>	<p>PG&E believes that although ED is an independent body, it is still a party with a professional opinion. PG&E also believes that both ED and the Utilities hire capable and responsible people. Additionally, PG&E believes that anytime two or more parties are involved there may be differing, yet credible, opinions. For this reason PG&E believes involving a third arbitrating party (party 1 – IOU, party 2 – ED, party 3 – arbitrator) to our decision process would help achieve reasonable and agreed upon conclusions where there is a difference of opinion. This is both a professionally accepted and practiced method as well as a way to involve additional industry knowledge and expertise to arrive at an appropriate, balanced and informed opinion.</p> <p>Field studies and collecting additional data can take months if not years and time delays like this can cancel entire EE projects as well as turn away future potential customers. For the purpose of quick resolution on some issues PG&E believes bringing the issue to upper ED mgmt. may expedite the process before continuing with potentially expensive and delaying studies. This is only if a professional third party arbitration option (above) is rejected.</p>

Timing for implementation of changes (retro-active or prospective and implementation timing?)

Issue: What should the timing be around changes to the custom measure process?

<i>Party</i>	<i>Party Position</i>	<i>Rationale</i>
PG&E	PG&E believes that any changes that are agreed to be made on a prospective basis. Additionally, appropriate timing to implement changes will be necessary as some of the proposed changes have large process and infrastructure change requirements.	<p>This new process is being presented now, over a year after the programs began. Also, this new process is in disagreement with the former agreements the IOU's and ED informally shared prior to Natalie Walsh retiring from ED and is in opposition to the methodology and numbers approved in the utilities program applications – which ED reviewed and approved as well (see letter dated October 21, 2010 from Julie Fitch to Jane Yura)</p> <p>In addition to the decision language, PG&E has put substantial labor and effort into instituting its approved portfolio and any changes that are made will require substantial administrative costs. These costs will be compounded if changes are to be applied retro-actively, as we will have further system and infrastructure process changes to implement. We believe this to be ineffective use of ratepayer funds given decision orders have been followed.</p> <p>PG&E believes that in agreeing to any substantial changes on a prospective basis is a strong signal for our desire to achieve compromise and process improvements and is more than fair given the previous agreements held with ED and the fact that these changes have not been communicated to us until now, over a year into the cycle.</p>

Attachment II Alternate 2

SCE Position on Energy Division Process for Review of Investor Owned Utility Custom Measure Ex Ante Values

This section contains the SCE position on the Energy Division process contained in Attachment II.

CMPA/CTA Requirements

<i>Party</i>	<i>Party Position</i>	<i>Rationale</i>
SCE	SCE believes the requirements for the CTA are duplicative and should be modified to not include individual project spreadsheets as those are kept in the CMPA.	The proposed requirements of the CTA for individual project spreadsheets to be stored there is excessive. That information is stored in the CMPA, which ED has access to and can view project details at any time. Additionally, the purpose of the CTA is to store generic tools and processes, not project specific tools. Storing project specific spreadsheets in the CTA not only goes against the purpose of the CTA, but also creates duplicative administrative costs. This process was discussed at the 1/13/11 meeting and agreed to but has not showed up in the text.
	SCE agrees to updating the CMPA 2 times a month and expediting project information to ED to allow for quick review timing.	To keep our tight review deadlines and pro-actively involve ED, SCE agrees with these additional ED requests.

Review Process Timing

<i>Party</i>	<i>Party Position</i>	<i>Rationale</i>
SCE	SCE requests that the ED process, in line with the second guiding principle, be fit into a maximum 2 week review cycle so as to allow a parallel review process. SCE would like to have the review process timeline laid out in a clear manner such that we can reach our aggressive 10 working day (2 week total) review timeframe. Also, a diagram with timing would help all parties understand this more clearly.	<p>Currently the review timeframe allots 2 weeks for ED to choose if they want to review (top of page 5) then ED promises to give us the review 10 days prior to the target agreement date (page 8, paragraph 4) granted there is “a reasonable ability to meet this timeline.” Given this approach, the overall timeline would be: 1. 10 days for ED to determine whether or not they select a project for review; 2. The time needed to review the project; 3. ED review completed 10 days prior to the target agreement date; therefore, a 20 day ED review timeframe for projects plus the time it takes for standard IOU review projects. Also, this process does not include any additional time that will be necessary to discuss ED and IOU calculation differences, if they exist.</p> <p>The process needs to be streamlined such that it can be completed within 2 weeks – in parallel with Utility review – and if not completed within that timeframe Utility proposed values will be frozen in as ex ante values for that project.</p>

Disagreement Resolution

<i>Party</i>	<i>Party Position</i>	<i>Rationale</i>
SCE	<p>SCE would like the option to bring issues to ED management review prior to field studies and data being collected.</p> <p>SCE believes that an alternative to the proposed process would be that professional differences of opinion between two respected parties could be worked out by inviting an independent third party. (i.e., party 1 is the utility and their professional opinion, party 2 is ED and their professional opinions.) If those opinions differ, a third party to decide differences could be a pre-approved engineering firm in the respective field (e.g. lighting, HVAC, etc.).</p>	<p>Field studies and collecting additional data can take months or years and time delays like this can cancel entire EE projects and deter future potential customers. To ensure a quick resolution on some issues SCE believes bringing the issue to ED upper management may expedite the process before continuing with potentially expensive and lengthy studies that cannot be utilized.</p> <p>SCE believes that although ED is an independent body, it is still a party with a professional opinion. SCE also believes that both ED and the Utilities hire capable and responsible people. Additionally, SCE believes that anytime two or more parties are involved there may be differing, yet credible, opinions. For this reason SCE believes involving a third arbitrating party (party 1 – ED, party 2 – IOU, party 3 – arbitrator) to our decision process would help achieve reasonable and agreed upon conclusions where there is a difference of opinion. This is both a professionally accepted and practiced method as well as a way to involve additional industry knowledge and expertise to arrive at an appropriate, balanced and informed opinion.</p>
	<p>SCE suggests that an additional percent-difference criterion be included for large projects within which IOU-determined savings are acceptable.</p>	<p>SCE believes that the inclusion of this provision will help streamline the review process which will boost customer satisfaction and reduce overall cost to the rate-payer.</p>

Baseline Discussions

<i>Party</i>	<i>Party Position</i>	<i>Rationale</i>
SCE	SCE would like more clear and definitive language and examples around baselines. Currently the process involves very subjective language to determine “compelling evidence” and “clear evidence” but never calls out what this may include.	SCE believes a large amount of our differences of opinion over savings for custom measures starts with baseline determination. Given a clear and defined method for determining baselines we would avoid a large portion of discrepancies. This clear definition would also reduce impacts of other review process items like GRR, NTG, and disagreement resolution.
	SCE proposes that ED and the IOUs jointly develop written guidelines for establishing baselines.	Clear written guidelines are necessary so that all impacted parties, including utilities, third party implementers, third party reviewers, and customers would all know what is required to document projects.

Timing and Freezing

Party	Party Position	Rationale
SCE	SCE believes that any changes to the current process which are agreed upon will be made on a prospective basis only; therefore, changes would be applied only to projects not currently in our project pipeline or without signed agreements at the time of the implementation of the process.	<p>SCE began the 2010-2012 cycle using the “best available information at the time the 2010-2012 activity is starting.” – D. 09-09-047 OP 48. For the reasons cited in the decision we believe all values used up to now have followed that language and the intent behind the language. This proposed process is being presented now, over a year after the programs began. Also, this new process is in disagreement with the former agreements the IOU’s and ED informally shared prior to Natalie Walsh retiring from ED. These values, approved by the Commission in Decision’s 09-09-047 and 10-12-054, were contained in SCE’s Compliance Advice Letter 2410-E and subsequently approved by Energy Division on April 8, 2010 in an Energy Division disposition letter from Julie Fitch. To venture away from these values is in complete opposition of Decision’s 09-09-047 and 10-12-054 and intent as well as Energy Division’s prior approval.</p> <p>In addition to the decision language, SCE has put substantial labor and effort into instituting its approved portfolio and any changes that are made will require substantial administrative costs. These costs will be compounded if changes are to be applied retroactively, as we will have further system and infrastructure process changes to implement. We believe this to be an ineffective use of ratepayer funds given decision orders have been followed.</p> <p>SCE believes that in agreeing to any substantial changes on a prospective basis is a strong signal for our desire to achieve compromise and process improvements and is more than fair given the decision’s language to use the best available information at the start of the program cycle.</p>
	An implementation timeline should be established as part of the final Process,	Short term implementation time allowances include the need to revise internal processes, retrain and reallocate support personnel, and to inform

	prior to it being implemented.	impacted stakeholders. Estimated time for this is approximately 3 months. Changes that have large process and infrastructure change requirements will need significantly more time and should be implemented in the next program cycle (e.g. dual baselines reporting mechanism).
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Attachment II Alternate 3

Third-Party Implementers position on Energy Division Process for Review of Investor Owned Utility Custom Measure Ex Ante Values

The goal of this proposal is to meet the Energy Division's objectives

The Energy Division ED striving to create a real time, parallel review process that results in the following:

- Ex ante values that are accurate as possible – requires being able to consider data and observe the realities of a project in as near real-time as possible
- Eliminates any delays/impacts on customers – requires a truly parallel process
- Allows Energy Division the freedom to review a variety of projects

Points of agreement:

- Customers can accommodate ED review
 - We believe that if clear criteria and a clear process are laid out, customers will not have an issue with ED review
- Real-time project review is useful and a good objective

Related Issues:

- No parallel process possible if ED has final say

Stakeholder	Impact
Customer	<ul style="list-style-type: none"> - Delay in project implementation and receiving incentives if there is disagreement on the ex ante value between Implementer, IOU and ED. - Lost savings opportunity. - May not move forward with Measure if ED revised incentive rate is too low, in spite of valid engineering calculations showing higher savings. - May only agree to do the subset of proposed measures with the fastest payback (i.e., cherry-picking), resulting in reduced comprehensiveness and stranded savings.
Implementer	<ul style="list-style-type: none"> - Delay in receiving payment for services if there is disagreement on the ex ante value between implementer, IOU and ED. - Major revenue uncertainty as forecasts are based on solid internal and/or industry accepted ex ante calculation methodologies in order for the company to realistically forecast revenue from Programs. - Need to renegotiate contracts and program goals to incorporate arbitrarily-changed savings and revenue.
IOU	<ul style="list-style-type: none"> - Delay in processing projects for payment. - Delay in providing customers with incentives. - Customer dissatisfaction with resulting inequity. - Need to renegotiate implementer contracts and program goals.

- ED has not yet finalized the process
 - o No discussion / appeal process if debate on Ex Ante value
 - o No timeline for review
 - o No criteria for project selection

Stakeholder	Impact
Customer	<ul style="list-style-type: none"> - Complete uncertainty as to the implementation of the Program at their site and what timelines to expect as a result. - Cannot plan resources adequately. - Cannot communicate project progress to management effectively. - If there is disagreement on the ex ante value, customer does not know when they will have an ex ante value to plan around in terms of forecasted savings.
Implementer	<ul style="list-style-type: none"> - Lacks clear, actionable information to communicate to the customer. - Cannot effectively or dependably forecast savings and associated revenue
IOU	<ul style="list-style-type: none"> - Unclear Program process presents a credibility issue for the IOU in the eyes of the customer. - Lost savings due to decreased program participation. - Decreased program participation due to uncertainty, delays and customer perception of program complexity.

- Risk to Program participation
 - o Lack of clear criteria or process for project review causes uncertainty with customers.
 - o Customers will err on the side of caution and may choose not to participate.
 - o Arbitrary default GRRs
 - Introduce a parameter which was not in place at the time of implementer contract signing and has significant impact on revenue forecasting and profitability.
 - Create inequality in payments for like projects depending on the effective date of GRRs within the Program Cycle.
 - Sends a false message regarding IOU and Implementer intentions, qualifications and ethics.
 - Creates a negative customer perception given these changes' arbitrary nature, and instills customer doubt in Program effectiveness.

Stakeholder	Impact
Customer	<ul style="list-style-type: none"> - Lost savings opportunities.
Implementer	<ul style="list-style-type: none"> - Do not have clear, actionable information to communicate to the customer. - Cannot effectively or dependably forecast savings and associated revenue. - Invalidates a number of key business decisions made for the 2010-2012 Program Cycle.
IOU	<ul style="list-style-type: none"> - Lost savings due to decreased program participation. - Stranded savings and reduced comprehensiveness due to decreased customer

	and implementer incentive.
--	----------------------------

Proposed Alternative:

To date, the Energy Division has not finalized a process to carry out custom project review. Furthermore, the Program Cycle is close to its half way point. Given issues previously outlined and their subsequent impacts on customers and, ultimately, on the success of the Programs, it is not realistic at this point in the cycle to implement a review process with all of the uncertainties currently in the Energy Division's proposed plan.

As we agree with the Energy Division that real-time project review is useful, we would like to recommend the following alternative to reaching this objective: **the Energy Division, IOUs, Implementers and Customers should take advantage of the remainder of the 2010-2012 Program Cycle to collaboratively develop and test a realistic, effective and mutually beneficial Custom Project Review Process. The learning extracted from the testing of this parallel process will inform the design of a real time review to be implemented across Programs in the following Program Cycle.**

Attempting to implement an undefined, non-vetted process mid-cycle and apply its impact retroactively presents an unreasonable amount of risk for all parties involved and will inevitably encounter major obstacles.

While there is not adequate time to implement a successful real-time review process in the remainder of the Program Cycle, there is ample time for the Energy Division to work with Utilities and Implementers to design and test a review process. This process would allow the Energy Division, IOUs, Implementers and Customers to work together to outline a process that is fast, accurate and effective. **Testing a review process in the current Program Cycle would help to ensure that Customers, Implementers and IOUs are not exposed to undue risk by adding a significant unknown element to Programs which was not a part of contracting or planning at the start of the Program Cycle.**

The following needs to be completed in order to assure an effective process testing period in **the remainder of the current Program Cycle:**

1. **No project review should be implemented which may affect payment to Customers or Implementers beyond those processes currently in place by the virtue of existing contracts and Program Participation Agreements. This makes the process truly parallel and fully eliminates the possibility of project implementation delays.**
2. The Energy Division, IOUs and Implementers need to define the following parameters expeditiously to begin testing a review process as soon as possible:
 - Define a project selection period.
 - We recommend: A period lasting 6 months from the date the Review Testing Process is finalized.

- Benefits: This period will allow the Energy Division to obtain a pool of projects to choose from, picking the most desirable projects, from the Energy Division's perspective, which fall within the specific project selection criteria specified below.
- Define specific criteria for project selection.
 - We recommend: 2 projects per program. 1 large, 1 small.
 - The selection pool for "Large" projects consists of any project where the ex ante value for the project represents 10% or more of the total Program goal, or three of the largest submitted project if none reach the 10% mark.
 - The selection pool for "Small" projects consists of any project where the ex ante value for the project represents 0.5% or less of the total Program goal, or three of the smallest submitted project if all are above the 0.5% mark.
 - Benefits:
 - This will provide implementers and IOUs with very specific criteria to be able to inform customers of the possibility that their project may be reviewed. This will result in adequate customer expectations setting and a better overall customer experience
 - **This volume of projects will provide the Energy Division with adequate time to study the advantages and challenges of particular steps in the review process, as well as to begin developing a long term process based on lessons learned and best practices.**
- Specific timelines for review:
 - We recommend:
 - Deadline of the second week from the end of the aforementioned 6 month project selection period to inform both the relevant IOU and Implementer of which two projects have been selected for review.
 - All project review by the Energy Division must be complete before 12/31/2010.
 - Benefits: With the truly parallel review process, as outlined above, this will allow the Energy Division to have more time to thoroughly review ex ante calculations without impacts to customers.
- Identifying specific areas for compiling lessons learned.
 - We recommend: In order to ensure that this review study process is as valuable as possible, we recommend identifying a list of key areas for which the Energy Division will document lessons learned in order to inform the process to be implemented in the next program cycle. Our proposed list includes, but is not limited to:

- Customer communication
- Implementer communication
- Review bottlenecks
- Recurring contentious assumptions in savings calculations
- Actual review timelines
- Final reviewed and approved savings values vs. those initially proposed
- Benefits:
 - The systematic documentation of lessons learned will allow the Energy Division to develop a review process based on the output of a truly collaborative effort. **This will increase the likelihood of buy-in from all parties.**
 - Furthermore, implementing a process based on such a study will eliminate much of the risk to all parties involved when encountering bottlenecks, breakdowns and various other obstacles. **Attempting to implement an undefined, non-vetted process mid-cycle presents an unreasonable amount of risk for all parties involved.**
 - **An independent overall study of the results of ED-reviewed and approved project savings vs. IOU-approved values for the same projects will comprise the basis for development of much more fair and accurate GRRs to be used in the program next cycle.**
- Define a clear appeal process if the Energy Division does not agree with the IOU-approved ex ante values for a particular project.
 - We recommend: The Energy Division should select a third party to review contentious projects and mediate discussions between the Energy Division, IOUs and Implementers with an objective to reach an acceptable ex ante value.
 - Benefits: As many close to the industry know, two equally qualified engineers can come to very different conclusions when presented with the same scenario. This process allows for all parties to have a fair chance to have their calculations vetted independently. This presents the greatest benefit for the Customers as the final ex ante values for the program will be the closest to reality, rather than over or under estimated.
- Set a default GRR of 1.0 for projects that are not reviewed.
 - We recommend: Allowing projects that the Energy Division does not review to maintain a GRR of 1.0 under the assumption that IOUs, Implementers and any third party Reviewers operate under the highest ethical standards of professional behavior, and with the best information currently available.
 - Benefits:

- This allows Implementers and Customers to maintain their revenue forecasts and not be exposed to the undue risk of a 10-30% reduction in projected revenue in spite of best efforts to complete quality work and without recourse to defend their calculations or the methodologies employed.
- This will avoid any inequalities or complications with project where implementers and/or customer have already received payments.

Attachment II Alternate 4

NRDC position on Energy Division Process for Review of Investor Owned Utility Custom Measure Ex Ante Values

Introduction:

This document details how ~~the California Public Utilities Commission (Commission) will review the~~ ex ante energy savings claims of Investor-Owned Utilities (IOUs) implementing custom measures or projects in the 2010-2012 Energy Efficiency program cycle: will be determined.

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 existing and proposed equipment, and an agreement is made with the customer to pay the financial incentive upon the completion and verification of the installation. The efforts are by definition unique, each with their own characteristics. Parameters that determine estimated energy savings from a custom measure or project are more variable and less predictable without a site-specific analysis than the more common deemed measures for which savings parameters can be predetermined. 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.

~~An effective custom measure and project review process balances the needs of program participants who are investors and beneficiaries, the IOUs who administer the programs, and ratepayers who provide incentive funding contingent on adequate oversight of their investment. The process identified here aims to strike that balance. This review process is intended to be applied consistently throughout the program cycle; however, clarification may be made at the discretion of the Assigned Commissioner or Administrative Law Judge.~~

Attachment A includes a graphical schematic depicting the process outlined in this document. In addition, the principles guiding this process and supporting resources are defined herein.

Guiding Principles:

1. Energy savings are the paramount priority of custom measures and projects.
2. The Customer Measure and Project Review Process is intended to allow Energy Division (ED) to review customer projects in parallel with the IOUs, thereby allowing for maximum customer convenience and program oversight.
3. ~~When Whenever~~ possible and practical custom measure and project calculation methodologies shall be based upon Database Energy Efficiency Resources (DEER) methodologies as frozen for 2008 DEER version 2008.2.05 ~~or upon methodologies documented within the most current Energy Division reviewed and approved IOU non-DEER deemed workpapers.~~
4. IOUs and Energy Division are both responsible for effective record keeping such that calculation tools, documentation of how those tools were applied to custom measures and

projects, and documentation of custom project ex ante savings calculations are retained and available for review by the Commission. IOU calculations and documentation shall be submitted electronically to the Energy Division.

Supporting Resources:

IOUs are directed to maintain the following supporting resources to enable timely, effective review of custom measures and projects by the Energy Division and their consultants.

Calculation Tool¹⁴ Archive (CTA):

Each IOU shall maintain an archive of all tools used in calculating ex ante values such that they remain accessible to the Energy Division throughout the program cycle.¹⁵ The archive shall contain all versions of all tools used in the development of ex ante values for custom measures or projects claimed during the current program cycle.

The tool archive shall include:

- c. All manuals and user instructions, where applicable. If the calculation tool is simply a spreadsheet, then all cell formulas and documentation shall be readily accessible from the tool.
- d. A list of technologies, measures or projects for which custom calculations are performed using the tool.

The Calculation Tool Archive shall be updated by the IOUs on an ongoing basis during the 2010-2012 program cycle as tools are revised.

Custom Measure and Project Archive (CMPA):

Each IOU shall keep a complete up-to-date electronic archive of all custom measures and projects. Each project should be added to the Archive as soon as possible after either identified in the pre-application stage or the date of the customer's application to the IOU, whichever is earlier. Each project should be assigned a unique identifier that shall not be re-used or re-assigned to other projects.

The IOUs shall provide a summary list of all projects, in pre-application stage and application stage, in their CMPA. Energy Division will provide the utilities with the format of the summary list. The summary list shall identify each project using its unique identifier and provide a link to the detailed files of each project. The summary list shall also reflect the date of the most recent entry into each project. The summary list shall include for each project the following (Energy Division and the IOUs will work out details of the meaning and specifics of each item below):

- The customer type
- The project type

¹⁴ Tools, in the context of this document, means software, spreadsheets, "hand" calculation methods with procedure manuals, or any automated methods used for estimating ex ante values for custom measures or projects.

¹⁵ The Utilities must arrange access to any proprietary tools and software used in the development of ex ante values so that Energy Division can perform the review described in this document.

- Industry Type
- Status (pre-application, application received, application in review, agreement signed, completed, paid, claimed, etc.)
- For pre-application stage projects, a best guess at probability the project will become an application (unknown, very low, low, medium, high, very high; or a percentage probability 0-100% for none to definite) with this status updated as new information becomes available)
- Project location (address)
- Utility contact person (Primary IOU review contact and, if appropriate, primary IOU customer interface contact such as marketing representative)
- Customer segment
- Equipment or process involved
- General description of the proposed project and its energy saving premise
- Estimated ex ante energy savings
- the target date when a customer agreement is expected to be issued for customer signature (Agreement Target Date)

The summary list shall be updated at least on the first and third Monday of every month for the duration of the 2010-2012 program cycle, however, the IOU shall provide the updated list more often as necessary to provide Energy Division with information on high priority or fast-tracked applications so as to allow Energy Division to perform reviews of such projects at its sole discretion. The IOUs may provide the summary list by program instead of a consolidated list, should they so desire.

For projects that, within a regular bi-monthly CMPA summary list submission, are projects for which applications have been newly received or projects that have moved from the pre-application state into the application state Energy Division will inform the IOUs of projects which have been selected for review. Such notification shall be before or by the next regularly scheduled CMPA summary list submission. Thus Energy Division will have a ~~minimum~~maximum of approximately two weeks to decide if a new application measure or project will be subject to review and included into its review “sample.” An IOU may request that a project review decision be expedited for high priority or fast tracked projects and Energy Division will make its best effort to accommodate such requests. If Energy Division chooses not to review a project an IOU may request such a project be included in the Energy Division review sample. Energy Division shall consider such decision change requests but will limit such changes based upon available resources to ensure adequate coverage of the full cycle portfolio of measures and projects in its review sample. An IOU request for Energy Division project review may be accepted, denied or deferred into the Early Opinion process at Energy Division’s discretion, however, Energy Division shall inform the IOU of its decision as quickly as possible.

For each project sampled for a review, the specific types of documents to be maintained in the CMPA and parameters required to be in the supporting documentation may vary based on the type of project. *Examples* of the expected data elements are listed below.

- Documentation to support Baseline assignment (Code or Standard requirement, Early Retirement, Retrofit, Replace On Burnout, industry standard practice, CPUC policy, etc)¹⁶
- Existing system controls and operating status description
- Existing system output capacities – current output and maximum/design capacity
- Pre-installation inspection report
- Post-installation inspection report
- Proposed modifications with schematic as applicable
- Preliminary savings calculations and supporting data with documentation to ensure replicability
- Manufacturer’s cut sheets when used to estimate ex ante savings or when needed to ensure replicability
- Fuel switching considerations and any required analysis per CPUC policy regarding fuel switching projects (see Energy Efficiency Policy Manual)
- Other fuel savings and/or load increases resulting from the project
- Heating, Ventilation, and Air Conditioning (HVAC) interactive effects values and methods used to develop those values, when measures cause a change in HVAC system loads
- Interactions between multiple measures that act to increase or decrease savings relative to a measure stand-alone savings estimate
- Pre/post production output data when used in savings calculations and the source of such records
- Billing history - one-year pre installation, with interval data required when available; when ex ante estimated values rely upon a per-unit-production changes based on multi-year production data, corresponding billing histories are required
- IOU or implementer program manual (a single archive of these documents should be referenced rather than including the documents in each project archive)
- M&V plans, reports and raw data archives, where applicable
- EUL/RUL value, analysis or source

Projects Energy Division selects for review will have ~~their~~their complete documentation from the IOU CMPA placed into an Energy Division Review CMPA which, with the Utility Custom Project Summary List, will be housed on an internet-accessible website that meets reasonable security and legal requirements. The Energy Division will be responsible to establishing and maintaining that website.

Custom Measure and Project Review Process:

There are two categories of Energy Division’s Custom Measure and Project Review Process: general and claims. All reviews are at the Energy Division’s discretion; ~~however, if an IOUs ex ante values are not reviewed by the Energy Division, the IOU shall rely on those values in making energy savings claims before the Commission after adjusting those values using the gross realization rates as shown in Table 1 below.~~

¹⁶ The baseline parameters used are of primary importance in estimating project savings. Appendix I of this document provides the guidelines by which Energy Division will review baseline parameter selection.

Table 1: Default Custom Measure Gross Realization Rates

IOU	kWh	kW	Therm
PG&E	0.6	0.6	0.7
SCE	0.75	0.75	
SDG&E	0.7	0.7	0.7
SCG			0.7

The **General Review** will include Energy Division's oversight of the CTA and CMPA. Energy Division, at its discretion, will review tools, measures, and projects, as well as inputs to the tools for selected projects. Energy Division may choose to provide the IOUs with input on one or more of the tools, measures, or projects. The tools reviews will be done on a prospective basis.

~~IOUs shall adjust their subsequent use of the tools to conform to Energy Division input.~~

The more specific **general project reviews** include a close examination of a selected subset of custom projects.

~~For all custom applications with ex ante values that are not reviewed by the Energy Division, the IOU shall apply an adjustment to the gross savings estimate values using the Default Custom Measure Gross Realization Rates (Table 1) above when making energy savings claims before the Commission.~~

~~Energy Division will may conduct general project reviews at threetwo stages of the IOU custom project process: concurrent and collaborative pre-installation review, and post-installation review, and claim review.~~

Pre-Installation Review

The objective of the Pre-Installation Review is for Energy Division to perform a parallel review, with the IOUs, and then for Energy Division to provide to the IOUs input on the estimated custom measure or project ex ante savings. The Pre-Installation Review allows Energy Division to supplement the resources and information available through the CTA and CMPA in making its recommendations.

The IOUs shall provide the Energy Division the opportunity to participate in any site visits, pre-installation inspections, customer interviews, pre-installation M&V, or spot measurements that may occur during this and subsequent phases. If such events are scheduled by IOUs more than five days in advance, the IOU shall provide notification to the Energy Division within one business day of scheduling the event; the Energy Division should be immediately notified for events scheduled less than five days away. The Energy Division will notify the IOUs prior to the event if they plan to send a representative.

During the Pre-Installation Review, the Energy Division will coordinate any Measurement & Verification (M&V) activities on these custom projects with the IOU. The Energy Division may choose to use the Utilities' or its own contractors, at Energy Division expense, to perform site inspections or pre-installation M&V.

The Energy Division will provide the IOUs with the results of its Pre-Installation Review, including recommended ex ante values and documentation to support its recommendation, at least ten days before the Agreement Target Date identified by the IOU in the CMPA summary list. However, the IOU shall provide Energy Division with all CMPA documents in a timely manner such that Energy Division has a reasonable ability to meet this timeline. Energy Division and the IOUs agree to work together to allow timely review of expedited and high priority project. ~~If the Energy Division affirms the IOU's estimated ex ante values or suggests values which would result in greater or lower savings than the IOU's estimated ex ante values, then the IOU shall rely on those values when entering into estimated incentive agreements for the project and shall also rely on those values for subsequent energy savings claims before the Commission if no further post installation adjustments are identified by either the IOUs or Energy Division, as described below.~~

Post-Installation Review

The objective of the Post-Installation Review is to provide the Energy Division with continued opportunity to review and provide input on the accuracy of ex ante values assumed by the IOU prior to the utility making its final incentive payment to its customer. The IOU shall allow the Energy Division access to site visits, post-installation inspections, customer interviews, post-installation M&V, or spot measurements. IOU and Energy Division notifications for these events should follow the guidelines described above for Pre-Installation Review. The IOUs shall continue maintenance of the CTA and CMPA in accordance with the direction provided above. If the post-installation M&V inspection results in an IOU adjustment of savings for projects that were reviewed by Energy Division during the pre-installation stage, Energy Division shall have the option to review ~~and approve such adjustments. If, as a result of the post installation inspection, the Energy Division affirms the IOU's estimated ex ante values or suggests values which would result in greater or lower savings than the IOU's estimated ex ante values, then the IOU shall rely on those values for making energy savings claims before the Commission. Otherwise, no deliverables are due to either IOU or Energy Division.~~ such adjustments.

IOU Claim Review

~~The IOU Claim Review allows the Energy Division to conduct a review of energy savings for custom projects included into the IOU Quarterly Claim¹⁷ to ensure that:~~

- ~~3. appropriate default realization rates were applied to ex ante gross savings estimates for projects that were not reviewed by the Energy Division;~~
- ~~4. recommendations made by Energy Division for reviewed projects were accurately reflected in the claim.~~

~~The IOU Claim Review shall commence upon the IOU submittal of a quarterly reporting period claim containing those projects, and end at the later of ninety days after that submission or the subsequent IOU quarterly submission. Energy Division shall notify the IOU of any errors found in their claim review and the IOU shall comply and revise the claims.~~

¹⁷ As a component their energy efficiency portfolio reporting requirements each IOU will submit a quarterly filing on EEGA which includes details of all measure ex ante savings values for all individual projects and measures which have been installed prior to that claim.

~~Custom projects that were not reviewed by the Energy Division prior to appearing in a Quarterly claim may be further reviewed for the purpose of gaining new information and prospective improvements to ex ante estimates and planning, but IOU's will not be held accountable for energy savings adjustments for such reviews for any projects covered by then existing customer agreements or already approved customer applications.~~

Resolution of Disagreements:

Should Energy Division and a Utility have a technical disagreement on a project's ex ante values, Energy Division and the Utility shall meet to discuss and resolve the differences. ~~If the Energy Division recommended ex ante value is within a small percentage of the utility estimated ex ante value, Energy Division and the utility shall split the difference of the two values..~~

However, this does not apply if the disagreement is where Energy Division determines that savings will not accrue at all or when a CPUC policy has not been followed. ~~Should the value in disagreement be outside of the agreed upon allowable percentage difference, an option for resolution is to defer the freezing of the value until:~~

- ~~4. additional field monitoring is conducted; or~~
- ~~5. the results of a site measurement and verification study are available; or~~
- ~~6. another mutually agreed upon action or activity is completed.~~

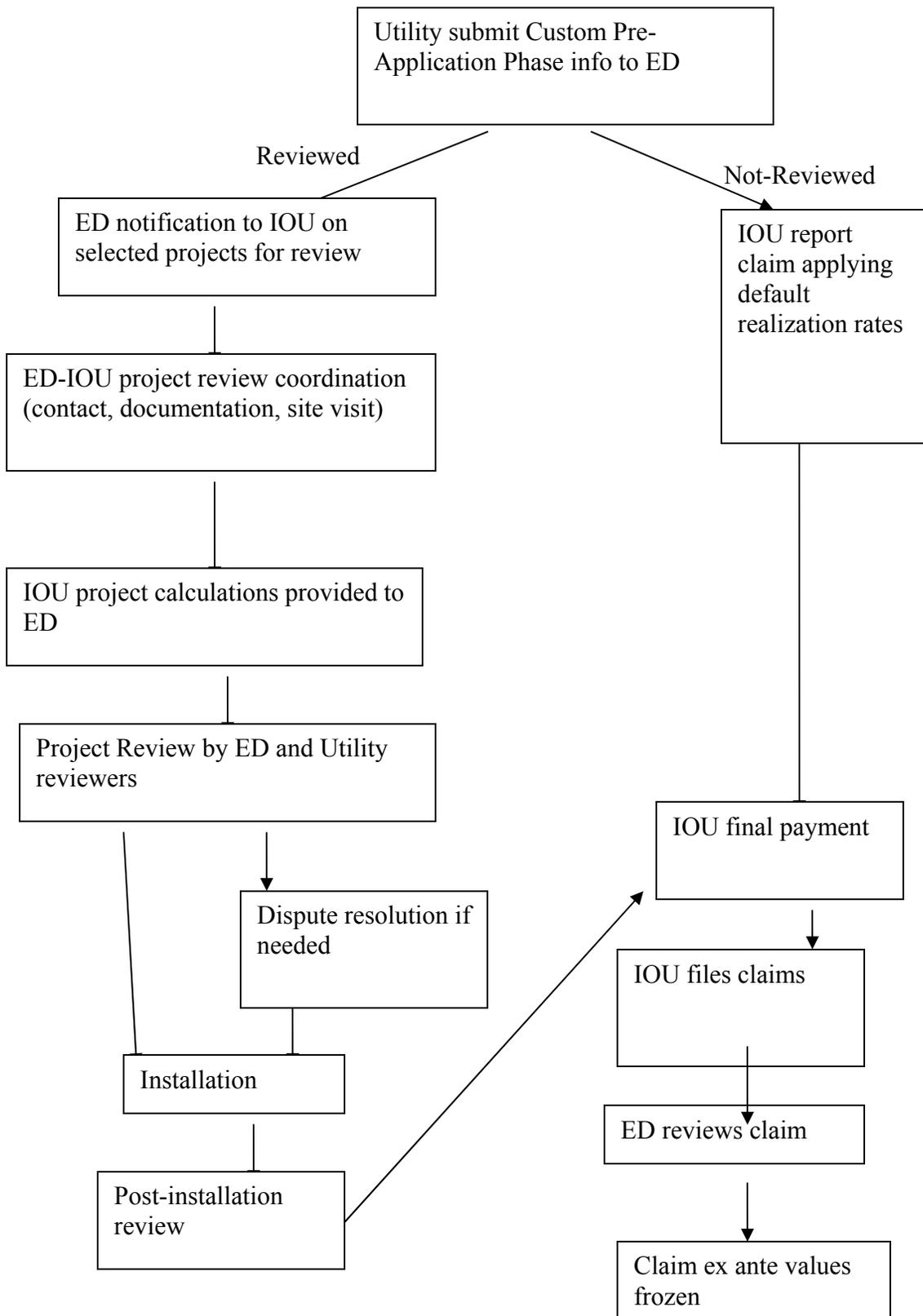
If the above efforts do not result in a resolution, Energy Division and the Utility will have a meeting with Energy Division management to discuss a resolution. If that still does not result in a resolution, the utility may make a request for intervention from the assigned ALJ.

To facilitate future communication:

Energy Division and the IOUs shall establish a working group to allow an ongoing dialog on the custom measure and project review process. This working group will provide a forum for all parties to exchange information on their current activities and future plan and to discuss and resolve problems and issues with the process outlined in this document. The working group will also provide a forum for Energy Division to inform the IOUs on issues arising in its custom measure ex ante estimation review process. These issues may include items such as baseline definitions, net versus gross savings definitions and other items as any party deems necessary.

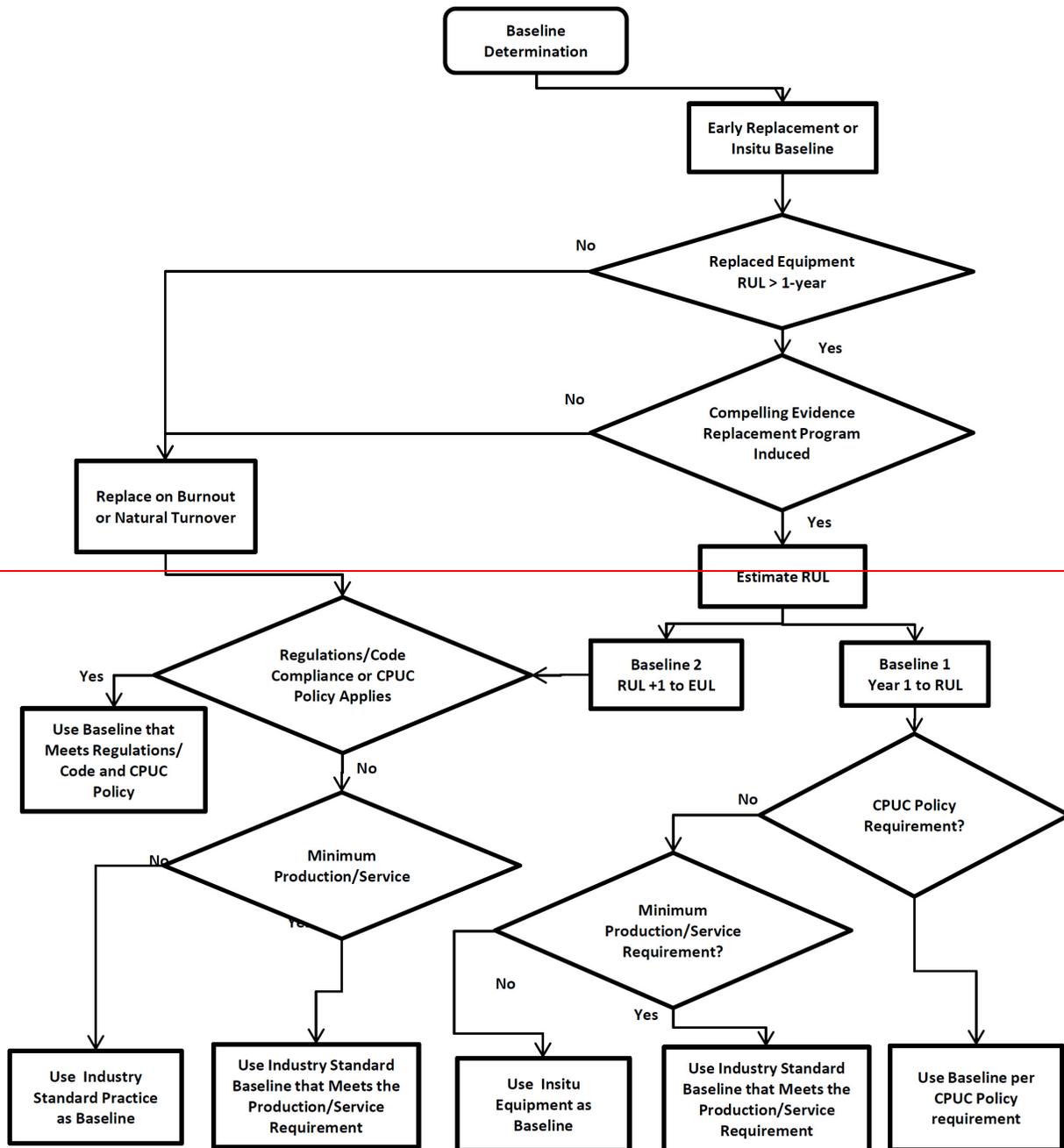
At any time during their development of ex ante estimates for a specific custom measure or project the Utilities may submit to Energy Division a request for an early Energy Division review or opinion on a specific issue. This process has been established by Energy Division issuance of the "Custom Measure Early Opinion Process" document posted as "Custom Measure Early Energy Division Opinion Process v2.docx" on basecamp 9/30/2010 in the "Early Opinion Shared" project area. Energy Division shall respond to that request in as expeditious a manner as possible to provide the IOUs with guidance and to allow the Utilities to complete their ex ante estimates in a timely manner. ~~However, this type of~~ Early guidance shall ~~not limit or~~ and constrain any later Energy Division review of ex ante claims submitted by the Utilities.

Attachment A



Appendix I

Energy Division Methodology for Determination of Baseline for Gross Savings Estimate



Review of Baseline for Gross Savings Estimates

The estimation of ex ante saving values requires the selection of a baseline performance for every project. The baseline selection and specific baseline parameters are of primary importance to establishing the ex ante savings estimates. The baseline parameters are selected by establishing the project category from the possible alternatives including New Construction or

~~Major Renovations, program-induced Early Retirement, Standard Retrofit or Normal/Natural Replacement/Turnover, and Replace On Burnout. These alternative categories result in the utilization of alternative baseline parameters set by Code or Standard requirements, industry standard practice, CPUC policy, or other considerations. In the review of IOU projects Energy Division will follow the guidelines as presented here in establishing the baseline for all gross savings estimates.~~

~~Notes to above flowchart~~

~~**Pre-existing equipment¹⁸ baselines are only used in cases where there is clear evidence the program has induced the replacement rather than merely caused an increase in efficiency in a replacement that would have occurred in the absence of the program.**~~

~~Pre-existing equipment baselines are only used for the portion of the remaining useful life (RUL) of the pre-existing equipment that was eliminated due to the program. These early or accelerated retirement cases may require the use of a “dual baseline” analysis that utilizes the pre-existing equipment baseline during an initial RUL period and a code requirement/industry standard practice baseline for the balance of the EUL of the new equipment.~~

- ~~• A pre-existing equipment baseline is used as the gross baseline only when there is compelling evidence that the pre-existing equipment has a remaining useful life and that the program activity induced or accelerated the equipment replacement. This baseline can only apply for the RUL of the pre-existing equipment.~~
- ~~• A code requirements or industry standard practice baseline is used for replace-on-burnout, natural turnover and new construction (including major rehabilitation projects) situations. This baseline applies for the entire EUL as well as the RUL+1 through EUL period of program-induced early retirement of pre-existing equipment cases (the second period of the dual baseline case.)~~

~~**CPUC policy rules and IOU program eligibility rules govern the baseline**~~

~~A careful review of utility and third-party program and CPUC policy rules must be undertaken and adjustments applied to gross savings in some cases. Adjustments are indicated for gross when there was clear evidence from program or policy rules that savings claims could not be made nor rebates paid for the baseline in question. Program rules come into play with respect to gross baseline requirements, for example, when those rules specify:~~

- ~~• a minimum required efficiency level;~~
- ~~• a minimum percentage improvement above applicable minimum code requirement;~~
- ~~• a minimum RUL of the existing equipment;~~
- ~~• the type or range of retrofits that are allowed be included in a program.~~

~~CPUC policy may apply to establishing gross baseline when Policy Manual Rules, a CPUC Decision or a decision maker Ruling includes special requirements or consideration for the situation or technologies of a measure. For example, projects or sites that involve fuel~~

¹⁸ Here the term equipment is intended to cover all technology cases including envelope components, HVAC components and process equipment and may also include configuration and controls options.

~~switching, co-generation or renewable technologies are usually subject to special baseline considerations (or other considerations) that must be considered in the savings estimates.~~

~~Minimum production level or service requirements govern the baseline~~

~~In some situations, a measure for which savings might be claimed could be determined to be the only acceptable equipment for an application. In such cases, the baseline must be set at the minimum needed to meet the requirements, which may be the same as the equipment planned for installation. An example would be an industrial process where only a variable speed drive pumping system could meet the production requirements. For situations where the baseline conditions or requirements were changed (such as production level changes), the baseline equipment is defined as the minimum equipment needed to meet the revised conditions. If the pre-existing equipment is not capable of reliably meeting the new requirement (such as production change) for its remaining life, then a new equipment baseline must be established utilizing either minimum code requirement or industry standard practice equipment, whichever is applicable.~~

~~Industry standard practice baselines are established to reflect typical actions absent the program~~

~~Industry standard practice baselines establish typically adopted industry specific efficiency levels that would be expected to be utilized absent the program. Standard practice determination must be supported by recent studies or market research that reflects current market activity. Typically market studies should be less than five years old; however this guideline is dependent on the rate of change in the market of interest relative to the equipment in question. For example, the lighting markets may change significantly in the next two years while larger process equipment markets might change more slowly. Regulatory changes might cause very rapid market practice shifts and must also be considered. For example, forthcoming changes in Federal Standards relating to linear fluorescent ballasts will result in rapid market shifts of equipment use.~~

Attachment III

SCE position

DRAFT

**Energy Division-Joint Utilities Status Update
2010-2012 DEER and NonDEER Measure Ex-Ante Values Review
May xx, 2010**

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Introduction

Consistent with the direction in D.09-09-047 (see excerpts from the decision in Appendix I) and the November 18, 2009, ALJ “Ruling Regarding Non-DEER Measure Ex-ante Values,” Energy Division and the Joint Utilities¹⁹ have undertaken extensive and intensive discussions since December 2009. For much of this time the Utilities, Energy Division staff and their consultants have met two or three times per week for several hours each meeting to discuss the range of topics involved in freezing DEER and non-DEER values. These meetings have been highly productive in many areas; however, some areas of disagreement remain to be resolved. The sections below summarize the status of the work that Energy Division and the Utilities have made thus far.

A. Custom Applications Review

Energy Division (ED) and Joint-Utilities (Utilities) have agreed to the custom applications review process in the attached document titled, Energy Division – Joint Investor-Owned Utilities Custom Measure Review Process (Appendix II). This document addresses how Energy Division will fulfill its mandated role in reviewing ex ante values to be used for custom measure/project claims and how the utilities will report ex ante claims for custom

¹⁹ The joint utilities are Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E) and Southern California Gas Company (SCG).

measures/projects. The objectives of this process are for Energy Division to review the utilities ex ante custom project estimates early to provide real time feedback to the utilities and collect baseline data before project implementation, without interrupting the program application process or project implementation activity.

The next step requires that ED and the Utilities supplement the attached document to identify the specific protocol for the custom applications review to include utility submission of applications to ED, and ED coordination with utility in the application review protocol. This detailed review protocol document is intended to be a living document that will be updated as the custom applications review protocol is refined. The general approach to the review process is meant to be frozen, although specific details will be added/modified as appropriate upon agreement between ED and the Utilities.

Detailed Custom Application Review and Coordination Process Document to be completed by: 5/31/2010

B. Non-DEER Non-HIM Workpaper Measures

By April 9, 2010, Utilities submitted to ED all utility Non-DEER Non-High Impact Measures²⁰ (HIM) workpapers consistent with the November 18, 2009 ALJ Ruling on Non-DEER measures review process. ED and Utilities agreed that due to the volumes of non-DEER non-HIM workpapers and the remaining amount of time available, ED could not review all the non-DEER non-HIM workpapers within the March 31, 2010 deadline as described in the ALJ Ruling. Per D.09-09-047, the Utilities were required to use [the 2008 DEER version \(v.\) 2008.2.05 methodologies](#) in development of all their workpapers. As such, the utility-submitted workpapers are deemed frozen throughout the 2010-2012 program cycle. These Non-DEER Non-HIM measures will be subject to the November 18, 2009 ALJ Ruling on Non-DEER Review Phase 2 Section H. Retrospective Review as ED deems necessary. In the Utilities' opinion, the retrospective review process may result in a workpaper change if the measure reaches a threshold greater than non-HIM status; however, such a change will be propagated in the subsequent program cycle. On December 10, 2009, the Utilities met with ED and requested specific clarification and guidance to update/create work papers that were consistent with the November 18, 2009 ALJ Ruling on Non-DEER measure review process. These requests included clarification on lighting operating hours and factors used for interactive effects that were unclear in the 2008 DEER v. 2008.2.05 documentation. In response, Energy Division provided the lighting workbooks that contain methodology for interactive effects estimates and provided lighting operating hours to the Utilities. See Section E. below for further status on these lighting workbooks.

Status of Non-DEER Non-HIM Workpaper Review:

²⁰ High Impact Measure is defined to be measure or measure group that contributes towards more than 1% of a utility's total portfolio savings forecast.

The non-DEER non HIM workpapers that the Utilities have submitted to date will be subject to the Phase 2 process as described above.

C. Non-DEER HIM Workpaper Measures (Excluding Lighting and Appliance Recycling Workpapers)

Utilities have provided all Non-DEER HIM workpapers ²¹consistent with ED's schedule. ED has begun its review of these workpapers and provided clarifying question to the utilities commencing April 1, 2010. Utilities agreed to respond to ED's questions within 3 to 4 days after the questions were posted on ED's workpaper submission website, <https://energydivision.basecampHQ.com>. ED followed up on the technical issues associated with the workpapers during the period from April 12 through April 23, 2010 by scheduling face to face technical workshop(s) and conference call meetings with utilities by workpaper or workpaper groups to resolve issues and differences regarding methodologies and assumptions in these workpapers. In accordance with the November 18, 2009 ALJ Ruling, Phase 1, Section C, this process resulted in either ED accepting a particular workpaper, or ED flagging the workpaper as reviewed but not accepted. ED reviewed as many Non-DEER HIM workpapers before April 30, 2010, as possible. These measures will be subject to the November 18, 2009 ALJ Ruling on Non-DEER Review Phase 2 Section H. Retrospective Review as ED deems necessary. In the Utilities' opinion, the retrospective review process may result in a workpaper change if the measure reaches a threshold greater than non-HIM status; however, such a change will be propagated in the subsequent program cycle.

ED and the Utilities have agreed that due to the timing of 2006-2008 impact study results, Energy Division would not require, but strongly encourages the Utilities to consider these results to be applied to work paper updates for the 2010-2012 program cycle. It was also agreed that the Utilities would review these results and proactively make programmatic changes with regards to the findings. Additionally, the mandated 60-day program response process to the 2006-08 evaluation studies results is also in place to address the study results through any needed programmatic changes.

Status of Non-DEER HIM Workpaper Review: : Energy Division posted the results of its review of the Utilities' Non DEER HIM workpapers on the <https://energydivision.basecampHQ.com> website on May 3, 2010.

D. DEER Fixes and Additions to 2008 DEER version 2.05

In D.09-09-047, the Commission clarified the use of 2008 DEER v. 2008.2.05, dated December 16, 2008, for planning and reporting accomplishments for 2010-2012. The

²¹ This includes utilities' lighting and appliance recycling workpapers.

Commission recognized that errors may be identified in the measure ex-ante values in the 2008 DEER version 2008.2.05 and directed that “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.”

On March 5, 2010, Energy Division and the DEER Team proposed corrections and additions to the 2008 DEER v2008.2.05. A summary of the error fixes, new measures, and changes to the DEER methodology are contained in the document embedded in Appendix III. This document was provided to the Utilities on March 5, 2010 and updated on March 18, 2010. The DEER Team had incorporated these proposed DEER 2008 changes in methodology and corrections into DEER version 3.02, which was used to develop the lighting and appliance workbooks discussed in Section E below.

Consistent with the collaborative approach envisioned by the Commission, Energy Division staff, the DEER Team and the utilities met on March 25, 2010, to discuss the proposed corrections and additions to 2008 DEER v 2008.2.05. The Utilities’ responses to the ED’s proposal can be found in the spreadsheet embedded in Appendix IV. Based on the information presented by ED and it’s consultants at the March 25th workshop, the Utilities have agreed to the following:

- Any changes made to the frozen 2008 DEER v. 2008.2.05 that the Utilities have determined as a change in methodology will be held for further review and discussion. Once agreed upon, these changes would be incorporated into DEER 2008 version 3.02 with the earliest implementation in the 2013-2015 program cycle.
- Changes made by the DEER team that the Utilities have determined as “acceptable” errors or new measures that will be implemented in the 2010-2012 program cycle include:
 1. Large office lighting schedule for linear fluorescent technologies
 2. HVAC Package unit updates for Title 24.
 3. General T24 updates (primarily HVAC)
 4. General Lighting updates (primarily Linear Fluorescent)
- Changes made by the DEER team that the Utilities have determined as “acceptable” errors or new measures, but will not elect to implement in the 2010-2012 program cycle include:
 1. DOE2 bug fixes changes
 2. Dishwasher/Clothes washer additions
 3. Multi-family building type additions

ED still believes that the DOE2 bug fixes are critical corrections to the 2008 DEER v. 2008.2.05, which should be incorporated for the 2010-2012 program cycle. DOE2 is a

building energy analysis program used to develop DEER measure savings estimates by building type, by climate zone. The DEER team discovered several errors in the DOE2 software, which affect the modeling of heat load due to lighting fixtures, outside air volume associated with duct leakage, and default minimum heat flow rate. The corrections to the heat load due to lighting fixtures are necessary to develop accurate weighting of heating/cooling saturation by HVAC system types to estimate interactive effects impacts. ED believes that not correcting for these errors and only applying those changes that the utilities found acceptable does not make logical sense, since it would mean updating a database (i.e., 2008 DEER version 2.05) with known errors to begin with. Furthermore, it will be more resource intensive for ED to start with 2008 DEER v. 2008.2.05, and implement the Utility-accepted errors, instead of using DEER v. 2008.3.02 with the DOE2 bug fixes and removing those other corrections that the Utilities identified as not acceptable at this time.

While the Utilities agree that the DOE2 bug fixes are important to make, the Utilities believe that the likely level of overall impact is small (less than 3%) (A high level lighting analysis for the SCE 2006-2008 portfolio shows a small impact as outlined in Appendix V) in comparison to the amount of resources required to make the updates in their respective tracking systems at this time in line with "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." (Per D.09-09-047). In the Utilities' opinion, that for completeness, ED's effort would likely require that all 2008 DEER v. 2008.2.05 values (1.2 million records) be updated. Simultaneously, the Utilities would be required to update all work papers that use the 2008 DEER v. 2008.2.05 values and incorporate the values into all of their tracking systems where DEER or Non-DEER impacted work papers are used. In the Utilities' opinion, this change would likely entail an incremental three to six month effort involving thousands of employee hours that would involve revising dozens of work papers, and updating tens of thousands of measures sets by the Utilities and their contractors which is a [significant and costly effort that may question the overall ratepayer benefit of revising the DOE2 model for these named changes](#).

In the Utilities' opinion, such an effort could not be finalized prior to the timing the Commission envisioned as adequate for the Utilities to begin full program implementation.

Currently, the 2005 DEER v. 2005.2.01 savings values, which are still being used by the Utilities for many of their portfolio measures, are not explicitly integrated into 2008 DEER v. 2008.2.05. In the Utilities' opinion, the Utilities would still be using a version of DOE2 without the bug fixes and as such be inconsistent with the assumptions found in DEER v. 2008.3.02. The Utilities would propose that it is a better use of resources to incorporate the DOE2 bug fixes for the 2013-2015 program cycle as DEER 2005 values are migrated to DEER 2008 and as subsequent updates to the existing DEER 2008 measures are made.

Status of DEER Fixes and Additions to 2008 DEER version 2008.2.05: Since Energy Division still believes that the DOE2 fixes is a threshold correction and updating DEER only for those corrections that the utilities find acceptable will be more resource-intensive, Energy Division and the Utilities agreed that the 2008 DEER v. 2008.2.05 will be left as is for purposes of the Utilities' 2010-2012 "frozen" ex-ante values.

E. Lighting and Appliances Workbooks

During 2009, the utilities have asked the ED DEER Team to add lighting measures to 2008 DEER version 2.05 that are common and important in their program offerings. To address this request as well as provide a method to facilitate the Utilities' ability to easily add new or change existing lighting measures in the future, the ED DEER Team developed a set of lighting and appliance workbooks in March 2010. In the Utilities' opinion, these workbooks were meant to partially replace 2008 DEER v. 2008.2.05 MISER tool measures that were created in 2008 for the Utilities to use. These workbooks provide a heating/cooling, system type, and building type weighting methodology direction to the Utilities that in the Utilities' opinion, had never been fully clarified previously, utilized in previous versions of DEER, or explicitly addressed in D.09-09-047 or in the related DEER documentation. These workbooks also provide complete measure impact values for the high impact measures; however, they do not rely upon the 2008 DEER v. 2008.2.05 methodology frozen in D.09-09-047.

These workbooks, since they contain impact values in addition to HVAC interactive effects factors and saturation weighting, could eliminate the need for the utilities to turn in workpapers on hundreds of residential and non-residential indoor lighting and appliance measures, both DEER and non-DEER. In the Utilities' opinion, since the workpapers have already been developed and submitted, the current value of the workbook is marginal. The 2008 DEER v. 2008.2.05 MISER tool and the 2005 DEER Access database would still be required for all other measures not included in these workbooks. ED proposed that utility savings estimates generated from these workbooks will be the accepted unadjusted ex ante savings estimates to be used in the Utilities planning forecast and accomplishment reporting.

As mentioned above, the ED DEER Team produced several drafts of the proposed workbooks, developed by incorporating all the corrections and additions identified in Appendix III as well as the Utilities feedback received in March of 2010.

The Utilities expressed they liked the functionality of the workbooks, but did not accept most of the ED DEER Team proposed DEER corrections, as they were methodological changes, and not corrections, as defined by the Commission in D.09-09-047. These changes in methodology and corrections are discussed in Section D that were incorporated into these workbooks. The Utilities agree that it is important to improve the assumptions and fix errors going forward; however, the Utilities feel that it is equally important to fully vet the assumptions and review the implications, including the resources required to effect the

changes, with sufficient lead time prior to implementing them. In the Utilities' opinion, while a reasonable attempt was made to do this at the March 25, 2010, meeting, there simply wasn't enough time to fully review all of the changes in detail and decide to implement them in a timely manner so as to not impact program execution. The Utilities consider that this approach is consistent with the November 18, 2009 ALJ ruling, where "...The level of detail of the review of measures will be performed as ED resources permit or as ED deems appropriate based upon the importance of measure(s) to the overall Utility portfolio..."

ED and the ED DEER team considers the HVAC system type additions and DOE-2 bug fixes as prerequisites to utilizing the workbooks; however, the utilities did not accept those proposed changes in methodology, additions, and corrections to 2008 DEER version 3.02 at this time. The utilities recommend that the lighting workbooks be implemented for the 2010-2012 program cycle using the assumptions found in 2008 DEER version 2.05 and not 2008 DEER v.2008.3.02.

In the April 9, 2010, ED-Joint Utilities Non-DEER Review Process meeting, the group agreed to not use the workbooks with all the corrections due to the outstanding disagreement on the inclusion of the DOE-2 bug fixes and system type additions. Instead, ED-Joint Utilities agreed to follow the process described below.

1. Lighting and appliances measures ex ante parameter estimates will be reviewed as part of the Non-DEER HIM Workpapers Measures Review process as described in Section C above, but with a due date of May 15, 2010 (decided later), for the completion of ED review of these workpapers. The utilities have submitted lighting measures workpapers under the non-DEER non-HIM submission to ED using the 2008 DEER v. 2008.2.05 methodologies, as directed by the Commission. ED will take those workpapers out of that bucket and move them to the non-DEER HIM review bucket.
2. The Utilities will use the ED DEER Team developed lighting and appliances workbooks, aka Workbooks 3.02, moving forward in the 2010-12 EE Cycle for applicable new measure ex ante estimates submitted under "Phase 2" outlined in the November 18, 2009 ALJ ruling. Consistent with the policy Manual version 4.0, the Utilities clarify that "new measures" for "Phase 2", include new values for base case, measure case, end use, and technology, but do not include new building types, climate zones, or predefined delivery methods.

In the Utilities' opinion, [implicitly, measures not accounted for in these workbooks, but are part of the 2008 DEER v. 2008.2.05 dataset would utilize the MISER tool to estimate the energy savings. Other measures that are part of the DEER 2005 data set would utilize the 2005 DEER Access database to estimate the energy savings.](#)

Status of Lighting and Appliances Workbook and Workpaper Review:

Energy Division posted the results of its review of the Utilities' lighting and appliance workpapers on the <https://energydivision.basecampHQ.com> website on May 17, 2010, for purposes of the 2010-2012 "frozen" ex-ante values. The Utilities will use the Lighting and Appliance Workbooks for applicable "new" measures as defined above going forward under Phase 2 ex-ante review and approval process.

F. Dispute Resolution Process

The Utilities proposed that ED collaborate with the Utilities to develop a mutually agreeable dispute resolution process addressing technical disagreements raised during Non-DEER measures review process. In the latest Evaluation, Measurement, and Verification Decision 10-04-029, the Commission was silent on a dispute resolution process for the non-DEER measures ex ante estimates review process.

In the April 9, 2010, Non-DEER Review Process ED-Joint Utilities meeting, the group agreed that ED and utilities should make an effort to discuss and resolve technical disagreements. However, if ultimately there is an impasse, ED and the utilities should agree to disagree. These ex ante estimates are ultimately the utilities' forecast estimates.

G. 2010 First Quarterly Reporting

Currently, the utilities' first quarter accomplishment reporting is anticipated to be due the first week in June of 2010. The Utilities request submitting the first quarterly reports with the second quarterly reports, which are due on 9/1/2010 to account for changes to non-DEER workpapers and associated decisions made during this non-DEER measures workpapers review process, which will require significant effort on the part of the Utilities to incorporate.

Establish Process for Initial Reporting Date: On or before July 1, 2010

First and Second Quarterly Reports Due Date: September 1, 2010

H. Process for Phase 2 Review: Adding New Measures & Error Corrections

The November 18, 2009 ALJ Ruling on Non-DEER measures review process describes a Phase 2 for a general process for the submission, review, and acceptance/approval of measures for the non-DEER measure database on a going forward basis after March 31, 2010. The ruling states, "The level of detail of the review of measures will be performed as ED resources permit or as ED deems appropriate based upon the importance of measure(s) to the overall Utility portfolio." The Ruling further describes a high-level process for this review.

ED will review the Phase 2 process as described in the November 18, 2009 ALJ Ruling with the Utilities to identify what is not clear to the Utilities in the Phase 2 process to ensure

that the requirements are clearly communicated. Clarifications to this process will be completed by May 28, 2010.

Status of Phase 2 Review:

ED will meet with the Utilities to review and clarify the Phase 2 process by May 28, 2010. ED will instruct the ED DEER team to complete those workbooks as soon as practical for use in Phase 2 review and approval activities.

Appendix I

Excerpts from Decision (D.) 09-09-047

D.09-09-047 was issued on September 24, 2009 and included the following ordering paragraphs (page 390):

47. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company shall closely examine 2006-2008 program final evaluation results when they become available and to apply the results to the approved programs as warranted for the 2010-2012 program period.

48. Both DEER 2008 and non-DEER measure ex ante values established for use in planning and reporting accomplishments for 2010-2012 energy efficiency programs shall be frozen, based upon the best available information at the time the 2010-2012 activity is starting.

The sections of D.09-09-047 reproduced below specifics of particular importance to understanding the intent of the timing and content of the frozen data sets highlighted.

4.2 Energy Savings Goals/4.2.2 Discussion, (D.09-09-047, p42-45)

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 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.

We find that these actions support the design of a robust, aggressive utility program portfolio. The energy savings goals remain stretch goals which will neither be too easy nor too difficult for the utilities to meet. In addition, with more appropriately aligned goals, we gain the freedom to consider adjustments to the utility portfolios which are responsive to evaluation results without concern that we would be imposing a burden on the utilities with regard to reaching energy savings goals.

4.4 Administrative Costs, (D.09-09-047, p. 64)

Finally, administrative costs include the costs to respond to Commission reporting requirements and other regulatory activities. The Commission must do its part to minimize the regulatory burden on the utilities and have made every effort in this decision to require only necessary filings and reports. We request that the Energy Division review further all existing and new energy efficiency reporting requirements and report on possible ways to streamline these requirements.

7.3. Process for Adopting Detailed EM&V Plans and Budgets for 2010-2012 (D.09-09-047, page 301)

The EM&V Decision we will adopt later this year will include, but not be limited to, the following issues:

(Continuing on page 303)

- *Frequency and Scope of DEER Updates* -- We are aware of the concerns expressed by the utilities that the continual updating of the DEER values creates a "moving target" for the utilities in terms of goal attainment. While this is the model that we approved in our 2004 and 2005 decisions, as with other aspects of those decisions, we recognize that these factors have not played out as we originally envisioned. There is a need to ensure that our DEER values reflect the most recent technical information gathered in our EM&V processes while fairly addressing concerns that the utilities must be offered a reasonable opportunity to meet their goals and that the goals themselves cannot become constantly moving targets. Consistent with this, in the goals section of this Decision, we commit to holding constant the 2008 DEER ex ante values and methodologies for the purpose of measuring portfolio performance against goals contingent upon essential corrections in the utilities' compliance filings. The decision here to hold constant current DEER values for the purpose of measurement against goals, does not imply that we will cease from updating DEER for other purposes. We also will hold constant the non-DEER ex ante values finalized in the process to be determined as described in Section 4.2.2. There remains value in updating these metrics to ensure the best available load impact estimates. In the upcoming decision on EM&V we will examine the optimal scope and timing of such updates.

(Continuing on page 304)

As discussed in Section 4.2.2, the DEER 2008 and non-DEER measures ex ante estimates will be frozen for planning and program implementation purposes. Energy Division has not had the opportunity to perform the non-DEER measure ex ante parameter review and approval. We direct Energy Division to provide the utilities within 30 days after the effective date of this decision a document that

details the requirements and procedure for the utilities to submit non-DEER measure workpapers for Energy Division's review and approval. The utilities shall fully cooperate with Energy Division during the course of the workpaper review so that this review and the finalization of non-DEER ex ante parameters that will be frozen for planning and program implementation purposes is completed in time for utilization in the utilities' first quarterly reports in 2010.

Appendix II

Energy Division – Joint Investor-Owned Utilities Custom Application Review Process

Background

The utilities have expressed to Energy Division that it is not possible to provide Energy Division ex ante estimates for custom calculated measures or projects until a customer submits an application for a specific measure or project. Energy Division understands that due to their very nature there is a wide and somewhat unpredictable variation of custom measures and projects that will be encountered during the 2010-2012 energy efficiency programs cycle. For each of these custom measures or projects the energy savings impacts, net-to-gross values, effective useful lives, and participant and incentive dollar values are not known until a customer program application is approved by the utility. The utilities have provided Energy Division with a forecast of their target total custom measure/project participation and have also provided a list of calculation methods they expect will primarily be used to produce ex ante energy savings claims. However both the measure or project mix and the specific calculations methods used on each will vary as implementation proceeds.

For these reasons, the intent of “freezing” ex ante values of customer measures and projects while the same as that for deemed measures and project, the process is expected to be different. Some calculation approaches/methods can be approved and “frozen;” however, the input values used in those calculation methods to produce ex ante values may vary by project for these custom measures and projects and hence need a different process for approval and reporting. Additionally, it is expected that there will be a need to alter existing methods or add new methods in cases when specific custom project are encountered that are not adequately addressed by the methods available and approved at the time of the ex ante “freeze.” Therefore, the “process” outlined below will be the agreed upon procedure for which the utilities will provide information/data to Energy Division for review of customized projects for the 2010-2012 program cycle. The Energy Division’s review process will be in parallel of the utilities’ own internal project application review and approval process. The Energy Division’s review process will be implemented in a manner to avoid causing delay in the utilities’ program application process or the project implementation activity.

Process

To address how Energy Division will fulfill its mandated role in reviewing ex ante values to be used for custom measure/project claims and how the utilities will report ex ante claims for custom measures/projects, a process is outlined in this document. The objective of this process is for Energy Division to review the utilities ex ante custom project estimates early providing real time feedback to the utilities, without interrupting the program application process or project implementation activity.

Steps:

2. **Custom measure/project calculation methodologies shall be based upon DEER methodologies as frozen for 2008 DEER version 2008.2.05 when possible or practical.** This means that if a measure or project utilizes technologies or is subject to use patterns or interactive effects considerations that are either the same or similar to DEER measures the calculations should be consistent with methods or values taken from DEER. This requirement is not intended to restrict the utilities ability to add new custom measures or restrict the custom measure calculation procedures for measures not within DEER. It is intended to ensure that custom measures that are variants of a DEER measure utilize methodologies derived from DEER to ensure the ex ante estimates for similar deemed and custom measures are comparable. Energy Division will instruct the DEER team to post all DEER analysis tools, models and documentation on changes to parameters or methodologies on the DEEResource.com website. The DEER team will also be instructed to provide assistance to IOU staff and their contractors to understand DEER methodologies and how to utilize the DEER tools in support of their development of workpapers and added tools for their ex ante estimates.

3. **For all custom calculations the utilities shall provide the Energy Division a complete list and archive of all calculation tools.** Tools shall mean software, spreadsheets, "hand" calculation methods with procedure manuals, or any automated methods. By March 31, 2010 the IOUs shall submit to Energy Division for archiving all tools expected at that time to be used for estimating ex ante values for custom projects. Tools that are commonly available to the public via website download will be supplied by providing links to that website so any versions referenced on the IOU submitted list may be downloaded. Tools that are created by the IOUs or their contractors must be supplied to Energy Division along with any available documentation. The submitted list of tools, tool weblinks, and tool archive shall be updated by the IOUs on an ongoing manner during the 2010-2012 implementation activity such that Energy Division is informed and is able to be in possession of the new tool or a new version of a prior listed tool in the production of ex ante estimates for any application prior to the time of application approval or submittals to Energy Division under item 4 below.

The tool submission shall include:

- a. All manuals and use guidelines, where applicable. If the calculation tool is simply a spreadsheet type, then all cell formulas and documentation shall be readily accessible from the tool;
- b. A list of technologies, measure or project types that may perform custom calculations using the tool;
- c. If several tools may be used to perform calculations for the same measure a clear description when one tool or another may be used will be provided;

- d. When available, a list of key input parameters for each tool and each technology covered by a tool and the utility guidance or review criteria for those input when ex ante values are calculated by users of the tool will be provided;
- e. the key user input parameters must include both baseline and installed measure values
- f. the allowed baseline guidelines for qualification for early replacement (pre-existing equipment) as the baseline.

Energy Division will review inputs to the tools as part of their ex ante values approval and freezing role. In this role, the Energy Division will also insure that the input values and methodologies are reasonable and consistent with common engineering practices at their discretion. This review will take place as the Utilities submit projects during the implementation period. It is expected that some tool information and documentation listed above will not be complete by the end of March. In these cases the Utilities shall make their best effort to submit more complete information and documentation on those tools at the earliest time and shall provide timely support to the Energy Divisions reviewers on use of the tools until such complete documentation is available.

Energy Division, as time permits during the review cycle, may choose to provide the utilities with comments on one or more of the tools, require more information or documentation on the tool. After review of a tool Energy Division may require changes to a tool or removal of a tool from future use if that review has concluded that the tool produces erroneous results or is not in conformance with DEER methods for technologies covered by DEER. Energy Division shall provide the IOUs reasonable opportunity to cure any tool deficiency prior to removal from the list.

4. **The utilities shall keep a complete electronic project archive of all custom measures or projects for which applications are approved and/or claims are made.** For each custom measure or project the archive will contain all documentation, information on tools used, tool input files or parameters used in the measure or project calculation, and description of the source of the tool input parameters. With this submission it is expected that IOUs will provide Energy Division with the same documentation its own reviewers had access to during their review for application approval such that Energy Division and its consultants are able to reproduce and review any selected project ex ante savings estimates or claims. All cost-effectiveness parameters shall be identified in the project files including the source of those parameters (including estimated incentive and participant cost, EUL, NTG for each measure included in the custom project.) Each utility claim or tracking data submission will include a reference for each custom measure or project to the archive entry for that item and the claim or tracking submission shall include the archive for all measures or projects claimed.

5. **For applications that meet or exceed the trigger points defined below the utilities will provide to Energy Division those custom project applications along with ex ante and incentive estimate supporting documentation in electronic format.**

Energy Division expects these are the same applications along with the complete supporting documentation for the application ex ante impacts, incentive and cost-effectiveness estimates undergoing the utility internal review prior to the application approval. The applications and supporting documentation, in electronic format, shall be submitted to Energy Division at the website URL <https://energydivision.basecampHQ.com> Energy Division and the Utilities will develop an agreed upon project identification system that will be used to uniquely name the files which are submitted.

The trigger for submission shall be effective at or prior to the time of utility customer application approval or acceptance into a program by the utility. The utilities normally schedule site visits during the pre-inspection period. The utilities will provide notification to ED within 1 business day of scheduling the site visit if the scheduled site visit date is more than 5 days away, or notification within that same day if the site visit is scheduled for less than 5 days from the scheduling date. The submission is intended to allow Energy Division to review the application in parallel with the utility and allow Energy Division to coordinate any pre-installation inspections, customer interviews and pre-installation M&V or spot measurements with the utilities similar activities. For this reason it is required the applications that meet this trigger be submitted as early as possible to facilitate this coordinated activity. Energy Division will supply the IOUs with the results of their reviews and any M&V activities on an ongoing basis. Energy Division reviewers will interact with and provide feedback to IOU review staff on an ongoing basis such that IOU reviewer are aware as early as possible of any important issues. The IOUs are expected to consider the Energy Division review information in future application review and approval activities as well as future ex ante saving claims. However there is no requirement for any specific action in response to information provided to the IOUs from the Energy Division's ongoing review process.

The trigger values shall be at the site or project level not just a single application. For example, some projects are divided into multiple measures and submitted as multiple applications. All applications for a single customer site during the 2010-2012 cycle participating in any program shall be aggregated for comparison with the trigger values and once any trigger level is hit all applications for a customer site shall be submitted. The trigger values shall be:

- a. 250,000 kWh
- b. 200 kW
- c. 10,000 therms

These values are intended to capture approximately 10-20% of the largest projects where the majority of the project savings are custom measures. These projects may represent 50-70% of the total custom measure ex ante savings. This submission will be an on-line submission to Energy Division and will be initiated as previously

indicated. This submission will be done at the time of utility application approval. Although this trigger will require a utility electronic submission to Energy Division, the implementation may proceed once the submission is complete. If deemed necessary an Energy Division M&V contractor will coordinate with the utility to perform any combination of:

- a. reviewing project savings estimate calculations including either parameter values or tool estimate methods;
- b. coordinated pre-/post- site inspections;
- c. coordinated pre-/post- M&V for this project.

Energy Division will coordinate and M&V activities on these custom projects with the IOUs and may choose to utilize the Utilities or its own contractors, at Energy Division expense, to perform site inspections or pre-installation M&V.

Not all projects submitted for early review as a result of the above trigger will be subject to an Energy Division M&V activity. However, those projects selected for review may be later included as sample points into Energy Division's impact evaluations. Energy Division acknowledges that applications submitted as a result of meeting the trigger thresholds defined above may have ex ante estimates updated prior to being included in a portfolio savings claim submission. The assumptions made by a utility for ex ante claims would be frozen based on the utility's actual claim for that application including any modifications made prior to final incentive payment such as those based upon utility ex ante "true-up" from post-installation inspections, M&V or other adjustments as the utility deems necessary.

To facility future communication:

Energy Division and the IOU will establish a working group to allow an ongoing dialog on issues and problems in any aspect of the custom measure impact estimation process. This working group will provide a forum for all party's exchange information on their current activities as well as future plan as well as discuss and resolve problems and issues with the process outlined in this document. The working group will also provide a forum for Energy Division to inform the IOUs on issues related to its impact evaluation activities that relates to the custom measure ex ante estimation process. These issues include items such as baseline definitions, net versus gross savings definitions and other items as any party deems necessary.

Appendix III

Energy Division DEER 2008 fixes and additions Proposal Document

Embedded is the most recent document circulated between Energy Division and the Utilities.
Click the object to open the full document.



Jan2010 DEER
Measure Database Uj

Appendix IV

Utility Response to DEER 2008 fixes and additions Proposal

Embedded is the most recent document provided by the Utilities to Energy Division with their responses to the proposed DEER corrections and additions. Click the object to open the full document.



Joint IOU comments
re upgrades to DEER :

Appendix V

High Level Analysis of DEER Bug fixes on SCE Portfolio Savings

The following method was used to approximate the difference in portfolio level impact of the DOE2.2 fixes on lighting measures between 2008 DEER version 2008.2.05 and the values found in the work books supplied to the utilities by the Energy Division (ED).

2008 DEER version 2.05 used limited heating/cooling types in the analysis of measures. More specifically for residential measures two choices were available (Gas Furnace with or without Split System DX Cooling) and for non residential building types there was only one system type available (Packaged DX with Gas furnace). In order to compare like values and eliminate the introduction of various new system types into DEER, values needed to be selected from the work books that represent the values/system types in 2008 DEER version 2008.2.05.

In order to accomplish this, for residential measures, the measures selected from 2008 DEER version 2008.2.05 were the measures with the system type Split System DX Cooling with Gas Furnace and the SCE Territory (Weighted) climate zone. From the work books V 3.02, the kWh and kW values were taken from the column that supplied values for the same system type. To achieve a climate zone weighted value the weighting per climate zone of that particular system type was taken from the work book tab titled "Selected Weights".

With two comparable values based on the same system type and climate zone weighted, the resulting delta in kWh and kW must primarily result from fixes/changes to DOE2.2, although some other minor changes are a part of these values as well.

For non residential building types, the logic for achieving climate zone weighted values for various systems types seems to be much more complicated. In order to weight the particular system types by climate zone, columns Q through AW were unhidden on the "Impacts Review" tab. It appears that in rows 71 through 86 and columns AK through AW are the climate zone weighting factors for the various system types. These values were extracted for each climate zone in column AK which appears to coincide with the column in Table 2. for Gas Heat – PSZ.

The weighting and comparison were then done very similarly to the residential approach. To obtain a very high level percentage, a few key building types were sampled. The percentage reduction in kWh and kW were averaged to come up with a single value for this analysis.

Overall the results were:

-0.03% kWh and -2.83 % kW projected for the 2006-2008 SCE portfolio.

General assumptions for this analysis are:

- Portfolio Analysis is limited to typical SCE HIM lighting measures from the 2006-2008 program cycle.
- Other minor changes in the workbook vs 2008 DEER version 2008.2.05 that could not be disaggregated are implicitly included within the analysis above. Data from the large office lighting building type was excluded to avoid this particular error.
- Variations to other IO portfolios and the new cycle may impact these impacts.

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a copy of the foregoing **MOTION OF SAN DIEGO GAS & ELECTRIC COMPANY (U-902-M), ET. AL. SEEKING THE RIGHT TO FILE CASE MANAGEMENT STATEMENT REPORT** on all parties of record in **A.08-07-021, A.08-07-022, A.08-07-023 and A.08-07-031** by electronic mail and by U.S. mail to those parties who have not provided an electronic address to the Commission.

Copies were also sent via Federal Express to Administrative Law Judge David Gamson and Commissioner Dian Grueneich.

Dated at Los Angeles, California, this 18th day of February, 2011.

 /s/ Marivel Munoz
Marivel Munoz

CALIFORNIA PUBLIC UTILITIES COMMISSION
Service Lists: A.08-07-021,022,023 and 031– Last Changed: February 15, 2011

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