

PUBLIC UTILITIES COMMISSION

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September 13, 2010

Ron Van der Leeden
Director, Rates, Revenues & Tariffs
San Diego Gas & Electric
8330 Century Park Court
San Diego, California 92123-1548

Advice Letter 2127-E/1903-G

Subject: Staff Disposition of SDG&E's Advice Letter 2127-E/1903-G regarding Energy Efficiency Compliance Filing for 2010-2012

Dear Mr. Van der Leeden:

The Energy Division has determined that Advice Letter (AL) 2127-E/1903-G is in compliance with Ordering Paragraph 15 of Decision (D.)09-09-047, effective January 1, 2010. The Utility Reform Network (TURN) and the Division of Ratepayer Advocates (DRA) 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 made below.

This disposition letter supersedes the letter that Energy Division sent out on April 13, 2010, approving SDG&E's Advice Letter (AL) 2127-E/1903-G, with effective date of March 24, 2010. This disposition letter provides Energy Division's response to and analysis of the protests that The Utility Reform Network (TURN) and the Commission's Division of Ratepayer Advocates (DRA) submitted on SDG&E's AL on December 14, 2009.

1. Administrative Costs

DRA states that SDG&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 portion of overall portfolio costs, excluding third party or local government administrative costs. SDG&E's "utility" core administrative costs are 8.8% of costs. When third party and local government costs are included, the overall sum is 10%. SDG&E has complied with D.09-09-049, OP 13a.

DRA is also concerned that Local Government Partnership Administrative Costs at 30% contradicts the Commission's intent to control administrative costs. SDG&E replies that during the implementation of these programs it will continue to work with its partners to lower these 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. SDG&E complies with this aspect of the decision.

2. Budget Reductions Affecting HVAC Programs

DRA states that the Commission should ensure that the Utilities' updated portfolio filings do not impair Strategic Planning objectives, specifically citing decreases in the SDG&E and SoCalGas HVAC budgets by nearly half of their July 2009 applications. D.09-09-047 reduced SDG&E's budget to \$278 million or approximately 42%. This budget reduction in conjunction with the Ex Ante E3/DEER adjustments addressed below affected the entire program portfolio. Most all of SDG&E's portfolio program budgets, including HVAC programs, were reduced significantly, with the majority of the reductions ranging from 10-70% for 49 out of 71 programs. Energy Division Staff finds SDG&E's revised budget for HVAC programs is consistent with the direction provided by D.09-09-047.

3. Ex Ante E3/DEER Compliance Filings

TURN and DRA cite that SDG&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 SDG&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 energy savings cost-effectiveness value parameters that are not transparent when looking at the E3 Calculator. Further explanation of the adjustments made to SDG&E E3 calculator is provided in Attachment 1 to this disposition letter. Energy Division Staff finds SDG&E's advice letter E3 calculator to be in compliance 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

cc: Bob Finkelstein, TURN
Linda Serizawa, DRA
Bruce Foster, SCE
Akbar Jazayeri, SCE
Sid Newsom, SoCalGas
Megan Caulson, SDG&E
Service List A.08-07-021 & Attachments (1) E3 Calculators/DEER Issues

Attachment 1
E3 Calculators/DEER Issues

Decision Language

In D.09-09-047, the Commission adopted SDG&E 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 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, SDG&E included its E3 Calculator as part of the compliance advice letter filing 2127-E/1903-G submitted on November 23, 2009.

E3 Calculator Adjustments

As the Commission noted in D.09-09-047, some modifications have been made to each utility’s July 2009 E3 submissions for purposes of consistency across measure values and more appropriate use of DEER measures. The Commission directed that the E3 calculators as modified by Energy Division be used for the utilities’ compliance advice letter filings and that the utilities work with Energy Division to correct problems with their July 2009 E3 calculators for purposes of the compliance filing. The adjustments made to the E3 calculators are described below.

Energy Division reviewed SDG&E’s July 2009 Application E3 Calculators for compliance to DEER for measures that had a significant impact on the utility’s portfolio savings. In its review, Energy Division found that generally the utility used DEER values as a starting point, but did not make some of the necessary adjustments to gross savings. Energy Division made these adjustments in the ED-Adjusted E3 Calculator and provided it to the utility in October 2009.

Energy Division made energy savings parameter value adjustments in the ED-Adjusted E3 Calculator for SDG&E to the following measure groups: compact florescent lamps (CFLs), custom projects, appliance recycling - refrigerators and freezers, and room air-conditioners (not a DEER measure). Energy Division also made some DEER value compliance adjustments to SDG&E's net-to-gross (NTG) and measure effective useful life (EUL) values. Additionally, Energy Division adjusted the SDG&E incentive levels for some measures.

For Upstream CFLs, to adjust the DEER gross energy and demand savings value, Energy Division used an installation rate based on the 2006-2008 EM&V value of 67% for residential whereas SDG&E in its July 2009 filing used 76%. To estimate interactive-effects, Energy Division utilize DEER values based on air-conditioning and gas/electric/heat pump/other heating saturation from the most recent appliance saturation study results. This reduced HVAC interactive effects: less negative Therms (from less gas heating) and less positive electric (due to less air-conditioning and more electric heat). SDG&E assumed 100% air-conditioning and gas furnace saturation, adding Climate Zone 15 as a special case.

For custom savings, Energy Division used an 80% gross savings realization rate for all major custom measures that were not using DEER values, whereas SDG&E used 100%. 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 also adjusted custom and deemed HVAC packed air-conditioner and chillers to use code baseline rather than pre-existing (to match costs that were incremental from code baseline). Lastly, Energy Division adjusted a few of SDG&E's custom measure costs to match Southern California Edison's (SCE) costs.

For the Appliance Recycling Program, Energy Division corrected the utility's refrigerator recycling cost to remove negative participant costs. For interactive effects, Energy Division used RASS saturation of air-conditioners, non-air-conditioners, gas, electric, or no or non-utility fuel heat (SDG&E used 100% air-conditioner and gas furnace saturation). Energy Division also used DEER values for units from conditioned and unconditioned area split based on ADM's 04-05 Appliance Recycling Program surveys - SDG&E assumed all from conditioned area. These adjustments serve to mitigate the interactive effect of negative therm impacts from the utility's calculations. Lastly, Energy Division adjusted DEER values to assumed replacements with a minimal Energy Star compliant unit, since DEER values are based on a typically used unit.

Energy Division made the following NTG and EUL adjustments:

- Agricultural DEER NTG's - changed greenhouse from 0.7 to 0.5.
- Process gas DEER NTG's – changed Water heating 0.7 to 0.46, Domestic Hot Water from 0.7 to 0.46, and misc HVAC from 0.7 to 0.5.
- DEER NTG's – changed the default for new measures to 0.7 (SDG&E had a 0.8 value for power strips).
- DEER EUL: changed faucet aerators from 10 to 9 years.

SDG&E incentive levels for measures found in their portfolio level E3 calculators were adjusted downwards. Energy Division made these adjustments because the SDG&E proposals to pay full incremental measure cost incentives was not reasonable or justified in cases other than direct install program models, as discussed in D.09-09-047 Section 4.6. The adjustments made to SDG&E incentive levels were generally done to match the incentive levels in the Pacific Gas and Electric Company and Southern California Edison Company incentives for similar measures (or measure types) planned to be offered in similar programs.

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 SDG&E' (TRC is 1.01) whereas the utility's compliance filing TRC is 1.36.

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.

¹ The other advice letters addressed in the TURN and DRA protests are: Pacific Gas and Electric Company AL 3065-G/3562-E, Southern California Edison AL 2410-E, and Southern California Gas Company AL 4041-G.

In its analysis of SDG&E, TURN first identified the measures that had a relatively high impact on the total portfolio by selecting measures that accounted for 4% or more of the total portfolio net savings for kWh or kW. These measures include compact florescent lamps, refrigerator recycling, freezer recycling, non-residential air-conditioning units, greenhouse heat curtains, energy star clothes washers, whole building-electric, and Other (-Bid Strategy). TURN then compared the NTG, EUL and unit energy savings values for these measures between the two E3 calculators (the ED-adjusted E3 calculator and SDG&E's compliance filing E3).

TURN's analysis shows that the increase in unit savings as a result of these utility changes for key measures in SDG&E's compliance E3 calculator relative to the ED-adjusted calculator generally ranged from 14% to 25% for kWh and 8% to 25% for kW. TURN also noted that SDG&E's compliance filing E3 calculator also included some changes to measure NTGs and EULs.

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.

SDG&E Response and Energy Division Conclusion

On December 21, 2009, SDG&E responded to the protests that it prepared its compliance filing in accordance with the direction provided by the decision. In preparation for its November 23, 2009 2010-2012 Energy Efficiency Compliance Filing, SDG&E stated that it communicated with Energy Division Staff to discuss the required changes to its E3 calculator in order to comply with D.09-09-047.

In its response to TURN's protest, SDG&E agrees that its Net-to-Gross ratio (NTG) for its Refrigerator Recycling program is 0.85 and the packaged air conditioner is 0.75, but that the appropriate NTG for refrigerators is 0.61, the NTG for freezers is 0.70 and the NTG for packaged air conditioner should be 0.64. SDG&E expressed that it made these changes to its E3 calculator and noted that its portfolio TRC goes from 1.35 to 1.34.

On December 28, 2009, Staff sent a data request to SDG&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 to Energy Division why some other values in ED-adjusted October 2009 E3 Calculator were changed in SDG&E's compliance filing E3 Calculator, such as greenhouse heat curtain (in ED-adjusted E3), and clothes washers (not adjusted in ED adjusted E3). ED requested the utility to use the spreadsheet attached in TURN's protest SDG&E as the starting point to provide the utility rationale supporting each value that was changed.

SDG&E responded to the data request on January 6, 2010. The utility indicated that the E3 Calculator used for SDG&E's Compliance Filing had a few NTG paste errors. These relate to the refrigerator recycling, freezer recycling, and packaged AC measures identified in TURN Excel Spreadsheet that were already addressed in SDG&E's response to TURN's protest.

SDG&E addressed the other measures in TURN's analysis Excel file as follows:

- (1) For the Greenhouse Heat Curtain measure, SDG&E believed that it had agreement with Energy Division that the NTG from the SCE Dairy report (0.50) was not applicable for non-dairy agricultural measures and that the default was applicable. Energy Division staff agrees with the utility.
- (2) For the Energy Star Clothes Washer (listed under Non-Residential), the utility assumed the default NTG since the units are not commercial units but rather residential appliances used in very small commercial establishments.

SDG&E tested the impact of changing all of the NTG changes in TURN's protest and found that the TRC remained at the 1.34 level described above. SDG&E believes this is a reasonable outcome since the NTG is applied to both the benefits and the measure cost, basically resulting in a zero sum impact for the measure mix. The utility stated that it can provide the E3 Calculator that includes all of the above described changes on request.

On March 1, 2010, ED sent a follow up data request to SDG&E asking whether Decision 09-09-047 resulted in any budget alterations that necessitated SDG&E to alter its Advice Letter compliance filing E3 Calculator measure mix different from that proposed in its July 2009 filing. If the response was yes, SDG&E was directed to provide Energy Division the details behind the new measure mix weighing, identifying clearly the base case 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.

SDG&E responded on March 11, 2010 that Decision 09-09-047 did not result in any budget alterations that necessitated SDG&E to alter its Compliance Advice Letter measure mix in the E3 Calculator from that proposed in its July 2009 filing. The utility stated that since it used representative measures rather than rollup measures in its filing, there were never any measure weights and, therefore no new measure mix weighing was needed.

SDG&E further stated that the main differences between the July Application and the subsequent advice letter filing were:

- Measure quantities and mix were scaled down to align to the adjusted electric goals.
- The savings for Codes & Standards changed due to corrections in the values generated in the Herchong Mahone Group White Paper.

- In the July 2009 filing, third party programs only had representative measures for select programs. In the November 2009 filing, SDG&E reallocated savings from core programs to the third party programs to provide a more balanced set of third party measures. The result was that all resource programs have measures that represented the expected level of activity.
- Changes were made in unit saving values as directed by the D. 09-09-047, consistent with post decision discussions with Energy Division.

In general, Staff is satisfied with the utility's clarifications for the discrepancies noted in TURN's protest and finds SDG&E's advice letter E3 Calculator to be in compliance with D.09-09-047. Staff finds that SDG&E did use the ED-adjusted E3 Calculator as starting bases for its compliance filing.

In an E3 Calculator, there are various adjustments that can be made to a particular measure 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.

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 complete. ED will provide the ALJ with a status update by August 2010.