

PUBLIC UTILITIES COMMISSION

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October 21, 2010

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Advice Letter 3065-G-A&B/3562-E-A&B

Subject: Staff Disposition of PG&E's Advice Letter 3065-G-A&B/3562-E-A&B
regarding Energy Efficiency Compliance Filing for the 2010-2012 Cycle

Dear Ms. Yura:

The Energy Division has determined that Advice Letter (AL) 3065-G-A&B/3562-E-A&B is in compliance with Ordering Paragraph 15 of Decision (D.)09-09-047, effective January 1, 2010. This disposition letter supersedes the letter that Energy Division sent on May 26, 2010 approving PG&E's Advice Letter (AL) 3065-G /3562-E with effective date of June 1, 2010.

The Utility Reform Network (TURN) and the Division of Ratepayer Advocates (DRA), Local Government Sustainable Energy Coalition (LGSEC) and the City and County of San Francisco (CCSF) submitted protests on December 11th and 14th, 2009. Under General Order 96-B, Section 7.6.1, Energy Division rejects the protests on the basis of the technical review and analysis attached to this disposition letter.

On April 21, 2010, Energy Division (ED) notified PG&E of the need for a Supplemental Advice Letter filing to address three issues of deficiency regarding: 1) PG&E planned budget reductions in PG&E's Strategic Plan program and activity budgets; 2) The timing of commencing PG&E's on-bill financing program; and 3) Budget amounts in view of the Commission's guidelines for direct implementation non-incentive (DINI) expenditures.

PG&E submitted Advice Letter 3065-G-A/3562-E-A on June 30, 2010. After initial review for forecasted energy savings found a change from its original DEER 2008-filed values, Energy Division directed PG&E to supplement AL 3065-G-A/3562-E-A by replacing the affected E3 calculator energy savings and tables.

Jane K. Yura
October 21, 2010
Page 2

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.

Please contact Anne Premo of the Energy Division staff at 916-928-4700 (awp@cpuc.ca.gov) or Peter Lai at 213-576-7087 (ppl@cpuc.ca.gov) if you have any questions.

Sincerely,



Julie A. Fitch
Director, Energy Division

Attachments (3) Technical Review and Analysis, Strategic Plan and DINI Budget Change Table and E3 Calculators/DEER Issues.

cc: Bob Finkelstein, TURN
Jeanne M. Sole, City and County of San Francisco
Dennis J. Herrerra, City and County of San Francisco
Linda Serizawa, DRA
Jody S. London, LGSEC
Julie Fitch, Energy Division
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Service List A.08-07-021

Attachment 1

TECHNICAL REVIEW AND ANALYSIS

Ex Ante E3/DEER Compliance Filings

Energy Division Staff finds PG&E's advice letter E3 calculator to be in compliance with D.09-09-047. TURN and DRA cite that PG&E did not comply with D.09-09-047 by not using the ED adjusted E3 Cost-effectiveness Calculator as a starting point for its cost-effectiveness compliance filing. Based on TURN's analysis, the protestants cited that PG&E changed savings inputs in its compliance E3 Calculator from those set forth in the Energy Division adjusted E3 Calculators, and that the changes generally cause the resulting measure of savings to be higher and, by extension, inappropriately inflate the cost-effectiveness of the measures. Energy Division Staff found that the utility did use the Energy Division adjusted E3 Calculator as a starting basis as directed in D.09-09-047, and the utility did use the 2008 DEER Version 2008.2.05 as a starting point when a measure is a DEER measure.

TURN's observed differences in savings input values are generally due to various adjustments made to particular DEER measure cost-effectiveness value parameters that are not transparent when looking at the E3 Calculator. Further explanation of the adjustments made to PG&E E3 calculator is provided in Attachment 3 to this disposition letter. Energy Division Staff finds PG&E's advice letter E3 calculator to be in compliance with D.09-09-047.

Administrative Costs

DRA states that PG&E's administrative costs are higher than the 10% cap ordered by D.09-09-049. Administrative cost restrictions ordered by Decision (D.) 09-09-049, Ordering Paragraph (OP) 13a, page 369, apply to the utility administrative cost portion of overall portfolio costs, excluding third party or local government subcontractor administrative costs. PG&E's "utility" administrative costs are 8.8% of costs. When third party and local government subcontractor costs are included, the overall percentage is 10.8%. PG&E has complied with D.09-09-049, OP 13a.

DRA is also concerned that Third Party and Local Government Partnership Administrative Costs higher than 10% contravene the Commission's intent to control administrative costs. D.09-09-049 does not impose a 10% cap on either Third Party or Local Government Partnership costs. Instead, the decision encourages a 10% target. PG&E complies with this aspect of the decision, with Third Party costs including utility administration costs at 11.8% and Government Partnership costs including utility administration costs at 12.0%.

Budget Caps and Targets

DRA refers to a set budget cap categories as Administrative Costs – 10%, Marketing, Education and Outreach (ME&O) - 6%; Evaluation, Measurement and Verification (EM&V) – 4%; Non-Resource support costs (excluding non-incentive direct implementation (DINI) costs) – 20%. Instead, D.09-09-049 identifies only utility administrative costs as having an absolute cap of 10% of the overall portfolio budget. The ME&O budget target is set at 6% of the overall portfolio budget, not an absolute cap. Similarly, Non-Resource support costs of 20% of the overall portfolio budget are also identified as a budget target. The EM&V budget amount is tentatively set at 4% of the overall portfolio budget, subject to further consideration under the later EM&V Decision 10-04-029, (D.09-09-049, mimeo pp.73-74). In its supplemental filing, PG&E complies with these budget targets as follows:

| | |
|-------------------------------------|-------|
| Administrative Costs – Utility only | 8.8% |
| ME&O | 7.9% |
| Non Resource support costs | 12.8% |
| EM&V | 4.0% |

Other Administrative Cost Issues

DRA requests an explanation for the apparent increase in PG&E's overhead costs from \$74 million in PG&E's July 2009 filing to \$94 million in the November PG&E Advice Letter. PG&E responded:

"The overhead number cited by DRA reflects a shift of \$24.3 million for IT costs from the EM&V cost category to overhead.¹ This shift responded to the Decision's directive to categorize costs for portfolio-wide IT services and support as administrative costs. (Decision, p. 50). As further clarified by ED in a memo to the utilities, "EM&V and other portfolio-level IT costs should be charged to administrative costs except in the case that these constitute capital costs . . ." (Energy Division Memo dated October 22, 2009, 2010–2012 Energy Efficiency Portfolio Administrative Costs, provided in PG&E's Advice Letter, Attachment 2).

Costs for portfolio-wide IT services and support have been spread across overhead for all PG&E's EE programs. Thus, the apparent increase in overhead is a reallocation of funds aligned with the directives of the Decision and ED instructions to the IOUs rather than an increase in funds. Certain overhead costs align with labor costs. PG&E decreased the number of fulltime equivalents (FTEs) in all cost categories in the Advice Letter compared to the July 2009 filing, and overhead costs decreased accordingly by about \$3.9 million. (This FTE/labor reduction is partially reflected in DRA , p. 6, Table 5 as a \$3.1 million decrease in HR Support/Development costs). The IT cost reallocation masks the nearly \$4 million reduction in overhead related to labor decreases."

¹ The IT costs reallocated from EM&V to overhead are for ongoing support for PG&E's legacy MDSS system through the 2010–2012 program cycle and do not include the cost to upgrade to a new system as that request was deferred to PG&E's general rate case, as discussed in Attachment 2 of PG&E's Advice Letter.

Energy Division confirms that PG&E's explanation correctly states the directions of D.09-09-047 and Energy Division's subsequent guidance regarding IT costs.

Overhead Costs as a Percentage of overall Administrative Costs

DRA states that PG&E's overhead costs are 81% of administrative costs (DRA, p.6, Table 4). PG&E responded to DRA as follows:

"The number cited by DRA's Table 4 is a typographical error. In fact, in Table 5, DRA shows that PG&E's overhead costs are 61% of administrative costs, and in Table 6, that Southern California Edison's overhead costs are 81% of administrative costs (DRA, pp. 6–8). The numbers were inadvertently switched in Table 4."

Energy Division observes that the overhead costs are a high percentage of administrative costs but the Commission has imposed no limit or formula restricting overhead costs under the category of Administrative Costs.

Strategic Plan Program Budgets

CCSF, DRA and LGSEC state that PG&E's original advice letter budgets may put the Strategic Plan's objectives at risk. Energy Division's initial compliance review revealed that three Strategic Plan programs had significant budget reductions and program changes, and requested budget augmentation to comport with the Program Implementation Plans (PIPs) filed in July 2009 and in compliance with the decision. These programs and the requested augmentation amounts are: Emerging Technologies (ET) \$8 million, Zero Net Energy (ZNE)

Buildings \$6-12 million, and Local Government (LGP) Innovator Pilots \$4.5-\$5 million. Energy Division also requested clarifications and improved implementation timing for the On Bill Financing program.

In response, PG&E submitted three supplemental advice letters, cited below. These advice letters were approved in June, 2010 as follows:

| <u>Subject</u> | <u>Advice Letter</u> | <u>Approval Date</u> |
|-----------------------|-----------------------------|-----------------------------|
| On Bill Financing | 3118-G-A/3667-E-A | 6/30/2010 |
| Emerging Technologies | 3118-G-A/3667-E-A | 6/30/2010 |
| Innovator Pilots | 3081-B-B/3597-E-B | 6/1/2010 |
| ZNE Pilot | 3078-G-B/3594-E-B | 6/7/2010 |

Energy Division has reviewed the supplemental Compliance AL 3065-G-A&B/3562-E-A&B for budget changes and confirms that these Strategic Plan programs now have augmented budgets of: \$8 million for Emerging Technologies transferred from the portfolio budget, \$6 million for ZNE, with \$4.6 million transferred from the portfolio budget and \$1.4 million from the EM&V budget, and \$4.5 million for Local Government Innovator Pilots transferred from the portfolio budget. PG&E has complied with Energy Division's budget change requests.

Direct Implementation, Non incentives and Rebates (DINI)

In its request to supplement funding for the Emerging Technologies subprograms, the ZNE Pilot, and LGP Innovator pilots, Energy Division also requested reductions to the cost category of DINI by about \$27 million to bring this categorical back towards the soft target of 20% of the portfolio budget. Energy Division suggested that cost shifts within the budget could provide the funding, without changing the overall portfolio budget approved by D.09-09-049. To accommodate this combined request, PG&E's budget reflects a major fund shift of \$52 million from DINI Core and Third Party Programs with approximately \$10 million more from Third Party Administrative Costs, redistributing the majority of it (\$47.6 million) to Direct Implementation Incentives. (See Table 5 of the Supplemental Compliance AL 3065-G-A&B/3562-E-A&B reproduced as Attachment 2 to this Disposition Letter) The Energy Division request to shift DINI costs and the budget shifts cited above also affected the portfolio energy savings, causing PG&E to rebalance its portfolio for cost effectiveness.

CFLs

DRA requests detailed fund-shifting reporting to ensure an absence of transfers to the category of Basic CFLs, as ordered by the Decision (DRA, p. 13).

:
As noted in PG&E's Advice Letter, "Funds will not be shifted into the Residential Basic Lighting subprogram, per D.09-09-047 (at p. 140)." (PG&E Advice Letter, p. 9–10, Table 5, footnote b). The fund-shifting categories in PG&E's Advice Letter found in Table 5 fully comply with D.09-09-047, which created fund-shifting categories for each of the statewide program areas and EM&V (Decision, p. 310). As stated in D.09-09-047, the IOUs are required to report any fund shifting activity on EEGA in advance of the first report, due July 2010 (Decision, OP 43e, p. 389).

Energy Division notes that the reporting template is still under development with Energy Division and will include the necessary detail to ensure compliance with limitations on fund shifting, including respecting absolute limits on the Basic Residential Lighting subprogram budget.

DRA also states that it does not see a mandate for IOUs to conduct an outreach campaign to encourage customers to install stored CFLs (DRA, p. 14). PG&E differs from DRA in interpreting the following Decision guidance as a mandate, "We direct the utilities to submit in their compliance filing an outreach campaign focused on getting these bulbs out of storage and into sockets." (Decision, p. 143).

In response, PG&E filed with its Advice Letter an Attachment 4, *Plan for Encouraging Customers to Install Stored CFLs into Sockets*. This plan describes a CFL marketing campaign delivered in 2009 that included messages promoting the immediate use of CFLs in storage and noted that it will work with the other IOUs on future campaigns, based upon available funding.

HVAC

DRA requests that the utilities provide rationale for cutting HVAC programs, given the prominent role that HVAC plays in the Strategic Plan, as well as in providing energy savings and peak energy savings (DRA, p. 12).

In order to comply with D.09-09-047, all utilities had to rebalance their portfolios to meet the required budget reductions and reallocations between programs. PG&E states that “given the budget reductions, PG&E’s decision to reduce HVAC program funding was based on these programs’ consistent failure to achieve cost effectiveness against metrics. Should the metrics for cost-effectiveness change or should the HVAC program demonstrate sufficient cost-effectiveness in this cycle, PG&E will request additional funding from the Commission for this program. The Decision specifically encourages such funding augmentation, “As actual experience is gained over the next three years the utilities can request budget augmentations as circumstances warrant ...” (D. 09-09-047, Mimeo, p. 76).

San Francisco Energy Watch Program

CCSF protests the reduction in the San Francisco Energy Watch program from \$12 million in PG&E’s July 2009 filing to \$11.54 million in PG&E’s Advice Letter (CCSF, pp. 2–3). Many programs including the San Francisco Energy Watch program saw a budget decreases reflecting the Decision’s budget reductions. CCSF’s reduction was 4% of its request. PG&E responds that it understands that any reduction creates problems for its partners and hopes to work with partners to nonetheless create significant energy savings in California through efficient implementation of energy efficiency programs that offer attractive products to carefully targeted customers.

Attachment 2

PG&E AL 3065-G-A&B/3562-E-A&B

**TABLE 5
SUMMARY OF PG&E CHANGES FROM COMPLIANCE AL
BY PROGRAM AND COST CATEGORY
(\$M)**

| Program | Admin | Marketing | Direct Implementation Non-Incentives (DINI) | Direct Implementation Incentives | Change from Compliance AL |
|--------------------------------------|-----------------|----------------|---|----------------------------------|---------------------------|
| Strategic Plan Programs | | | | | |
| Emerging Technologies | \$0.8 | \$0.8 | \$6.4 | \$0.0 | \$8.0 |
| Innovator Pilots | \$0.3 | \$0.0 | \$4.2 | \$0.0 | \$4.5 |
| Zero Net Pilots (excludes EM&V) * | \$0.8 | (\$0.0) | \$3.9 | \$0.0 | \$4.6 |
| Total Strategic Plan Programs | \$1.8 | \$0.8 | \$14.5 | \$0.0 | \$17.1 |
| Core Statewide Programs | | | | | |
| Residential | (\$0.1) | \$0.0 | (\$31.9) | \$31.0 | (\$1.0) |
| Commercial | (\$0.4) | \$0.0 | (\$7.1) | \$0.0 | (\$7.5) |
| Industrial | (\$0.2) | \$0.0 | (\$2.8) | \$0.0 | (\$2.9) |
| Agricultural | (\$0.2) | \$0.0 | (\$3.2) | \$0.0 | (\$3.4) |
| Total Core Statewide Programs | (\$0.9) | \$0.0 | (\$45.0) | \$31.1 | (\$14.8) |
| Third Party Programs | | | | | |
| TP-Residential | (\$1.2) | \$0.3 | (\$1.3) | \$2.2 | (\$0.0) |
| TP-Commercial | (\$9.4) | \$0.4 | (\$1.2) | \$6.1 | (\$4.1) |
| TP-Industrial | \$0.7 | (\$0.6) | (\$3.8) | \$5.3 | \$1.7 |
| TP-Agricultural | (\$1.8) | (\$0.3) | (\$0.2) | \$2.4 | \$0.0 |
| TP-HVAC | \$0.0 | \$0.0 | (\$0.5) | \$0.5 | \$0.0 |
| TP-WE&T | \$0.1 | \$0.0 | (\$0.1) | \$0.0 | \$0.0 |
| Total Third Party Programs | (\$11.7) | (\$0.1) | (\$7.1) | \$16.5 | \$2.4) |
| Total Change | (\$10.7) | \$0.7 | (\$37.6) | \$47.6 | \$0.0 |

* Not shown in totals, \$1.4M funding for ZNE Pilot Program authorized from EM&V budget.

Attachment 3

E3 Calculators/DEER Issues

Decision Language

In D.09-09-047, the Commission adopted PG&E's 2010-2012 energy efficiency portfolio and budgets, effective January 1, 2010, but directed the utility to file a compliance advice letter within 60 days of the effective date of the Decision.

Per D.09-09-047, Ordering Paragraph No. 15 "[t]he utilities shall, within 60 days of the effective date of this decision, file a "compliance" Advice Letter (AL) containing the following information:

g. 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.

Also, per the same Decision, Ordering Paragraph 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 Commission further clarified that the DEER 2008 values referred to in the 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.

In accordance with D.09-09-047, PG&E included its E3 Calculator as part of the compliance AL filing 3065-G/3562-E submitted on November 23, 2009. PG&E submitted supplemental AL on June 30, 2010, to address deficiencies that Energy Division raised on the initial AL filing. PG&E filed a second supplemental AL on September 17, 2010, to submit revised E3 Calculator that matches the DEER energy savings for Appliance Recycling Program as directed by Energy Division.

E3 Calculator Adjustments

Energy Division made adjustments in the E3 Calculator for PG&E for the following measure groups: compact florescent lamps (CFLs), custom projects, appliance recycling - refrigerators and freezers, and room air-conditioners (not a DEER measure), and HDTVs. These adjustments were incorporated into the "ED-adjusted E3 Calculator" that was posted on the CPUC website in October 2009, which the Commission directed the utilities to use for their compliance advice letters per Ordering Paragraph 15.g. in D.09-09-047.

For Upstream CFLs, to adjust the DEER gross energy and demand savings value, Energy Division adjusted the DEER gross energy and demand savings value by using an installation rate based on the 2006-2008 EM&V value of 67% for residential and 90% for non-residential,

whereas PG&E in its July 2009 filing assumed 76% for all. To estimate interactive-effects, Energy Division utilize DEER values based on saturation of air-conditioning and gas/electric/heat pump/other heating from the most recent utility specific appliance saturation study results. This reduces HVAC interactive effects, less negative Therms (from less gas heating) impact and less positive electric (due to less air-conditioning and more electric heat). PG&E assumed 47% air-conditioning and 100% gas furnace saturation.

For custom savings, Energy Division used an 80% gross savings realization rate for all major custom measures that were not using DEER values, whereas PG&E assumed 100% for core gas and electric. The realization rate of 80% is derived from the 2004-2005 Standard Performance Contract Program Final EM&V Report. The report value was actually 0.79 which was rounded up to 0.80 for this adjustment. Energy Division adjusted a few of PG&E's electric custom measure costs to match Southern California Edison Company's (SCE) costs. PG&E estimated a \$0.20 to \$0.60 customer cost per kWh of savings. This is a year 2000 vintage cost estimate that is too low.

For the Appliance Recycling Program, as in CFLs, Energy Division utilized DEER values based on air-conditioning and gas/electric/heat pump/no/other heating saturation from the most recent utility specific appliance saturation study results to estimate interactive effects. (PG&E used 100% air-conditioner and gas furnace saturation). Energy Division also used DEER values for units either 'removed and replaced' or 'removed and recycled' from conditioned and unconditioned area split based on ADM 04-05 ARP EM&V project surveys. 'Removed and replaced' means that the recycled unit transfer is prevented; however, the customer that could not get the recycled unit goes on to acquire another unit. PG&E assumed that 95% of refrigerators and 87% of freezers are replaced. Energy Division also adjusted DEER values to assumed replacements with a minimal Energy Star compliant unit, since DEER values are based on a typically used unit. Lastly, ED separated refrigerators and freezers into two lines; used PG&E's detail backup to get unit counts separated for refrigerators and freezers.

ED additionally made adjustments for two measures that are non-DEER measures. For room air-conditioners, the most recent survey data indicates room air-conditioner units utilize between 15-20% of the amount of electricity per ton of unit size as do central air-conditioning units. Instead of using this 15-20% value, Energy Division assumed that room a/c units with higher efficiency will save 50% as much as a central a/c DEER unit per ton of size. PG&E assumed that room air-conditioners save 90% of central air-conditioners per unit size.

For HDTV's, ED assume the average savings of program unit is 20% of Energy Star qualified HDTV consumption (program units must exceed Energy Star by 15% so this provides for some non-Energy Star units purchased otherwise). ED also assumes Neilson survey data for late afternoon (12% viewers) provides an average of 12% of units on during peak period (this is likely high as the Neilson data is for households not TV's and many households have multiple TV and it is unlikely that the new unit is always the one viewed during the peak period). ED also used the DEER default NTG of 0.7, and an assumed EUL of 7.5. PG&E assumed a Unit Energy Savings baseline of 2006 LCD and Plasma HDTV's for 153kWh/unit-year, a NTG of 0.8, and an EUL of 9.8.

TURN and DRA Protests

On December 14, 2009, TURN and DRA submitted protests to the Utility Advice Letters Implementing 2010-2012 Energy Efficiency Portfolio Budgets And Other Directives Pursuant to D.09-09-047.¹ TURN's and DRA's protests stated, among other items, that the utilities have not fully updated their energy savings assumptions as ordered by the Commission in performing cost-effectiveness calculations.

In their protests, TURN and DRA cited that the utility changed savings inputs from those set forth in the ED-adjusted E3 Calculators. TURN stated that there were some substantial discrepancies between the ED-adjusted E3 calculators that the utility was instructed to use as starting bases, and the E3 calculators used in the utility compliance filing. TURN believes that the utility made these changes without Commission authority. The changes generally caused the resulting measures' savings to be higher and, by extension, inappropriately inflate the cost-effectiveness of the measures (as measured by the Total Resource Cost, or TRC). TURN provided its spreadsheet analysis of the perceived differences between the ED-adjusted E3 vs. the utility's compliance filing E3 Calculator.

TURN's protest questions whether the utilities' 2010-12 energy efficiency portfolios as filed in their advice letters are cost-effective or likely to deliver the expected energy savings. TURN points out that using the ED-adjusted E3 Calculators the utility-requested budget level yields a lower TRC for PG&E' (TRC is 1.01) whereas the utility's compliance filing TRC is 1.24.

TURN reviewed and analyzed the utility's compliance filing E3 Calculator to assess the extent to which each utility had used the ED-adjusted E3 calculators as the basis. TURN determined that there were some substantial discrepancies between the ED-adjusted E3 calculators and the E3 calculators used in the utilities' compliance filing. TURN therefore sought to assess whether these changes would impact savings levels or have a substantial effect on the cost effectiveness of the portfolio or its programs. TURN looked at three key measure parameter values – net-to-gross values (NTG), estimated useful life values (EUL), and unit savings (kWh and kW). These parameters were chosen because they have large effect on utility's energy efficiency measure savings forecasts.

In its analysis of PG&E's E3 Calculator, TURN first identified the measures where any of the key parameter values (NTG, EUL, or unit savings) differed between the ED-adjusted E3 and the E3 filed by the IOUs. Of those measures, it then identified the measures for which there was an increase in the key parameter values between the ED-adjusted E3 and the IOUs compliance filing E3. For the resulting subset of measures with an increase in these key parameter values, TURN then found the total net savings for the measure and the proportion of total portfolio savings each measure accounted for. TURN screened measures to focus on those measures accounting for at least 1.5% of total portfolio savings, a subset it deemed the "high impact measures" due to their relatively high impact on the portfolio performance. For these high impact measures (HIM), TURN calculated the savings that would have resulted if the net savings were modified by the change in unit savings it identified in the first step of the analysis.

TURN's analysis indentified that of the more than 165 measures in PG&E's E3, the utility adjusted almost all of the kWh savings upward by a range of 25-36%, and kW savings upward by a range of 25-44%, and therm savings by upward of 25-61%. The TURN identified HIM

¹ The other advice letters addressed in the TURN and DRA protests are: Southern California Edison AL 2410-E, San Diego Gas and Electric AL 2127-E/1903-G and Southern California Gas Company AL 4041-G.

includes consumer electronics (residential), and non-residential: retrocommissioning (3rd party), controls and variable speed drives (3rd party), screw-in CFL interior (upstream – traditional, commercial), screw-in CFL interior (upstream specialty, commercial), screw-in CFL interior (direct-install, 3rd party), linear fluorescents interior (direct install, 3rd party), interior controls (downstream, commercial), other interior lighting (commercial), custom (3rd party), compressed air (3rd party), cooling & motors (3rd party).

TURN analysis also identified 10 changes to measure effective useful lives. One is the consumer electronics and nine are for measures within Government Partnership Programs. The magnitude of the EUL increases ranges from 40% to nearly 300%.

TURN believes that Energy Division's 2006-08 ex post EM&V results will illuminate the need to require the utility compliance filing to reflect the best available information. DRA concurs in that because DEER and non-DEER values will be frozen throughout the 2010-12 EE cycle, it is essential to use the most up-to-date data possible.

In its protest, DRA agreed with TURN's analysis and conclusions. DRA further states that the lack of adjustment in Utility filings to comply with the Commission's order is particularly concerning given that the Utility portfolios do not yet reflect the most up-to-date non-DEER values to be approved by Energy Division (ED) or other savings and cost inputs into E3 calculators.

PG&E Response and Energy Division Conclusion

In its December 21, 2009 response to the protests, the PG&E stated that it has fully complied with Decision 09-09-047 and Energy Division's instructions regarding cost-effectiveness calculations and categorization of costs. The utility stated that it followed ED's guidance on which energy savings assumptions to use.

On December 28, 2009, Staff sent a data request to PG&E requesting the utility to provide clear, detailed rationale supporting each value that appears different in its November 2009 compliance E3 Calculator from those in the ED-adjusted October 2009 E3 calculator. Additionally, it is not clear why some other values in the ED-adjusted October 2009 E3 Calculator were changed in PG&E's compliance filing E3 Calculator, such as why there is a participant's cost for Appliance Recycling Program, and why EULs for some measures such as CFL fixtures, linear fluorescents, etc., and Whole Buildings for government partnerships and 3rd party programs have increased 10 years. Staff requested the utility to use the spreadsheet for PG&E that TURN attached to its protest as the starting point to provide the utility rationale supporting each value that was changed.

PG&E responded to the data request on January 15, 2010. The utility stated that the Decision 09-09-047 required budget alterations necessitated PG&E to alter its compliance filing measure mix from that proposed in its July 2009 filing. Once the underlying measure mix is changed, the summary-level E3 calculator will necessarily change as well, even if all other assumptions remain constant. It is the measure mix changes in PG&E's Compliance filing that accounts for the majority of changes noted in TURN's spreadsheet. PG&E's specific responses are summarized below:

1. PG&E agreed that the appliance recycling participant cost is zero in the ED-adjusted E3 Calculator and it inadvertently did not incorporate this adjustment in its Compliance filing.

2. The expected useful life (EUL) for some measures was increased as a result of PG&E removing assumptions related to remaining useful life (RUL) and reverting to the DEER 2008 EUL assumptions. Subsequent to discussion with Energy Division, PG&E adjusted its RUL assumption in its Compliance filing to be consistent with the 2008 DEER EULs and with other IOUs. The RUL adjustment assumptions accounts for all of the EUL changes noted by TURN, with the exception of consumer electronics.
3. All EUL changes shown on the TURN spreadsheet are government partner-related measures and due to PG&E removing its original RUL assumptions from the filing, as discussed in 2 above.
4. As to Unit Savings differences, the change in measure mix is the primary factor altering the core program unit kWh, kW, and therm savings shown in the TURN spreadsheet. Changes in third party unit kWh, kW and therm savings are due to the expectation of vendor performance improving as contract negotiations proceeded and clarity was gained regarding the measure mix and savings third parties would be able to deliver during the upcoming program cycle.
5. Consumer Electronics savings were initially based on PG&E's initial workpaper submitted in 2008. PG&E updated its assumption based on its revised workpaper submitted in August 2009, which employs updated assumptions in line with DEER 2008 therm interactive effects. Workpapers are the only available source for measure savings as this measure is not in DEER 2008 and no relevant EM&V results are available.
6. As for room air-conditioners, PG&E continued to use its July 2009 values based on workpaper submitted in PG&E's 2009 quarterly report. Workpapers are the best available source for measure savings, as this measure was not included in DEER 2008 and no new EM&V results were available at time of compliance filing.
7. As for calculated measures, PG&E did not incorporate the 20% discount for energy savings impacts stating that this is the first time such a discount was employed and that ED did not provide support for the discount. PG&E did not apply the upfront discount, as the adjustments to the kWh and therms saved are made during the project review process, prior reporting savings to the CPUC.

On March 1, 2010, Staff sent a follow-up data request asking PG&E to identify clearly the basecase DEER measure parameter values and the measure mix composition that resulted in the new weighing value for those measures affected by changes in measure mix in the summary-level E3 Calculator measure groupings. In addition, Staff stated to the utility that DEER 2008 EUL assumptions should be used in parallel with RUL estimates, and asked how PG&E distinguish between incremental energy saving and incremental cost for a measure that is replaced on burnout versus the full energy saving and full cost for a measure that is an early retirement, given PG&E's removal of the RUL assumptions.

PG&E responded on March 16, 2010, with a spreadsheet that provides a detailed comparison of the energy savings per unit for the core deemed program measures used by PG&E in its July 2009 E3 Calculator and its November 2009 compliance advice letter E3 Calculator. The spreadsheet illustrates how changes in measure mix at the measure level maps to each of the measure groups in the E3 Calculator. In response to Staff's EUL/RUL question, PG&E states that PG&E employed DEER 2008 EUL values consistent with the other IOUs in its compliance advice letter. This treatment was discussed during a conference call between PG&E and Natalie

Walsh of Energy Division prior to PG&E filing its compliance advice letter. Based upon that discussion, PG&E altered its measure life assumptions to be consistent with the other IOUs. PG&E believes that measure life assumptions should be consistently applied to all IOUs and be included as part of the ex-ante assumptions in place for the 2010-2012 portfolio.

In general, Staff is satisfied with the utility's clarifications for the discrepancies noted in TURN's protest and Staff's questions. Additionally, Staff's review of PG&E's updated E3 Calculator submitted as part of its June 30, 2010 supplemental filing to be in compliance with D.09-09-047. Staff finds that PG&E did use the ED-adjusted E3 Calculator as starting bases for its compliance E3 Calculator filing. The ex-ante savings assumptions for custom measures are dealt with through the non-DEER workpaper review process per the November 18, 2009 Administrative Law Judge Ruling Regarding Non-DEER Measure Ex Ante Values.

In an E3 Calculator, there are various adjustments that can be made to a particular measure group energy savings cost-effectiveness parameter value that are not transparent simply by looking at the input values to the Calculator. It is this opaqueness that leads TURN to find apparent discrepancies in its comparison analysis of the utility's E3 Calculator. For example, the upstream lighting CFL adjustments such as installation rates, interactive effects and residential and non-residential sales split to gross savings are all not transparent in the E3 Calculator input sheet. All these adjustments are made to the gross savings value prior to entering the savings values into the Calculator. On top of this, the utility adjusted the number of individual measure units estimated to be installed per budget adjustment in D.09-09-047. This change in individual measures units reweighs the measure group ex ante assumptions that are inputs to the E3 Calculator.

Regarding DRA's protest comment on ED's review of utility's non-DEER measures, Phase 1 of that process as described in the November 18, 2009 Administrative Law Judge Ruling Regarding Non-DEER Measure Ex Ante Values is completed. The ED engineering review summary of non-DEER high impact measures was posted on the Base camp website for the utilities on May 3, 2010. On July 12, 2010 ED sent by email to the utilities its recommendations on the non-DEER HIM workpaper that were reviewed.