

ATTACHMENT A
SAN DIEGO GAS & ELECTRIC COMPANY'S RESPONSE TO
RULING ATTACHMENT A: UTILITIES AND
A.2. SPECIFIC QUESTIONS FOR SDG&E

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

Responses to Attachment A: Utilities

**NOTE: ALL REFERENCES TO EXTERNAL FILES ARE AVAILABLE ON
<http://www.sdge.com/regulatory-filing/3501/sdge-energy-efficiency-programs-and-budgets-years-2013-and-2014>.**

Funding Sources for 2013-2014 Programs Budgets

Q1: Please fill out the following table, with actual data as of July 2, 2012, unless otherwise indicated. Unspent funding means both unspent and uncommitted as of that date.

Category	Electric PGC funds	Electric Procurement funds	Natural Gas PPP Funds	Total
EM&V Funds				
Projected unspent 2012 funds, 7/2/12-12/31/12				
Unspent 2010-2012				
Unspent 2009				
Unspent 2006-2008				
Unspent 1998-2005				
Subtotal Unspent EM&V Funds				
Program Funds				
Projected unspent 2012 funds, 7/2/12-12/31/12				
Unspent 2010-2012				
Unspent 2009				

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

Unspent 2006-2008				
Unspent 1998-2005				
Subtotal Unspent Program Funds				

SDG&E Response:

Category	Electric PGC Funds	Electric Procurement Funds	Natural Gas PPP Funds	Total
EM&V Funds				
Projected Unspent 2012 Funds, 7/2/12-12/31/12		\$0	\$0	\$0
Unspent 2010-2012		\$0	\$0	\$0
Unspent 2009 (see note below)				
Unspent 2006-2008 and 2009 ¹		\$10,713,798	\$806,415	\$11,520,213
Unspent 1998-2005				
Subtotal Unspent EM&V Funds	\$0	\$10,713,798	\$806,415	\$11,520,213
Program Funds				
Projected Unspent 2012 Funds, 7/2/12-12/31/12		(\$21,347,860)	\$15,453,197	(\$5,894,663)
Unspent 2010-2012		\$8,623,465	\$680,426	\$9,303,891
Unspent 2009 (see note below)				
Unspent 2006-2008 and 2009 ¹		(\$10,166,805)	\$4,236,404	(\$5,930,400)
Unspent 1998-2005	\$40,208,288	\$0	\$3,059,169	\$43,267,457
Subtotal Unspent Program Funds	\$40,208,288	(\$22,891,199)	\$23,429,196	\$40,746,285

Notes:

1. SDG&E unspent/uncommitted amounts for program years 2009 and 2006-2008 are combined due to how these funds are tracked and reported in the balancing accounts.

Residential Programs

Q2: Explain and justify the rationale for changing the name of the Energy Upgrade California (EUC) program to the Whole House Upgrade Program, in light of Commission direction for statewide ME&O utilization of the EUC brand beginning in 2013. How will this improve customer understanding and program uptake?

SDG&E Response:

The “Whole Home Upgrade” program name was submitted in the application as a placeholder for and point of differentiation between what is considered the current program and what will become the new statewide Marketing, Education * Outreach (“ME&O”) brand for “energy efficiency, demand response, dynamic rate options, enabling technologies, climate change impacts, the Energy Savings Assistance Program (low-income energy efficiency

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

program), distribution generation, smart grid upgrades and other general impacts of energy use for individuals or the state as a whole.”¹ With A.12-08-009, SDG&E’s application for Statewide Marketing, Education and Outreach (SW MEO), the IOUs were directed to describe this transition, from a single program to a larger brand that will “provide general energy education and demand-side management program information for residential and small commercial customers.”²

As described in A.12.08-009, “The most critical aspect of the brand transition of Energy Upgrade California from a single energy efficiency program to a Statewide brand that serves all energy management programs... is the brand assessment to be conducted on the existing brand of EUC (the program.)”³ We further explain that “In the statewide program implementation plan for the CalSPREE program... the IOUs have already reflected a name change to the ‘Whole Home Upgrade Program.’ This name change would be enacted only if the brand assessment determines that this is the correct path for the program brand as well as the statewide brand.”⁴

Due to the timing around the brand assessment occurring in late 2012, the IOUs proposed WHUP as a way to describe the sub-program, not necessarily as the new customer- and contractor-facing name of the program. This provides a way to differentiate specific WHUP incentives and offers from other CalSPREE programs that will be described by the IOUs in their local marketing efforts.

Q3: Describe the proposed Whole House Upgrade Program contractor training objectives in detail for 2013-2014, including specific training objectives and targets for contractor enrollment and/or technician trainings per IOU.

- a. Indicate where objectives draw from evaluation reports or other review work performed on the existing program.**
- b. Discuss strategies for targeting minority, low-income, or disadvantaged populations for training.**

SDG&E Response:

a. There are several key contractor training objectives for the statewide Whole House Upgrade Program (WHUP) that have been developed from draft evaluation recommendations, in field quality control (QC) findings, Quality Assurance (QA) desktop review deficiencies and contractor feedback. These training objectives are in addition to the robust existing training courses available through the utility’s training centers and workforce education and training

¹ D.12-05-015, OP 117,a.

² D.12-05-015, OP 117,a.

³ A.12-08-009, Vol. II, Ch.3, pg. SH-18

⁴ Ibid.

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

efforts. The training was informed and developed using the findings from the PG&E, SCE and SoCalGas process evaluation work.⁵

1. Improve the quality of contractor diagnostic testing and measure installations. The success of efforts to meet this objective will be measured by tracking the number and type of failures and deficiencies identified during in-field QC. This objective will be achieved through:

a. Increasing technical hands-on training to increase the quality of diagnostic testing and measure installations in the program. The technical training will focus on combustion safety testing, diagnostic testing techniques, best practices for installing measures and other areas of need identified through the program. These efforts are currently underway and will expand and evolve as the program’s needs change.

b. Broadening awareness and participation in field mentoring. The utilities strongly encourage new enrollees and newly hired technicians to utilize the mentoring program. These mentoring sessions can be on test-in, test-out or any time during an upgrade. While these mentoring sessions are extremely beneficial, they are underutilized. To address this, the utilities are highlighting the availability of mentoring in participation workshops, simplifying the mentoring process and increasing the availability of these services.

2. Increase contractor and rater sales and marketing skill. The success of this effort will be measured by tracking the increase in jobs from training participants. This objective will be achieved through:

a. Creating or expanding marketing and sales training for participating contractors and raters. This training will provide best practices for marketing home performance and detail the sales tools available to participants.

b. Highlighting resources and support available to participants. This includes collateral material such as fliers and door hangers in addition to helping participants optimize their online profiles on the statewide website.

3. Increase accuracy and consistency of job submissions and energy modeling. The success of this effort will be measured by tracking the number of rejected and resubmitted jobs. This objective will be achieved through:

a. Increasing the amount and availability of job submission and EnergyPro energy modeling training.

⁵ The draft evaluation report, “*2010–2012 PG&E and SCE/SOCALGAS Whole-House Process Evaluation Report -DRAFT*” now available. See WH PROCESS EVALUTION Draft Report 8-28-12.pdf

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

b. Expand mentoring and support available to participants to assist with job submissions and energy modeling.

c. Ensuring participation workshops and onboarding adequately educate new participants about available resources and tools.

b. Discuss strategies for targeting minority, low-income, or disadvantaged populations for training.

The WHUP program training is primarily focused on the on-boarding process for eligible contractor and their technicians, and augmenting skills of participating contractors. These training strategies, as detailed in 3.a. focus on improving the technical, administrative and sales skills to drive success in the WHUP program. This augments existing workforce education and training programs offered through the utilities and the energy training centers.

The Interim Findings and Recommendations from the Whole House Process Evaluation, May 1, 2012 report found:

“The number of individuals with active BPI certifications grew dramatically between January 1, 2010 and November 1, 2011. Total active certified individuals grew from 65 to 1,596. The number of certifications (individuals may have more than one type of BPI certification) grew from 88 to 2,349.”

This demonstrates that there is a substantial number of trained individuals in California. The need for additional training is minimal, and instead focus should be on driving demand to help maintain employment of these individuals.

The majority of upgrades are performed by 20% of the contractors enrolled in the utility programs. Based on this, and the dwindling number of new enrollments, the utilities are shifting focus from recruiting new contractors to supporting and strengthening the existing participants (slide 33). The remaining contractor recruitment is focused on firms with business models that have demonstrated success in transforming to home performance, such as HVAC contractors.

Q4: Explain why the utilities have inconsistent on-site verification QA/QC requirements for the proposed Whole House Upgrade Program. Provide one document with each IOU’s desk and on-site QA/QC requirements.

SDG&E Response:

The QA and QC requirements were designed to reflect processes built into the different utilities IT and program infrastructure. The development of the original QA and QC procedures and specifications were done separately as a result of each utility launching their program at a different time in the 2010-2012 program cycle. Additionally, each individual utility may have a

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

slightly different internal requirement related to in-field verification percentages, savings validation, corrective actions, and safety requirements. There is a process underway to drive consistency of installation specification and technical standards statewide.

See EXCEL spreadsheet “EUC_IOU_QA_QC Comparison PGE_SDGE_SCG_SCE_2 22 12 Final” for the statewide comparison of QA/QC requirements.

See PDF “Q1 – SDGE QAQC plan V-1 4 – 030912 Final” for SDG&E’s QA/QC requirements.

Q5: Explain why the utilities have inconsistent eligibility requirements for the Middle Income Direct Install program (OP 58). (PG&E’s eligibility rules target 201-400% of federal poverty guidelines, while others seem to have much more restrictive requirements).

SDG&E Response:

Decision 09-09-047 provided the IOUs with authority to launch the Middle Income Direct Install (MIDI) components, and as such, SDG&E launched its MIDI program during the 2010-12 cycle. For SDG&E, the 2013-14 MIDI offerings are proposed as continuing components of the MIDI offerings currently being implemented in the 2010-1012 cycle.

With regards to income eligibility requirements, it is important to note the difference between eligible customers and targeted customers. By its nature, the moderate income population is a very large segment of customers and the IOUs are sensitive to potential oversubscription while also balancing the need to serve this large segment.

Each IOU has taken a slightly different approach but have a common goal of targeting those customers just above the ESAP eligibility requirement ($\leq 200\%$ of federal poverty guidelines), and expanding the eligibility requirements to allow service to a broader range of customers within this segment, while still balancing the need to not oversubscribe free services to a very large segment.

Q6: For the Middle Income Direct Install program, provide:

- a. Eligibility requirements**
- b. Number of households that would be eligible to participation in the proposed program**
- c. Analysis conducted to determine proposed eligibility requirements, including but not limited to the effects of these requirements on numbers of potentially participating households, and potential costs of the program based on these projects. In other words, explain why your utility selected the eligibility approach selected, and whether this increased or decreased the number of participating households, etc.**
- d. Targets for participation in 2013-2014**

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

- e. Budget for 2013-2014**
- f. Estimated savings for 2013-2014.**

SDG&E Response:

- a. SDG&E Middle Income Direct Install (MIDI) program requirements include:

Maintain a residential SDG&E account

Single-Family Owner Occupied Home

Meet 201%-300% federal poverty guidelines

Must be available for inspection verification

- b. Number of households that would be eligible to participation in the proposed program:
There are roughly 100,000 eligible households.

c. For the 2010-2012 MIDI offering SDG&E the income eligibility requirements for the MIDI begin where the Energy Savings and Assistance (ESA) Program caps off – which is 200% Federal Poverty Level (FPL) with the MIDI cap at 400% FPL. Thus the 2010-2012 MIDI income eligibility was 201%-400% of FPL.

SDG&E soon realized that the number of customers in this segment is very large as compared to the resources available for the MIDI, SDG&E has proposed in 2013 – 2014 to limit the income eligibility for the MIDI to 201%-300% of FPL. This approach allows customers within the MIDI segment who are the most financially constrained and are slightly above the ESA Program eligibility requirements to participate in the MIDI program at a higher rate. In addition, lowering the eligibility requirements also allows SDG&E to market to a distinct and select group of customers that will help minimize over enrollment to the program.

- d. Targets for participation in 2013-2014: 1,000 total homes

- e. Budget for 2013-2014: Total program budget is 4.4 million dollars

- f. Estimated savings for 2013-2014: 2.4 Gwh, 624kW, .19 MMTh

Q7: For the Energy Upgrade California – Whole Home Upgrade Program, Multifamily Path, provide a more detailed or augmented PIP, with more detail in at least the following areas:

- a. budget and savings placemats.**
- b. “per building” or “per dwelling unit” tiered incentive structure.**

SDG&E Response:

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

The WHUP Subprogram PIP has been augmented with section 14) Additional SDG&E *Multifamily Path* Information:

Q8: The Commission “expect[s] all of the IOUs to pursue cost-effective potential from behavioral programs with equivalent effort and timeliness” (p.75). Clearly describe in one succinct document any and all “behavior change” programs or pilots that are proposed to take place in 2013-2014. Indicate:

- a. objectives,**
- b. targeted participation levels,**
- c. implementation timelines,**
- d. budgets, and**
- e. energy savings.**

SDG&E Response:

In compliance with ordering paragraph 16 of the Guidance Decision SDG&E will be implementing an energy efficiency behavior change program as it is defined by CPUC Decision D.10-04-029 and based on SB 488 whereby the program includes “comparative energy usage disclosure.” And more specifically, “...pursuant to which an electrical corporation or gas corporation discloses information to residential subscribers to the amount of energy used by metered residences compared to similar residences in the subscriber’s geographical area.” The program will use the experimental design methodologies as outlined in the California Evaluation Protocols, comparing two populations which are in no way different except for the treatment of the program.

The purpose of this program is to increase customer awareness of their energy use and motivate them to take actions, which can include usage-based or equipment-based changes in behaviors, as well as increased participation in existing and future energy efficiency or demand response programs. SDG&E’s objective as it relates to energy efficiency behavior programs is to pursue cost effective savings with a 100,000 residential customers, which is equal to about 7.5% of the residential customer base. SDG&E is also planning a behavior program targeting 5,250 small commercial customers, which is about 7.5% of the small commercial customer segment, to examine the potential for increased energy awareness and behavioral energy efficiency among this segment. For both residential and small commercial customers SDG&E will leverage the program to also deliver demand response education and program offerings.

The SDG&E budget requested for the two year energy efficiency cycle is \$2,485,189. M&V for the 2011-2012 behavior change/home energy report program commenced in August 2012. The results from this evaluation will inform the energy savings goals for the 2013-2014 cycle.

Q9: Clearly indicate by IOU which of the several proposed pilots or tests included in the Plug Loads and Appliances (PLA) program each IOU intends to undertake in 2013-2014, as well as is understood at this time. Update the PIP to indicate:

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

- a. Budgets for each proposed test/pilot**
- b. Objectives of the test/pilot**
- c. Hypotheses the test/pilot will be testing**
- d. Data collection or evaluation work likely to be required**
- e. Anticipated function and membership of the PLA Program Decision panel**
- f. Contractor training or other credentials required (particularly for pool pump installers)**
- g. Specific plans for 2013-2014 to engage TV service providers in addressing plug loads**
- h. Response to NRDC’s suggestion to include clothes washer recycling.**

SDG&E Response:

a. Budgets for each proposed test/pilot: SDG&E has not determined the final budget for the pilot at this time.

b. The objectives of the test/pilot are as follows:

(1) To quantify the energy efficiency benefits of automation and information provided by the IDS HEMS (Integrated Demand Side Home Energy Management System);

(2) To identify key drivers to customer satisfaction of IDS HEMS equipped home; to identify critical success factors for mass development of IDS HEMS; and

(3) To assess the program implementation feasibility of such IDS HEMS.

c. Hypotheses the test/pilot: To determine if automation and information provided by IDS HEMS help customers to be more energy efficient and assist customer to be better informed and more satisfied energy consumer.

d. Data collection or evaluation work likely to be required: Time-interval UEC data from various appliances through representative household through different season, day of week, energy price, inside and outside temperature; customer’s information queries either through web portal or IHD under above monitor conditions; customer’s billing charges under above monitor conditions; customer’s satisfaction levels; and comments at each billing cycle;

e. Anticipated function and membership of the PLA Program Decision panel: Individual utilities will continue to manage products and programs using stage-gate product development process to optimize intervention strategies through the product lifecycle. The PLA Program Decision panel will consist of the IOU representatives from the Statewide PLA program team that coordinate the adoption and promotion of consistent specifications, rebate levels and best practices for the PLA sub-program.

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

f. Contractor training or other credentials required (particularly for pool pump installers): If the installation of the appliances is completed by the contractor, then SDG&E’s PLA Program required the customer to use licensed contractors if the product and installation cost more than \$500.

For pool pump installation, SDG&E is evaluating best practices such as PG&E’s Contractor Training Requirements supplement by PG&E’s provided training program to Pool Contractors to ensure high quality retrofit projects and code requirements compliance.

g. Specific plans for 2013-2014 to engage TV service providers in addressing plug loads: SDG&E is assessing the markets to determine the most effective engagement strategy with the TV service providers in addressing the energy consumption of TV set-top boxes.

h. Response to NRDC’s suggestion to include clothes washer recycling: With respect to appliance recycling for clothes washers, NRDC comments that the performance gap widens between efficient new machines and older cohorts, and suggests that a retailer-based clothes washer recycling program would likely be more cost-effective (NRDC, p. 20), SDG&E is willing to work with the other IOUs, manufacturers, retailers and other appropriate partners to re-assess market conditions and make appropriate program enhancements to ensure new cost-effectives measures and appropriate program enhancements are adopted.

Q10: For the Multifamily Energy Efficiency Rebate (MFEER) program:

a. Describe in detail how MFEER will implement recommendations from evaluation studies conducted of this program during 2010-2012

b. provide narrative and examples of lessons learned or implemented recommendations from the MFEER process evaluation.

SDG&E Response:

The MFEER program will coordinate where applicable with the EUC Multifamily Program to provide a more holistic total building approach. Training will be conducted for the contractors on the programs as well as on technologies for the building as whole. Contractors will also be educated in the training on how to best market the program to owner and tenants.

Looking beyond the lighting contractors to add new measures to the program, as well as seeking out new technologies will allow the program to achieve deeper energy savings. Coordination with MFWHUP and low income programs are key elements in providing expanded options to multifamily property owners and managers. The IOUs will explore how to develop a marketing strategy to include outreach to homeowners/realtor associations, and property management companies.

The MFEER program is exploring a MF-Audit tool. For the large property owners/managers, benchmarking services would be important to the success of the program. For the smaller

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

customers, a comprehensive audit would help to fully identify improvement needs and a plan to address these needs.

Q11: Applications indicate that the MFEER program is one of the most cost-effective residential programs. Given this, why are the proposed budgets and participation targets so relatively low? If justified, indicate augmented budgets, with more ambitious multifamily building enrollment targets for 2013-2014, in a revised PIP.

SDG&E Response:

Following the 2013-2014 EE transitional filing Guidance Decision to centralize lighting measures, MFEER will shift focus to other energy efficiency measures within its portfolio to achieve program goals. Yet, as these measures require out-of-pocket costs/investments from property owners/managers such as upgrades of appliances, pool pumps and HVAC measures, the utilities recognize that program participation will face certain barriers to adoption such as “split incentives” and “out-of-pocket” expenditures. Given the change in program focus as well as these noted barriers, we believe the submitted participation targets are ambitious and will not be without program challenges.

Q12: Estimate the percentage of Whole House Upgrade Program and Plug Load and Appliance program budgets that will be reserved for or targeted to multifamily buildings.

SDG&E Response:

Approximately 5% - 10% will be reserved or targeted to multi family buildings.

Q13: Describe the “peak incentive” for the Residential New Construction programs in more detail.

- a. Which program(s) would offer this incentive?**
- b. If the incentive is for kW avoided by installation of renewable energy systems, are the utilities proposing to use energy efficiency funds for this purpose?**
- c. Is the aim of this proposed incentive to stimulate construction of “zero peak homes?” If so, provide a consolidated IOU definition of a “zero peak home.”**

SDG&E Response:

SDG&E notes that it provided an outdated version of its 2013-2014 Residential New Construction Program implementation plan. SDG&E hereby provides its 2013-2014 Residential New Construction PIP in this response which replaces its original July 2, 2012 submittal in its entirety. Please see file “1 SDGE SW CalSPREE PIP Clean 9-4-12.docx”

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

a. Peak incentives are included in the ESMH Program (\$75/kW). During 2013-2014, the California Advanced Homes Program will no longer offer a peak incentive because the statewide team did not see enough evidence in the 2010-2012 program to suggest that “kicker” incentives were cost effective or necessary to increase program adoption beyond the adoption generated by the standard incentive offerings. Indeed, in speaking with representatives from the building industry in California, the statewide IOU CAHP team did not receive negative feedback after presenting the proposal to remove “kickers” in the 2013-2014 program.

b. The utilities will not be spending incentive dollars or claiming savings on these measures. Rather, non-incentive dollars will be used for the purpose of driving the residential new construction market toward the LTEESP’s 2020 ZNE goal. Renewable energy will be a critical component of reaching this goal and RNC is considered a market transformational program. Therefore the support of kW reduction measures, including renewable technologies, is necessary.

c. No, this proposed incentive is eliminated from CAHP and retained in ESMH to help support ZNE 2020 goals rather than zero peak homes.

Q14: Describe the training requirements and targets for the CAHP program in detail. Indicate how such trainings will be aligned and coordinated with any new Codes and Standards workforce trainings offered in 2013-2014.

SDG&E Response:

As in the 2010-12 program cycle, the CAHP trainings offered by the utilities will be primarily focused on the key elements of the new Title 24 code requirements, and the incremental changes from the current code. Prior to the implementation of the new code, the utilities will develop climate zone specific measure strategies for achieving energy savings levels significantly above the code minimum. As the primary concern of the builders is the additional costs associated with the measures, the utility trainings will work towards assisting builders and energy analysts in understanding the cost-benefit aspects of the suggested measure strategies.

During the first year of implementation of the new code, the utilities will conduct at least four training sessions; training sessions will be continued on an as-needed basis thereafter.

The utility training sessions will be targeted towards (Section 6a iv and 6b iii) builders’ sales agents, T-24 consultants, architects, contractors, real estate agents, raters and energy analysts. In addition to the training sessions, the utilities may provide additional technical presentations at CABEC meetings, BIA chapter meetings, etc. as opportunities become available to reach out to energy analysts and raters and other stakeholders.

Additionally, the utilities offer targeted classroom course offerings in T-24 code, software, green building techniques, lighting and HVAC, energy cost management, and food service

Attachment A—San Diego Gas & Electric Company’s Response to Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E

equipment. CAHP stakeholders will have the opportunity to take advantage of these course offerings.

The CAHP training efforts will be coordinated with Codes & Standards workforce training schedules. IOU’s Codes & Standards proposed training activities for the 2013-14 cycle may include but are not limited to the following:

1. Title 24 Standards Essentials Role-Based training for building inspectors: Training to plan examiners and energy consultants; Expanded role-based training curriculum to additional compliance improvement market actors such as the building trades and design professionals as guided by needs assessment; HVAC Quality Installation and Other Programs with Direct Code Requirements; Identification of opportunities to insert code compliance modules in existing curriculum, such as training required for technicians
2. On-line Compliance Training: Exploring delivery mechanisms beyond the traditional classroom to include live webinars, activity-based online training, and in-field demonstrations

CAHP will closely coordinate its training plans with Codes & Standards and invite new construction stakeholders to participate and obtain first-hand knowledge about code requirements and compliance options. Codes and Standards is currently conducting a needs assessment to determine what the residential building industry needs in order to prepare for effectively implementing the 2013 standards. The assessment will be complete by November 2012 and the outcome will determine what training the IOUs will develop and begin delivering in 2013.

Q15: Provide builder and home/unit participation targets for the CAHP program for 2013-2014. Provide analysis demonstrating that these are appropriate targets, providing data from credible sources referring to construction start projections, as well as past CAHP participation levels. Discuss in detail how this program advances or fulfills the goals of the Strategic Plan and Zero Net Energy strategies and goals.

SDG&E Response:

	2013-2014 Projections			
	Total Builders	Total Units	SF Units	MF Units
PG&E	200	13,556	9,979	3,577
SDG&E	25	5,175	3,881	1,294
SCG	35	13,191	10,310	2,881
SCE	35	12,900	6,958	5,942

Projections for PG&E and SDG&E are informed by IOUs’ current project pipeline, historical participation rates, and the June 2012 UCLA Anderson Forecast of the California housing market

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

in 2013-2014. PG&E’s forecast assumes a 4% month-over-month increase in new home starts through 2013, an 8% month-over-month increase in new home starts in 2014, and a linear correlation between the strength of the home construction market and CAHP program participation. SCG and SCE used Global Insights projections for 2013 and 2014 and applied historic participation rates.

The 2013-2014 CAHP continues to prepare the residential new construction market for future iterations of increasingly stringent energy codes through the offering of performance-based financial incentives. Specifically, the LTEESP targets “by 2015, 90% (of new homes) will surpass 2005 Title 24 standards by 35%. By 2020, all new homes are ZNE.” CAHP targets the achievement of the 2015 goal through the core program and the 2020 goal through the ZNE subcomponent, which is still being developed. As a minimum this subcomponent will include in-depth technical analysis to optimize the technology most applicable to each ZNE project.

Q16: Explain in detail the proposed role for ENERGY STAR in both the CAHP and ENERGY STAR Manufactured Housing programs and justify any difference in approaches.

SDG&E Response:

Per the response to Q13 above, the IOUs have proposed to eliminate “kicker” incentives in the 2013-2014 program. This proposal does not indicate a lack of value for the ENERGY STAR brand, which the IOUs value considerably.

ENERGY STAR will retain a primary role in the EMSH program, as qualification for the program is based wholly on ENERGY STAR criteria. ENERGY STAR for manufactured homes is a national brand with national recognition in the industry. The CA IOUs value the industry recognition ENERGY STAR has garnered and will continue to help foster the brand, improving construction practices beyond the standard HUD requirements.

Q17: Provide ENERGY STAR Manufactured Housing program:

a. Budgets

b. Participation targets

c. Number of units estimated statewide for manufactured housing in 2013-2014.

SDG&E Response:

a. Budgets: Non Incentive: \$117,911.02; Incentive: \$50,000

b. Participation targets: 2013 = 50; 2014 = 50

c. Number of units estimated statewide for manufactured housing in 2013-2014: 1,500
Statewide

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

Q18: Discuss IOU work to explore HERS II assessment or rating incentive pilots with local governments. Also explain why SDG&E was the only utility to include a HERS II assessment/rating proposal for their Whole House Upgrade Program.

SDG&E Response:

Within the WHUP Subprogram PIP, regarding local government partnership activities, SDG&E did note that the SDG&E Local Government Partnerships (LGPs) were proposing a number of activities to be performed by local governments to promote EUC. However, the WHUP Subprogram PIP reference LGP PIPs for details and budgets for these activities.

Q19: The proposed scaled performance-based incentives for 2013-14 for the California Advanced Home Partnership are identical to those used for the program during 2010-2012. Please explain how this complies with D. 12-05-015 Ordering Paragraph 69 and dicta at 184, which states:

“We direct the IOUs to include in their 2013-2014 applications a timeline by which increased levels of incentives supporting the 30% more efficient building codes expected to be adopted in Title 24 can be incorporated into their Residential New Construction program. The date proposed for inclusion in the Residential New Construction program of higher incentives supporting the increased Title 24 efficiency levels should be no later than March 1, 2013. The IOUs shall consult with the California Energy Commission, Commission Staff, builders and other stakeholders regarding appropriate incentive levels for this increased building efficiency performance. The incentive design and increased incentive levels identified in this process should encourage the early adoption of base and reach (Title 24) codes.”

a. Provide a date certain for when the IOUs will convene the required consultation regarding higher incentive levels.

SDG&E Response:

The IOUs will comply with the Commission’s directive to raise incentive levels in the Residential New Construction program by March 1, 2013 in such a way that eases the transition to the 2014 code and helps motivate builders toward the early adoption of code measures. The IOUs will convene the required consultation and finalize details of a revised incentive structure no later than December 1, 2012.

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

Commercial Programs

Q20. Describe in detail how the commercial programs will be structured to achieve deep energy savings through bundled measures. Is there a minimum number of measures defining what is “bundled?” Would bundled measures always include at least one non-lighting measure? Explain.

SDG&E Response:

SDG&E has proposed an integrated approach of new commercial program design and structure to achieve deeper energy savings which includes increased measure incentives for “bundling” but also testing increased incentives for high impact audits “audits” and “new emerging technologies”:

- 1) SDG&E’s Core, Third Party and Local Government CIA programs will be designed and delivered to help customers achieve deeper energy savings by encouraging customers to do full assessments/audits of their energy use and implement all cost effective energy savings, demand response and self-generation measures. Key to achieving deeper energy savings is encouraging and motivating customers to first perform an appropriate and high impact energy assessment (audit). SDG&E and the other IOUs have begun to work together to investigate, develop and test new methods of motivating customers to perform an integrated energy audit at the beginning of their DSM project(s). Methods being discussed and developed include an audit incentive or incentive adder for completion of a qualified audit.
- 2) Emphasis will also be given to testing bundling of a diverse mix of energy efficiency, demand response and self-generation measures which complement and enhance the overall performance of each other (e.g. lamp upgrades bundled with lighting control systems which also provide demand response capabilities and participation). Bundling can take place within like measure families, across measure families, across DSM options or any combination of these. The IOUs are currently discussing and developing how many measures, across how many DSM families constitutes “bundling” and what incentive structure and incentive levels will help customers achieve deeper energy savings. The IOUs are open to working with ED staff to determine the definition of bundling including potentially a minimum number of DSM measures, one of which is a non-lighting measure; however, A bundle would include measures from more than one and thus yes, a bundle would generally include at least one non-lighting measures. The possible exceptions would be advanced lighting given emerging technology status or lighting controls leading to an IDSM solution.

The IOUs also view the proposed Whole Building Demonstration as a possible channel for measure bundling (e.g., retro-commissioning and customer retrofit incentives) through a

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

customized, performance-based approach that provides customers with an incentive to realize both persistence benefits as well as pursue incremental measure opportunities over time.

- 3) The IOUs will target their emerging technology programs to projects that can provide deeper energy savings through the use of multiple measures. SDG&E and the other IOUs are discussing increased emerging technologies incentives during the transition from initial development, product testing and market testing to mainstream market introduction. This strategy also would decrease incentives appropriately as new technologies become readily accepted and imbedded in the market place through the technologies lifecycle.

Q21. The statewide commercial PIPs mention an emphasis on deep energy savings and emerging technologies when appropriate. Explain how the commercial programs (including Energy Advisor) will target customers to install measures with deep savings potential.

a. What criteria will the utilities use to determine when this is “correctly aligned?”

b. Under what circumstances might it be appropriate to emphasize “deep energy savings?”

SDG&E Response:

The opportunity to achieve deeper energy savings through the strategies detailed in response to Q20 above exists in all delivery channels (Core, Third Party, Local Government Partnerships) and across most if not all commercial, industrial and agricultural markets and customers. Before the next cycle 2013-2014, to the extent possible, SDG&E’s objective is to begin testing enhanced program design and structure for motivating customers to perform high impact energy audits and create more comprehensive customer projects through measure bundling across as many channels, programs and markets as is practical within resources and funding. SDG&E will target their emerging technology programs to projects that can provide deeper energy savings through the use of multiple measures. SDG&E and the other IOUs are discussing increased emerging technologies incentives during the transition from initial development, product testing and market testing to mainstream market introduction. This strategy also would decrease incentives appropriately as new technologies become readily accepted and imbedded in the market place through the technologies lifecycle.

The IOUs take a holistic view toward deeper energy savings, recognizing the importance and potential cost effectiveness of capturing and sustaining operational and behavioral savings in buildings. Advanced building controls and analytics software, also known as energy management and information system (EMIS) products, can enable or engender those types of savings. Analytics software, in particular, has the potential for identifying retro-commissioning and retrofit opportunities that typical investigations may be unable to detect easily.

The IOUs are actively evaluating the savings potential of EMIS products through its Emerging Technology (ET) Program, and wishes to launch incentive products for those EMIS

Attachment A—San Diego Gas & Electric Company’s Response to Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E

products with high potential for material operational and behavioral savings, whether in combination with efficiency programs or separately as standalone or bundled products. The IOUs believe that EMIS technology-enabled products and programs can both drive deeper energy savings and enable utilities, implementers and service providers to identify energy savings opportunities among their customers.

The IOUs will know when enhanced program design, structure, and targeting of Emerging Technologies are properly aligned with customer, market, societal needs and benefits through on-going monitoring and reporting of performance. Results will show customer projects that are realizing greater numbers of cost effective deeper energy savings (as compared to 2010-2012 as the baseline).

Q22. How will the utilities incorporate a comprehensive whole building approach into the commercial building energy efficiency programs?

SDG&E Response:

The IOUs believe the Whole Building Approach (WBA)⁶ could play a crucial role in achieving statewide efficiency goals by expanding participation in commercial building efficiency programs, especially for Small Medium Business (SMB) customers. SDG&E also recognizes that there are many technical and evaluation challenges that must be addressed in order for WBA-based programs to become effective for deployment on a large scale.

The IOUs have a number of initiatives underway, including the proposed Whole Building Demonstration, to test the viability of WBA-based programs that offer a mix of measures (e.g., retrofit and retro-commissioning) and leverage using interval meter data to improve the cost-effectiveness of ex-ante savings estimation and ex-post savings measurement. A key goal of the WBA-based program activities during the 2013-2014 Transition Period, including the proposed Whole Building Demonstration, is to prove that deep energy savings can be achieved and reliably proven not just through a single intervention, but through multiple interventions over time using performance baseline models produced using either calibrated simulation or EMIS software that leverage interval meter data.

⁶ For the IOUs, the “Whole Building” (WB) concept has a separate but related meaning for both program design and impact evaluation. From a program design perspective, the utilities envision “Whole Building” as taking a holistic view toward building efficiency with a mix of different measure types (e.g., retrofit and retro-commissioning) for different building systems (e.g., HVAC, lighting and envelope). “Whole Building” programs focused exclusively on energy efficiency might also be referred to as “integrated efficiency” programs. The IOUs are using the term “Whole Building Approach (WBA)” to refer impact evaluation approach that estimates and measures energy savings at a whole building level, while “WBA-based programs” refer to programs that rely on whole building savings measurement.

Attachment A—San Diego Gas & Electric Company’s Response to Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E

Although the IOUs are still evaluating program design alternatives for the demonstration, the expectation is that the Demonstration will be targeted to customers for which WBA is well suited using either of the two whole building EM&V standards under the International Performance Measurement & Verification Protocol (IPMVP).

In addition to the Whole Building Demonstration, the IOUs may be open to incorporating WBA into existing programs, such as its Core Retro-commissioning or Monitoring Based Commissioning Programs, to demonstrate the viability of WBA for commissioning or strategic energy management programs.

SDG&E expects that the ED will be involvement in the design of the EM&V plans for the Whole Building Demonstration as well as other potential WBA-based program applications.

Q23. What types of market research, market tests, and/or pilots do the utilities plan to use to reduce the split-incentive barrier in commercial multi-tenant buildings (OP 80)?

SDG&E Response:

As stated in SDG&E’s 2013-2014 Commercial PIP, “multi-tenant buildings have a unique and significant barrier. Most typically referred to as the principal-agent or tenant-landlord split incentive, this issue is characterized by the natural separation of tenant energy efficiency savings and capital expenditures by building owners.” Energy efficiency is often not a priority in buildings built to lease either because of the split incentive between owner and occupant and the situation depends on who is financially responsible to pay the utility bills. Leased buildings present barriers to energy-efficient operations and efficiency upgrades and the reason for this lies in the lease structure and issues related to sub-metering. If the tenants split the utility bill or if spaces are sub-metered and paid for by the occupant, the owner will be less inclined to consider efficient performance of the building in early project decision-making because much of the operations cost is bore by the tenant. For example, an important step of Savings-By-Design (SBD) has moved to increase the incentives offered for those projects that include an M&V component in their projects that would entail monitoring end uses.

Some examples of strategies that warrant testing and are continuing in 2013-2014 include:

- Market research and/or market tests to better understand how best potential programmatic offerings can help to reduce the barrier.
- Combinations of education and creative tenant/landlord incentives or credits for centralized systems or building shell upgrades
- Incentives for sub-metering, and plug load control technologies.

Attachment A—San Diego Gas & Electric Company’s Response to Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E

- Outside consulting services with expertise in tenant/land lord contract relationships to help find solutions and answers to overcoming the current split-incentive barriers.
- Open this challenge and opportunity to Third Party and Local Government providers through new 2013-2014 3P and LGP solicitations.
- In the 2013-14 Transition Cycle IOUs will be engaging in pilot activities within the SBD framework that seeks to uncover innovative ways of addressing the barrier.
- The “Office of the Future” pilot activities will continue to work with building owners and tenants to identify areas where outreach, training, and incentives – both financial and non-financial – will be offered to motivate investments in reducing the portions of the energy usage paid for by occupants.

SDG&E will also deliver training, as appropriate, at its Energy Innovation Center for the tenant/landlord community and contractors on how to overcome the split-incentive barrier in multi-tenant buildings through the Workforce, Education and Training Program (WET). These efforts will be continued in 2013-2014.

Q24. Propose the percentage of programs that will include the incentives for sub-metering and plug load control technologies (OP 80).

SDG&E Response:

As directed by the Commission, the IOUs are developing strategies and tactics for including specific incentives for sub-metering and plug load technologies in 2013-2014. This planning is at a very early stage and is not far enough along to have quantitative estimates or details as yet. Sub-metering incentives will be included where beneficial in the Whole Building Demonstration and Retro-commissioning programs to help assess and verify the validity of whole building measure identification and savings quantification techniques. Lighting, HVAC, and plug load technologies will be incented through the Custom Incentive Program. The Custom Incentive Program’s budget is approximately 14% of SDG&E’s total program budget.

Q25. Beyond the Energy Advisor program, how will the commercial programs test the directive (OP 74) of requiring an audit on customers who implement three or more measures?

SDG&E Response:

The IOUs believe that mandating an audit for customers implementing three or more measures is counter to the Commission’s directive to achieving deeper energy savings with each

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

customer. Such a requirement creates a barrier rather than an encouragement for customers to implement all cost effective energy savings measures. As detailed in SDG&E’s response to Q20, the IOUs have proposed and are working together to create a positive motivation for customers to perform the appropriate energy assessment or audit through an audit incentive or audit adder to measure incentives for a qualifying audit being submitted with customers’ EE applications. IOUs are currently working together on developing and implementing this concept throughout CIA markets and customers.

Q26. Describe how the various commercial programs will collect and utilize performance data.

SDG&E Response:

The IOUs are actively studying ways that performance data, whether collected at the device, system or building-level, may be cost-effectively collected and utilized to support commercial program goals. For example, the collection and utilization of performance data is a key element of the planned WBA-based program activities, including the proposed Whole Building Demonstration. A key goal of these activities is to prove that, through emerging technology and advanced modeling techniques, interval meter data can be leveraged to offer cost-effective incentives for measures that produce device (i.e., retrofit), operational and behavioral savings. Under this concept, energy use baselines would be produced using either calibrated simulation or EMIS software to achieve the requisite level of savings quantification accuracy. The IOU’s are currently exploring alternatives for evaluating the accuracy of base lining tools, as the IOU’s anticipates this will be a concern for any WBA- based programs that base incentives and claimed savings on the energy use baselines produced by these tools.

The IOUs plan to also test the use of performance data in Core retro-commissioning and monitoring-based commissioning program offerings. As mentioned above, however, there are a number of technical and evaluation considerations that must be addressed before use of performance data can be fully integrated into some of these core programs.

Q27. What are the proposed programmatic strategies that the commercial programs will utilize to target the MUSH market (p. 225)? Please update the PIP to indicate:

- a. What are the numerical targets for buildings within the MUSH market that will be addressed by statewide programs?**
- b. Describe what sub-programs will be addressing the MUSH market.**
- c. What is the percentage increase of third party programs that will be addressed by statewide programs targeting the MUSH market?**

SDG&E Response:

The IOUs provide a robust offering of energy efficiency services and products to the MUSH market through current Core, Third party and Local Government Partnerships (LGP) programs

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

and contracts. While many sub-programs may support the MUSH market, approximately 34% of SDG&E sub-programs are directly applicable to the MUSH market. The following table lists these sub-programs.

Program #	Main Program Name / Sub-Programs
	SW Commercial EE Program
SDGE3215	SW-COM-Continuous Energy Improvement
SDGE3216	SW-COM-Customer Services-Benchmarking
SDGE3217	SW-COM-Customer Services- Audits NonRes
SDGE3218	SW-COM-Customer Services-Audits Healthcare Energy Efficiency (HEEP)
SDGE3220	SW-COM-Calculated Incentives-Calculated
SDGE3221	SW-COM-Calculated Incentives-RCx
SDGE3222	SW-COM-Calculated Incentives-Savings by Design
SDGE3223	SW-COM-Deemed Incentives-Commercial Rebates
SDGE3224	SW-COM-Deemed Incentives-HVAC Commercial
SDGE3225	SW-COM-Deemed Incentives-HVAC Core
SDGE3226	SW-COM Direct Install
SDGE3227	SW-IND-Continuous Energy Improvement
SDGE3283	SW-COM-Customer Services- Audits NonRes (TA)
SDGE3292	SW-Com-Customer Services-Pump Test Services
SDGE3285	SW-AG-Customer Services- Audits (TA)
	SW Lighting Program
SDGE3240	SW-Lighting-Lighting Market Transformation
SDGE3241	SW-Lighting-Lighting Innovation-ETPC MD
SDGE3242	SW-Lighting-Lighting Innovation-ETPC Pilots
SDGE3243	SW-Lighting-Lighting Innovation-ETPC Advanced LED
SDGE3245	SW-Lighting-Primary Lighting
	Local Partnerships
SDGE3267	LInstP-California Community College Partnership
SDGE3268	LInstP-UC/CSU/IOU Partnership
SDGE3270	LInstP-University of San Diego Partnership
SDGE3271	LInstP-San Diego County Water Authority Partnership
SDGE3272	LGP- City of Chula Vista Partnership
SDGE3273	LGP- City of San Diego Partnership
SDGE3274	LGP- County of San Diego Partnership
SDGE3275	LGP- Port of San Diego Partnership
SDGE3276	LGP- SANDAG Partnership
SDGE3277	LGP- SEEC Partnership
SDGE3278	LGP- Emerging Cities Partnership

Examples of current offerings relevant to the MUSH market include:

- Savings By Design (NRNC)
- Customized Retrofit Incentives

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

- Deemed Incentives
- Retro-commissioning
- Benchmarking
- On-Bill Financing (not a savings measure but an enabling offering)
- Integrated Audits
- HVAC QM Lighting

Although SDG&E does not plan to initiate additional programs specifically targeting the MUSH market, SDG&E will continue to deliver its current robust offerings of energy efficiency efforts in the MUSH market in 2013-2014. As in 2010-2012, all Commercial sub-programs will be addressing MUSH markets and customers. For 2013-2014 this includes Commercial Calculated Incentives, Commercial Deemed Incentives, Energy Advisor, Commercial HVAC and Direct Install.

Q28. The utilities were directed to consolidate programs, including for new construction. Indicate the budget and savings targets within the Calculated Incentive program that are being allocated for the Commercial New Construction Program – Savings by Design. Calculate the percentage increase or decrease in budget from the 2010-2012 and explain the rationale.

SDG&E Response:

The IOUs were directed in the Commission’s Energy Efficiency guidance decision ruling, D.12-05-015 (pg. 12), to eliminate the statewide New Construction Program, and distribute its associated sub-programs, as appropriate, within the Residential, Commercial, Codes & Standards, Emerging Technologies, and Workforce Education and Training statewide programs. The Commercial New Construction Program, including budget and savings, are now included within the statewide Commercial PIP budget and savings estimates. SDG&E’s 2013-2014 Savings by Design (SBD) budget is \$10,732,410.37. SDG&E expects the demand for this program to remain constant, therefore this budget is basically unchanged on an annual basis from the SBD budget during the 2010-2012 cycle.

Q29. Provide targets for the number of business improvement districts (BIDs) and local government partnerships with which the IOUs plan to partner through the Direct Install Program (OP 73).

SDG&E Response:

Attachment A—San Diego Gas & Electric Company’s Response to Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E

SDG&E’s Direct Install program plans to work with 100% of SDG&E’s Local Government Partnerships and the business improvement districts (BIDs) within each of the areas they serve.

Q30. Provide measurable goals for the Energy Advisor program objectives, beyond number of audits.

SDG&E Response:

Specific goals related to the non-resource aspects of the Energy Advisor program have not yet been developed; however listed below is a breakdown of the SDG&E Commercial Energy Advisor budget.

Program #	Main Program Name / Sub-Programs	Total Compliance Budget By Program (Actual)
	SW Industrial Programs	
SDGE3216	SW-COM-Energy Advisor-Benchmarking	\$378,694
SDGE3217	SW-COM-Energy Advisor- Audits NonRes	\$1,198,514
SDGE3218	SW-COM-Energy Advisor-Audits Healthcare Energy Efficiency (HEEP)	\$1,365,642
SDGE3219	SW-COM-Energy Advisor-Audits Lodging Energy Efficiency (LEEP)	\$1,445,642
SDGE3283	SW-COM-Energy Advisor- Audits NonRes (TA)	\$5,956,804
SDGE3292	SW-Com-Energy Advisor-Pump Test Services	\$70,664
	SW-IND-Energy Advisor	\$10,415,961

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

Industrial and Agricultural Programs

Q31. Explain the rationale for cutting the industrial and agricultural custom calculated program budgets (p. 393 states that the utilities “shall not curtail custom measure and project activities...”)

SDG&E Response:

SDG&E did reduce the industrial and agricultural custom calculated program budget proportions. This activity affected the absolute budget amounts for the industrial and agricultural custom calculated programs, especially when compared to the commercial custom calculated program; however the combined (Com, Ind, & Ag) custom calculated budget in reality was slightly increased on an annual basis. This change was made to better reflect the demand/performance of the three sectors on a relative basis within SDG&E’s service territory.

Additionally, the Commission’s direction to restructuring the PIP categories and arrangement for the 2013-2014 EE Portfolio programs PIPs does necessitated shifting some funding into new and different accounting areas so a direct comparison between 2010-2012 and 2013-2014 does require some translation. For example the creation of a separate Lighting PIP shifted accounting for CIA deemed lighting funding from the CIA PIPs to the new Lighting PIP.

Q32. What is the overarching Energy Advisor budget and the budget allocation for the five subprograms?

SDG&E Response:

The following table provides the total Energy Advisor budget and its allocation to sub-programs.

Energy Advisor Budget 2013-2014

Sub-Program	SDG&E
Benchmarking	\$ 117,029
Onsite Audits	\$ 2,482,329
Online Audits	(Note 1)
Pumping Efficiency Services	\$ 393,321
RetroCommissioning	
Over arching Budget Total:	\$ 2,992,679

Notes:

1. SDG&E's Online Audit budget is included within the Onsite Audit sub-program budget

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

Q33. How do you plan to implement baseline determinations in the industrial and agricultural sectors?

SDG&E Response:

SDG&E employs the following baseline determination guidelines:

1. The IOUs’ process to conduct Industry Practice studies will be used on selected measures to determine if certain types of baselines are appropriate. Those that are deemed “industry standard practice” will be removed from the list of eligible measures at the time the determination has been finalized.
2. The IOUs will utilize input from the Energy Division’s ex-ante review process to determine programmatic or calculation requirements related to measure baselines.
3. The IOUs will also incorporate information gained from the proposed 2013-14 baseline indicator studies of various markets. The IOUs may initiate other “industry standard practice” assessment to define baselines for measures without such research.

Q34. Industrial and Agricultural facilities typically have less conditioned space than commercial facilities, where retrocommissioning programs have thus far been focused.

a. Why is retrocommissioning an energy saving strategy for the Industrial and Agricultural Markets?

b. If it is monitoring-based, where do you see the opportunities in the industrial and agricultural sectors?

c. If not, how will the two retrocommissioning offerings be implemented?

d. Are there program manuals for retrocommissioning in the industrial and agricultural sectors? If not, how will the two offerings be implemented?

SDG&E Response:

- a. SDG&E has not expanded Retrocommissioning (RCx) to either the Industrial nor the Agricultural markets because of the limited RCx opportunities in these sectors for in the SDG&E service territory.
- b. N/A
- c. N/A
- d. SDG&E does not currently offer these programs to these specific segments; therefore program manuals are not available.

Q35. Continuous Energy Improvement (CEI): CEI is described in the PIPs as both a statewide program and a component of the Energy Advisor program. Explain.

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

- a. Is the budget for CEI separate from the budget for Energy Advisor?**
- b. Is any aspect of the CEI budget included in the Energy Advisor budget?**

SDG&E Response:

CEI is a statewide program and functions as a separate subprogram within the statewide Agriculture and Industrial programs (as applicable for each utility). It is not a budgetary component of the Energy Advisor program; however, the services offered by the CEI program are critical towards moving customers towards a self-actualized/market transformed approach towards energy efficiency planning. Educating the customer about energy planning and the continuous energy improvement cycle will be the focus of the Energy Advisor portfolio of audit services. For more information, refer to the Energy Advisor program implementation plans.

SDG&E does not have an Agricultural CEI program component.

- Q36. Are you considering claiming savings for CEI and retrocommissioning activities? Explain why or why not.**

SDG&E Response:

SDG&E will claim savings for the CEI program through its core programs and, therefore, CEI will not directly claim savings. CEI is considered a non-resource program. The program’s scope includes activities that encourage and enable EE projects. Once an EE project has been defined, the customer will apply to one of the utility’s core or 3P programs, as defined by the scope, and the savings will be claimed under that program.

SDG&E’s Retrocommissioning (RCx) program is limited to the Commercial sector and thus there will be no RCx savings claimed for the Industrial and Agricultural sectors.

- Q37. Explain the reference to incentives for deeper retrofits and describe how the incentive design would be structured.**

SDG&E Response:

SDG&E has proposed an integrated approach of new commercial program design and structure to achieve deeper energy savings which includes increased measure incentives for “bundling” but also “audits” and “emerging technologies”:

SDG&E’s Core, Third Party and Local Government CIA programs will be designed and delivered to help customers achieve deeper energy savings by encouraging customers to do full assessments/audits of their energy use and implement all cost effective energy savings, demand response and self-generation measures. Key to achieving deeper energy savings is encouraging and motivating customers to first perform an appropriate and detailed energy assessment (audit). SDG&E and the other IOUs have already begin to work together to investigate and develop new

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

methods of motivating customers to perform an integrated energy audit at the beginning of their DSM project(s). Methods being discussed and developed include an audit incentive or incentive adder for completion of a qualified audit.

Emphasis will also be given to bundling a diverse mix of energy efficiency, demand response and self-generation measures which complement and enhance the overall performance of each other (e.g. lamp upgrades bundled with lighting control systems which also provide demand response capabilities and participation). Bundling can take place within like measure families, across measure families, across DSM options or any combination of these. The IOUs are currently discussing and developing how many measures, across how many DSM families constitutes “bundling” and what incentive structure and incentive levels will help customers achieve deeper energy savings.

SDG&E will target their emerging technology programs to projects that can provide deeper energy savings through the use of multiple measures. SDG&E and the other IOUs are discussing increased emerging technologies incentives during the transition from initial development, product testing and market testing to mainstream market introduction. This strategy also would decrease incentives appropriately as new technologies become readily accepted and imbedded in the market place through the technologies lifecycle.

It is the objective of SDG&E and the other IOUs to have these three program enhancements in place by the beginning of the 2013 -2014 Portfolio period.

Q38. Describe in the “IDSM Section” of the CEI PIP how the CEI program will serve as an integrated program for purposes of informing IOU strategic planning efforts to develop and promote integrated program design and projects. Also include a table separating each DSM resource (EE, DR, and DG) and describe how each will be promoted in the CEI program. Please describe specifically how the CEI program will coordinate and work with the statewide IDSM taskforce including specific coordination objectives and specific activities that will be pursued to achieve them.

SDG&E Response:

The CEI program seeks to identify and incorporate any IDSM measures that are of value to our participants. The CEI statewide team is currently awaiting final report of the CEI process evaluation. Subsequently, the team plans to further incorporate the findings of the report to better address integrated program design.

The requested table has been provided below; however, the primary activities of CEI are shown as crossing each DSM resources since the intent of CEI is to provide a true IDSM approach to both planning and implementation.

DSM Program Promotion Matrix

Attachment A—San Diego Gas & Electric Company’s Response to Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E

Energy Efficiency	Demand Response	Distributed Generation
<p>Utilize technical audits program to allow for the proper identification of DSM resources.</p> <p>CEI Providers will market and promote EE, DR, and DG in every engagement</p> <p>CEI to build additional incentives/promotions for providers to seek out DR and DG opportunities.</p>		

SDG&E’s CEI Program Manager will coordinate with the statewide IDSM taskforce by providing program and integrated project updates and sharing lessons learned in SDG&E’s monthly IDSM Core Team meetings and at statewide IDSM taskforce meetings as needed. CEI activities, accomplishments, and lessons learned will also be recorded in SDG&E’s quarterly IDSM Compliance and Tracking Report. Findings and lessons learned uncovered by the statewide IDSM taskforce will also be shared with the CEI Program Manager during SDG&E’s IDSM Core Team meetings. The objective of such close coordination is to pilot and optimize integrated program activities and offerings in the CEI Program for ultimate adoption into other program areas where appropriate.

Q39. Describe specifically how the CEI program will coordinate and work with the statewide WE&T taskforce including specific coordination objectives and specific activities that will be pursued to achieve them.

SDG&E Response:

The 2010-2012 WE&T program is supporting CEI program through educational courses that are focused on energy management and energy planning. The curriculum offered helps set the groundwork in market transformation as outlined in the California Long Term Energy Efficiency Strategic Plan. By offering courses in benchmarking, energy management such as Building Operator Certification (BOC) and Energy Savings through Process Improvement and Optimization, the IOU’s can transform the market to a continuous improvement pathway. These offerings help customers leverage utility programs, services and encourage long-term integrated energy planning.

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

HVAC Programs

Q40. Provide the placemat spreadsheet that includes all of the budget projections and savings estimates for each subprogram that was previously part of the statewide HVAC program and is now a subcomponent of the statewide Residential and Commercial subprograms, including:

Residential Quality Installation (QI)

Commercial QI

Residential Quality Maintenance (QM)

Commercial QM

Commercial Upstream Incentive program

HVAC System Diagnostic Advocacy program

SDG&E Response:

In Decision 12-05-015, the Commission stated:

“Specifically, we direct the IOUs to split and/or incorporate the HVAC Residential and Commercial Quality Maintenance, Residential Quality Installation, and Commercial Quality Installation sub-programs into the respective Residential and Commercial statewide programs. The IOUs shall consider moving the HVAC Technology and System Diagnostics and WE&T sub-programs into the statewide Emerging Technologies and WE&T sub-programs, respectively.” (p.160)

Consistent with the decision, the IOUs developed their budget and savings forecast for HVAC at the residential and commercial subprogram levels. HVAC Technologies and System Diagnostics Advocacy budget and savings has been integrated into the Emerging Technologies (ET). The Residential HVAC, Commercial HVAC, and ET budget and savings forecasts are presented in Appendix A - Portfolio Cost Effectiveness Analysis and Appendix D - Budget and Savings Placement Tables.

A summary of SDG&E budget information is provided in the following table:

Attachment A—San Diego Gas & Electric Company’s Response to Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E

2013-2014 Program	2010-2012 Sub-Program	2013-2014 Filing	GrosskWSavings	GrosskWhSavings	GrossThermSavings
SW CALSPREE	A SW-CALS – Residential HVAC	\$2,507,278	1,057	1,130,643	20,756
	1 Residential Quality Installation (Res QI)	\$1,527,630	261	436,632	1,340
	2 Residential Quality Maintenance (Res QM)	\$979,648	796	694,011	19,416
SW Commercial EE Program	B SW-COM-Deemed Incentives	\$5,648,696	4,322	13,105,596	(61,540)
	3 Commercial Upstream HVAC Equipment Incentive	\$1,325,028	646	1,916,279	(1,039)
	4 Commercial Quality Installation (Com QI)	\$10,660	53	134,616	(277)
	5 Commercial Quality Maintenance (Com QM)	\$4,313,008	3,623	11,054,701	(60,224)
HVAC Emerging Tech	C				
	6 HVAC Technologies System Diagnostic Advocacy (TSDA)	\$600,000	0	0	0
Notes:					
Residential Quality Installation	1	Workpapers still pending approval. Actual savings by measure will be updated once workpapers are finalized.			
Residential Quality Maintenance	2	Workpapers still pending approval. Actual savings by measure will be updated once workpapers are finalized.			
Commercial Upstream HVAC Equipment	3	Commercial Upstream includes Upstream Equipment and Local Area Activities			
Commercial Quality Installation (Com QI)	4	Program development in progress. No workpapers pending.			
Commercial Quality Maintenance (Com QM)	5	Workpapers still pending approval. Actual savings by measure will be updated once workpapers are finalized.			
WET - HVAC TSDA	6	Funding through Emerging Technologies			

- Q41. Provide a detailed record of all major 2013-2014 activities planned for the Commercial and Residential QI/QM programs, with planned funding for each activity.**
- Justify the importance of expenditures in each activity in advancing the QI/QM programs.**
 - Justify the budget levels provided with the benchmarks for contractor enrollment, maintenance agreements signed and units maintained.**

SDG&E Response:

Major activities for Residential and Commercial QI and QM are presented on the first lines of the program logic models in Sections 7.e. in each of the Residential and Commercial HVAC Subprogram statewide PIPs.

Additionally, activities in the Direct Implementation—Incentives & Rebates category are presented in Section 4.b. and activities in the Direct Implementation—Non-Incentive Customer Services category are presented in Section 4.c. in each of the Residential HVAC and Commercial HVAC Subprogram statewide PIPs. The Residential HVAC and Commercial HVAC budget forecasts, with a breakdown by the major activity categories of Administrative, Marketing & Outreach, Direct Implementation—Non-Incentive Customer Services and Direct Implementation—Incentives & Rebates are presented in Appendix A - Portfolio Cost Effectiveness Analysis and Appendix D - Budget and Savings Placement Tables. A summary of this SDG&E budget information is provided in the following table:

Attachment A—San Diego Gas & Electric Company’s Response to Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E

2013-14 Program #	Subprogram	Total Administrative Cost	Total Marketing & Outreach	Total Direct Implementation (Non-Incentive Customer Services)	Total Direct Implementation (Incentives & Rebates)
SDGE3212	SW-CALS – Residential HVAC	\$176,371	\$26,397	\$859,886	\$1,444,625
SDGE3224	SW-COM-Deemed Incentives-HVAC Commercial	\$142,377	\$34,684	\$2,328,279	\$3,143,356

The IOUs plan to allocated funds as appropriate for 2013-2014 Residential HVAC and Commercial HVAC Subprogram activities; see response Q40 above.

a. The program logic model diagrams in the PIPs mentioned above demonstrate the causal relationships between the proposed program intervention activities and their intended results in addressing market barriers and achieving short-, medium- and long-term outcomes that align with the HVAC goals in the California Long-Term Energy Efficiency Strategic Plan.

b. Based on the experience with the HVAC program cost factors, such as customer and contractor incentives, incentive processing, contractor recruitment contractor training, contractor management, marketing development, and program administrative staff, during the current 2010-2012 cycle, the budget levels provided are required to meet the targets stated for QI and QM in the Residential HVAC and Commercial HVAC Subprogram PIPs. The IOUs will continue to work with participating contractors and program implementers to try to exceed the stated targets.

Q42. Explain why there appears to be very little QI/QM activity described toward meeting Big Bold Energy Efficiency Strategies or the Strategic Plan goals. How will the QI/QM programs ensure progress toward the Strategic Plan?

SDG&E Response:

There is QI/QM activity towards meeting the Big Bold Energy Efficiency Strategy and the Strategic Plan goals described throughout the Residential and Commercial HVAC Subprogram PIPs. Major activities are referenced in the ‘Program Rationale and Expected Outcome’ section of the PIPs. Additionally, the program logic model diagrams in the PIPs map the key activities and their connection with the short-, medium- and long-term outcomes that align with ensuring

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

progress toward meeting the HVAC goals in the California Long-Term Energy Efficiency Strategic Plan and the Big Bold Strategy.

Q43. In its comments on the applications, TURN proposed a residential upstream HVAC program similar to the commercial version which provides incentives to distributors of efficiency units.

- a. Would such a program be feasible for launch during 2013-2014 and what are the barriers, if any? Explain.**
- b. What types of HVAC units should be eligible if such a program were to be launched, and how would you make a determination of which HVAC units would be eligible?**
- c. Provide some historical context for this proposal. Have upstream residential HVAC programs been in place before? If so, provide some analysis of the program’s performance compared to current downstream incentives.**
- d. Provide assumptions and reasonable targets for units of equipment incentivized and energy savings achieved if such a program were to be launched. Provide low, medium, and high estimates for tons of equipment incentivized and energy savings.**

SDG&E Response:

a. Yes, launching a residential upstream HVAC program during 2013-2014 is feasible. Indeed, the IOUs are exploring the possibility of including such a program in the 2012 Third-Party Program solicitation for design and implementation in 2013-2014 of a limited-scope offering to better understand the opportunity for overcoming some very significant barriers that would need to be addressed before a larger-scale program could be considered. Significant issues affecting feasibility of a residential upstream HVAC program include the following:

Based on preliminary analysis conducted by IOUs, a residential upstream program would not be cost effective (with a TRC ratio of significantly below 1.0). Since high-efficiency residential HVAC system replacements are considered DEER measures, DEER savings must be used as program reported savings. Based on our analysis, the cost of incentives required to influence the market and drive contractors to participate will be considerably higher than the cost benefits from DEER savings.

Most residential HVAC units are split systems where components (such as evaporator and condenser units) can be purchased separately. This prevailing market characteristic results in a large number of system combinations where the combined efficiency is not fully known or defined. While an upstream program can dictate acceptable combinations, it may not offer enough flexibility to contractors, since the selection of system components is driven by size and price rather than efficiency.

Paying incentives strictly at the upstream level may not be feasible as distributors do not keep track of where residential equipment is installed. A split incentive with contractors may be

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

necessary, but such incentive arrangement would add to the complexity and cost of program administration.

b. If such program were offered, it should consider all applicable equipment types, including split, packaged, and direct/indirect evaporative cooling. Equipment eligibility would be determined based on the level of efficiency.

c. Due to the barriers outlined in (a), the IOUs have not historically implemented a residential upstream program offering. During the current 2010-2012 program cycle, the Upstream HVAC Subprogram PIP included language that would have enabled the offering of residential upstream measures; however, the statewide IOU team did not add such measures to the program due to the aforementioned barriers.

d. The IOUs are unable to provide reasonable estimates of targets at this time; however, the IOUs are open to collaborating with Energy Division and interested stakeholders to further explore how the above barriers may be able to be addressed to improve the cost-effectiveness and long-term feasibility of a statewide residential upstream offering.

e. Due to the barriers identified in (b), the IOUs are unable to provide estimates of reasonable targets at this time.

Q44. TURN also proposed to pilot residential QI/QM programs in hotter climates during 2013-2014. Provide answers to the following:

a. Would it be feasible for the IOUs to launch this proposed program during 2013-2014?

i. If so, would you focus on one particular HVAC program or would you launch both proposed programs as pilots? Explain how you would focus your resources.

ii. If not, explain why it would be unnecessary or impossible to launch a pilot residential QI/QM program in 2013-2014.

b. If such a program were launched, what climate zones or markets would you target?

c. Provide any thoughts and assumptions on reasonable targets for number of households and energy savings, with low, medium, and high estimates.

SDG&E Response:

a. The IOUs’ understanding of TURN’s proposal is to increase HVAC EE offerings and accelerate HVAC offering ramp-up in the Residential Program, including in the revised Whole Home Upgrade Program (WHUP) Basic Path, focus these HVAC elements on hotter climate zones, increase related HVAC EM&V research efforts, and increase permit compliance. The IOUs agree with these objectives and think it is indeed feasible to address them in 2013-2014.

i. The focus of the IOUs to address these objectives would be as follows:

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

- Improve upon existing programs instead of launching pilots that may duplicate what can be incorporated within an existing program.
- Add high-efficiency HVAC equipment as an option in the enhancement of the WHUP Basic Path.
- Accelerate the planning of revisions to the WHUP Basic Path in order to offer the enhanced Basic Path by the beginning of the 2013-2014 transition period, including presenting a proposal to all interested stakeholders in a meeting being planned for early October, 2012.
- Continue to improve and ramp up the Residential HVAC QM offering.
- Continue to work with the HVAC industry and other stakeholders to develop a revised approach to Residential HVAC QI that both would support the HVAC industry’s consensus standard for QI (ACCA Standard 4), and would lead to the sustained market transformation envisioned in the Strategic Plan.
- Require customer and contractor certifications of permit code and licensing compliance and permit numbers on rebate applications for Residential HVAC and WHUP Subprograms.
- Focus program resources for contractor recruitment and target marketing primarily on hotter climate zones.
- Continue to collaborate with ED on 2013-2014 HVAC EM&V research plans to address important knowledge gaps.

ii. Not applicable. See Answer Q44a. and Q44.a.i. above.

b. Hotter climate zones to target would be CZ11, CZ12, CZ13, CZ14, and CZ15. In addition to climate, other important criteria for market targeting would include overall patterns of higher energy use and other customer data and segmentation that would indicate a higher likelihood of customer participation.

c. Given the high-level nature of the TURN proposal, it would be premature to estimate specific targets associated directly with the proposal. Further, since the IOUs consider that they will be addressing the objectives mentioned in (a.), the planned targets and energy savings in the IOU applications for the WHUP and Residential HVAC Subprograms already take the above activities into account.

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

Lighting

Q45. Incentives for LEDs are provided as placeholders until the LED quality standard is adopted. Given that it is unknown when the LED quality standard will be finalized and approved by the CEC, how will you modify the lighting program when the standard is approved?

SDG&E Response:

Any modification would be based on the impact of the standards as finalized. Additionally, other forthcoming information is required for an analysis, such as details of the final decision, work paper approvals, and final Ex Ante assumptions.

If modification to the program is warranted, the IOUs would file PIP addenda to propose changes along with all necessary justification.

Whenever a modification is needed to a program measure, we must look at the following:

- Qualified products for the impacted measure(s)
- Information system updates required for program change
- Cost effectiveness analysis of revised measures
- Marketing and Outreach updates required
- Program application changes
- Training and internal/external communication to program stakeholders

Q46. How will the cost of the LED quality standard bulb impact:

a. the estimates provided in the applications for LEDs?

b. the installation estimates for LEDs?

c. The incremental measure cost estimates for LEDs?

SDG&E Response:

a. Regarding estimates of incentive levels, if the quality standards do not result in extensive price increases for the products, it would allow SDG&E to operate within the maximum incentive levels proposed in the filing. Therefore, no impact to those estimates would ensue. Otherwise, if needed the IOUs would propose higher incentive levels in a future PIP addenda, or adjust the quantity of LED products offered for rebates, or both.

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

b. The existing estimates in the application would remain unchanged, unless revisions are required due to directions or policy changes such as through the CPUC decision, or it becomes expedient to do so to achieve portfolio or program targets.

c. There is a possibility that the cost of the LED quality standard bulb may change due to the additional requirements of product testing and labeling for the new standard, change in production cost of these new LEDs. If the CPUC changes the Ex Ante incremental measure costs for LED measures and directs the IOUs to use them, the IOUs will comply with their directives.

Q47. How will the answers to the question immediately above impact the cost-effectiveness of the lighting programs and the overall portfolio application?

SDG&E Response:

The impact will not be known until the final Ex Ante assumptions are provided by the CPUC to the IOUs. If incremental costs are increased and other assumptions stay the same, it will decrease measure cost-effectiveness. If the costs are decreased under those circumstances, it would increase measure cost-effectiveness. If the new Ex Ante assumptions result in increased cost-effectiveness, the result could be a greater quantity of affected LED products rebated. If cost-effectiveness ratios result that jeopardize SCE’s ability to meet portfolio targets, it could result in fewer products rebated.

Q48. The utility applications list several LED type measures with various replacement types, e.g., 30-40 W Replacement Lamps, 45-55 W Replacement Lamps.

a. Assuming the LED quality standard is adopted, how would the utilities treat the base-case bulb that the LED quality standard is replacing?

b. In other words, would the LED quality standard be replacing incandescent bulbs, CFLs of various wattages, or other LEDs?

c. For the various base case situations, how would this impact the utility energy savings and cost-effectiveness of the lighting program and would this have any significant effect on portfolio level cost-effectiveness? If so, what would be the effect?

SDG&E Response:

a. Under CPUC policy, the standards would affect the base case assumptions if they result in new work papers with applicable base case modifications approved by the CPUC.

b. The consultants who determined the Wattage Ratios (multipliers) presented in the recent document entitled “Workpaper Disposition for Integral LED Lamp Replacements” are the best source for more detailed information on the mix of lighting types and other factors both in the current base cases, and any that might result from impacts of the new standards.

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

c. As described above, if the costs for lamps under the new standard change, then the cost-effectiveness of the lighting program and portfolio level will also be altered. Similarly, the energy savings of the lighting program and portfolio level would be changed if the list of market available qualified products changed. If the availability of the qualified products is lower due to the newly introduced standard, then energy savings of the program and portfolio would most likely follow the same trend initially.

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

Water-Energy Nexus Issues

Q49. Provide a document that compiles, describes, and synthesizes all water-energy nexus activities to be undertaken in the 2013-2014 period (similar to a PIP).

- a. Describe efforts that will be made to target industrial and agricultural customers and small and medium-sized water agencies**
- b. Include a detailed budget broken down by water-energy nexus activity**
- c. Under what auspices will leak detection be offered?**
- d. Do you anticipate leak detection services leading to any kind of customer impact projects for the IOUs?**
- e. Will there be estimated savings as part of leak detection?**

SDG&E Response:

SDG&E has filed to continue its Partnership with the San Diego County Water Authority (SDCWA). The Water Authority and its 24 member agencies own and operate numerous facilities and infrastructure, including flow control facilities, pumping facilities, water treatment facilities, and pipelines. Although the water agencies have participated in energy efficiency programs to reduce energy costs, many opportunities to improve energy efficiencies and reduce embedded energy consumption still exist and will be an element of the partnership.

Additionally, SDG&E plans to work with its local water agencies to develop a joint approach to targeting agricultural and industrial customers to determine energy/water savings opportunities and continued energy/water nexus implementation for 2013-2014.

SDG&E intends to offer a leak loss detection program through its Partnership with the San Diego County Water Authority (Water Authority). Leak detection is an offering that requires further development and planning, but will be explored based on the belief that water loss reduction in a retail distribution system can create cost-effective energy savings. It remains to be seen what exact strategy that will be most effective, in part due to the highly variable nature of energy intensity from one water agency to another. The Natural Resource Defense Council (NRDC) filed comments regarding the utilization of best practices and the bulk procurement of consulting services to address this high potential offering and SDG&E is currently exploring this and other strategies.

It is possible that leak detection services may identify leaks on the customer side of the water meters. When identified, it is typically the customer’s responsibility to fix the leak(s) and also to their advantage as it results in savings on their water bill. Additionally, some water agencies have assistance programs for customers seeking to fix leaks on their property. Also, as part of the SDCWA Partnership, SDG&E is proposing the WaterSmart Landscape Efficiency Program which will include a component of identification and repair of customer side leaks.

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

Currently, there is no approved or agreed upon methodology for calculating and claiming embedded energy savings. That said, during the 2013-14 Transition Period, SDG&E will calculate energy savings associated with the avoided water loss from repaired leaks, implemented pressure management strategies and other water loss control intervention strategies implemented. Though the projects are different than typical calculated projects (i.e. savings stem from multiple customer facilities), it is envisioned that the calculations performed will be consistent with current practices.

Table 1 below provides the various program elements for possible Water-Energy nexus activities.

Table 1 – SDG&E Water-Energy Nexus Program/Measure Matrix

Program/SubProgram	Water-Energy Measure(s)	Budget¹
Energy Advisor (EA)	Information on energy and water savings strategies; may offer energy saving starter kit which includes faucet aerators and low-flow showerheads; will include collaboration with water agencies	\$820,112
Plug Load and Appliances (PLA)	Clothes washer, CEE tier III, shower heads – low flow, water heater, tankless, water saving kit – low flow showerheads/aerators	\$6,868,021
Multi-Family Energy Efficiency Rebates (MFEER)	Water heaters, clothes washers, dishwashers, cold water clothes washers, variable flow pool pumps, demand control for recirculation pumps	\$3,902,566
Whole Home Upgrade Program (WHUP)	Water heaters, pipe insulation, low-flow showerheads, thermostatic shut-off valves, boilers, variable frequency drives for circulation pumps	\$12,847,890
California Advanced Homes Program (CAHP)	Dishwashers, aerators, showerheads, clothes washers	\$3,367,635
Commercial Calculated	A broad spectrum of measures with	\$36,742,048

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

Program/SubProgram	Water-Energy Measure(s)	Budget¹
Incentives Program	calculated energy reduction associated with water use (e.g. motors and gas engines for water pumping)	
Commercial Deemed Incentives Program	Low-flow showerheads, ozone laundry, ice machines, connectionless steamers, HE clothes washers	\$11,835,730
Agricultural Deemed Incentives Program	Drip irrigation, low pressure sprinkler nozzles	\$719,800
Agricultural Calculated Incentives Program	A broad spectrum of measures with calculated energy reduction associated with water use (e.g. motors and gas engines for water pumping)	\$1,685,189
San Diego County Water Authority Partnership	Irrigation repair, weather-based irrigation controller installation and monitoring, prison water fixture retrofit	\$922,645
Energy Efficient Water Pumping	Pump tests for agricultural, commercial and industrial customers	\$463,985

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

Financing

Q50. Are you planning to fund the CHF MIST program in your territory in 2013-2014? At what budget level?

SDG&E Response:

SDG&E is interested in work with CHF to roll out the MIST 2 program in our service territory. SDG&E was working with CHF to see if there was an opportunity in 2012 to roll out a program in our service territory but CHF was not able to secure a financial institution (FI) that could service the region. Assuming CHF is able to bring on a FI that can serve SDG&E’s service territory we are able to earmark \$200,000-\$500,000 in 2013-2014 to support of the MIST 2 program. This amount is based on information CHF provided to SDG&E during 2012 negotiations and assumes CHF will maintain consistency with the MIST 2 program that will be rolling out in PG&E’s service territory; the exact funding amount will be subject to negotiations between CHF and SDG&E.

Q51. Provide a budget breakdown for on-bill financing, previously-ARRA-funded financing programs, and new pilot programs. Clearly explain how the total budget adds to \$200 million statewide. (OP 22)

SDG&E Response:

Proposed 2013-2014 Statewide Finance Program Budget

	PG&E	SCE	SoCalGas***	SDG&E	Statewide Total
OBF Program Budget	\$38,000,000	\$60,823,136	\$1,727,378	\$697,435	\$120,247,950
OBF Loan Pool*	**	***	\$2,000,000	\$17,000,000	
ARRA- Originated Finance Programs	\$4,000,000	\$12,944,730	\$4,000,000	\$2,225,224	\$23,169,954
New Finance Offerings	\$31,000,000	\$12,279,882	\$10,467,622	\$12,077,309	\$65,824,813
Total Financing Programs Budgets	\$73,000,000	\$86,047,748	\$18,195,000	\$31,999,969	\$209,242,717

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

* For PG&E and SCE, the EE-funded OBF program budgets include their loan pool funding; these budgets can be found in their filed Program Implementation Plans. SoCalGas' and SDG&E's EE-funded OBF program budgets do not include their loan pools which are from non-EE ratepayer funding. SoCalGas and SDG&E requested their EE -funded OBF budgets in their Program Implementation Plans and their non-EE loan pools in their filed testimonies.

** PG&E expects that \$32 MM of the \$38 MM will be used for the loan pool

** SCE expects that \$56 MM of the \$61 MM will be used for the loan pool

*** SoCalGas' budgets for ARRA-Originated Finance Programs and New Finance Offerings are placeholders until more detailed budgets are developed

Q52. Explain process and timeline for selecting and continuing previously-ARRA-funded programs during 2013-2014 (not just 2012).

a. Which specific programs do you expect to fund and at what budget levels in 2013-2014?

b. Do you expect the programs selected to be the same as the ones selected for 2012 funding. If not, why not?

c. What savings estimates are associated with the funded programs?

SDG&E Response:

a. SDG&E expects to fund the following:

- i. CHF MIST 2, \$200-500k for the two year cycle.
- ii. City of San Diego; expected to be approximately \$400-800k for the two year cycle.
- iii. County of San Diego; expected to be approximately \$400-800k for the two year cycle

b. SDG&E anticipates continuing ARRA programs selected in 2012 into the new cycle. We have already started negotiations with the funding recipients to discuss scope and budget and are working to increase integration of our program offerings with those offered through continued ARRA programs.

c. 2013-2014 savings estimates will be a function of project scope and budget, both of which are still under development for all the entities listed above. SDG&E expects to report no savings estimates for the work performed under the City and County of San Diego because of the nature of the efforts (primarily non-resource type activities). SDG&E is working with selected entities

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

to collect data about program activities and develop corollary data about savings generated from program activities.

Q53. Explain how you will go about estimating or collecting data to estimate incremental energy savings from financing programs to ensure that financing becomes a “resource program” in reality.

SDG&E Response:

SDG&E proposes that estimation/data collection to estimate incremental energy savings should be included in the formal EM&V efforts. As part of Impact Assessment Process, the EM&V evaluators could conduct surveys on customer motivations to see what impact financing would have on customer decisions. SDG&E will also collect savings data as part of any “calculated” program efforts.

Q54. “Site bundling” in the on-bill financing program appears to be only offered for institutional customers. Are chain stores also eligible? If not, explain why not.

SDG&E Response:

The “site bundling” feature is not offered to chain accounts to avoid overlapping with the Direct Install program. Many chain stores are eligible for the Direct Install program to have outdated, inefficient energy equipment replaced with new, energy efficient models. Therefore chain accounts are not a good fit for this feature.

Q55. Submit program flow charts and logic models for all financing activities except the new pilots.

SDG&E Response:

See 13-14 OBF Program Flow 8-31-12.pdf , and 2013-2014 On Bill Financing Logic Version 1.pdf

Q56. Explain what portion of the market the current on-bill financing program can serve, given its terms, and how this relates to the Harcourt Brown & Carey Needs and Gaps Assessment findings.

SDG&E Response:

The portions of the market the current On Bill Financing program can serve are those qualified nonresidential customers with qualifying projects. Qualified customers are those who have been active customers of the utility for at least two years and meet utility’s credit

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

requirements. Qualifying projects for business customers are those with 5-year or better simple project payback and total installed project cost less rebates/incentives to be within \$5,000 and \$100,000 per meter; for taxpayer-funded institutional customers are those with 10-year or better simple project payback. Maximum loans for taxpayer-funded institutional customers are \$250,000 per meter for local governments and \$1MM per meter for State of California accounts.

Assuming the reference to the HBC Assessment is meant to address how much of the financing potential OBF addresses, then we would defer to HBC to answer that question. IOU’s do not have enough details to determine the answer.”

Q57. Do you have any plans to pilot on-bill repayment and/or line item billing with residential single family customers in 2013-2014? If yes, describe your plans, timeline, and budget.

SDG&E Response:

No, SDG&E has no such plans due to lending law implications.

Q58. Explain in detail where there is overlap, if any, between your financing programs and those of the RENs. Provide a table that compares the REN/IOU financing program descriptions, market segments served, and the budget amount allocated to each subprogram.

SDG&E Response:

There is currently no overlap between the proposed CHF REN and SDG&E’s OBF program.

Q59. Is duplication or overlap inherently undesirable? Or might there be cases in which overlap would be justified to simultaneously test multiple finance strategies in the same market segment? Explain.

SDG&E Response:

Duplication or overlap may not be inherently undesirable in all circumstances, however, it is probably not a good approach to test multiple finance strategies in the same market segments in the next two years for the following reasons:

- Confusing to customers: too many choices can lead to lack of action for those potential customers who don’t have immediate replacement needs.
- This is not the most effective use of ratepayer funding: Funding competing multiple finance programs in the same market segments at the same time with ratepayer funding will likely result in wasting ratepayer dollars as there’ll be duplicating

Attachment A—San Diego Gas & Electric Company’s Response to Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E

administrative/ marketing costs which could also lead to poor public perception of how ratepayer dollars are used.

- Introducing multiple programs at the same time in the same market also translates to smaller portfolios for each program and reduces the attractiveness of these loan portfolios to secondary security markets. This could impact the desire of a lender to participate (if the potential market share is perceived to be that much smaller).

Q60. Describe plans or efforts to coordinate with the CAEATFA loan loss reserve program.

SDG&E Response:

The IOUs have tasked the Expert Finance Consultant team to engage CAEATFA to understand options for coordinating with them, and their capabilities and capacity to manage any loan-loss reserve program under the yet to be defined pilots. Whether or not there are options to using CAEATFA is part of the development and design process that the Consultant is conducting.

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

Integrated Demand-Side Management (IDSM)

Q61. Regardless of whether Market Transformation Indicators (MTIs) were transmitted in the staff guidance on 2013-2014 MTIs, provide a list of MTIs pertinent to portfolio-wide IDSM efforts.

SDG&E Response to Q61:

The Guidance Decision (D. 12-05-015) directed the utilities to include Market Transformation Indicators (MTIs) in the PIPs of programs identified as “market transformation-oriented” programs (p.358). As IDSM was not identified as a market transformation-oriented program, the IOUs did not propose new MTIs in the 2013-2014 IDSM PIP. If deemed appropriate for IDSM, the IOUs propose to work with Energy Division to develop appropriate MTIs going forward through the MTI Project Coordination Group authorized in the Guidance Decision. The IOUs were unable to develop new MTIs within the time provided for responding to this request and do not feel that it is appropriate to propose new MTIs without consulting with this group and including key stakeholders. Any new MTIs should follow the same rigorous process applied to the previously approved MTIs.

In addition, the IOUs agree with the market transformation experts from the November 2011 MTI workshop, who unanimously agreed that the creation of new market indicators is one of the last steps in a market transformation program planning methodology.

Q62. Include a table indicating estimated budgets for IDSM supporting activities occurring in other statewide programs including a brief description each line item activity.

SDG&E Response:

SDG&E’s IDSM activities are tightly interwoven into current portfolio programs and have been throughout the 2010-2012 cycle. As a result, the budget planning process occurred at a higher level and no detailed budget information is available.

Q63. What other funding buckets will the IOUs “explore” to be leveraged (e.g., CSI ME&O, RD&D funding) to support IDSM activities?

SDG&E Response:

To support the progression of IDSM activities during the 2013-2014 program cycle, all areas of customer programs will be considered: EE, DR, LGP, ME&O, Assistance & IDEEA365. Separate budgets were included for DR in this application. SDG&E will coordinate as necessary with California Center for Sustainable Energy to determine appropriate leveraging of their

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

CSI/DG programs, as CCSE is the program administrator for those budgets in SDG&E’s territory.

Q64. What are the specific activities the IOUs will undertake to coordinate between the IDSM taskforce and the Emerging Technologies Coordinating Council? How will these activities be pursued? What are the deliverables to report and track coordination activities between the ETCC and IDSM taskforce?

SDG&E Response:

The IOUs plan to expand current coordination between the IDSM Task Force and the Emerging Technology Coordinating Council (ETCC) by continuing to have members of the IDSM Task Force participate in ETCC meetings on a regular basis and track the integrated technologies presented at these meetings. The IOUs have also established a subcommittee of the IDSM Task Force that communicates regularly and will expand integrated ET tracking and reporting efforts.

Deliverables include the identification of integrated technologies and opportunities, since integrated systems that are identified through ET efforts present a great opportunity to package offerings to customers with combined energy efficiency and demand response (and California Solar Initiative or other program where practical) incentives and capabilities. Coordination activities will be reported in the IDSM Quarterly Report.

Q65. For pre-existing pilots from 2010 - 2012, describe how the new proposals are different from the last program cycle. How will they improve promoting IDSM in 2013 – 2014 (including specific activities and descriptions), and the associated budgets for each. Do the same for any new 2013 – 2014 pilot programs (e.g., CEI). How will they promote IDSM and associated budgets?

SDG&E Response:

The Sustainable Community & MicroGrid Pilots from the 2010 – 2012 program cycle are wrapping up in 2012 and are not included going forward in the new 2013 -2014 program cycle.

SDG&E is building on results and lessons learned from the IDSM Sustainable Projects (Cevita & Erma Road) and applying them in the New Construction DR Pilot offering. The Microgrid Pilot results and findings will feed into the new Energy Upgrade California Program in the 2013 – 2014 program cycle.

SDG&E will be offering the new IDSM Behavioral Change Pilot in the 2013 – 2014 program cycle. The purpose of this program is to increase customer awareness of their energy use and motivate them to take actions, which can include usage-based or equipment-based changes in

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

behaviors, as well as increased participation in existing and future energy efficiency or demand response programs.

The program will leverage comparative energy use reports delivered to residential customers by U.S. Mail, email, web portal or any combination of the three channels in order to achieve greater customer awareness and energy savings. In addition, SDG&E will pilot energy use reports with a small sub-set of small commercial customers to examine the potential for increased energy awareness and behavior change demonstrated by energy savings. This program will also be leveraged to deliver energy efficiency and demand response program offers to the participating customers.

This behavior change program supports the marketing, education and outreach vision of the California Energy Efficiency Strategic Plan:

“Californians will be engaged as partners in the state’s energy efficiency, demand-side management and clean energy efforts by becoming fully informed of the importance of energy efficiency and their opportunities to act.”

The program also supports the Strategic Plan’s DSM goal to “Deliver integrated DSM options that include efficiency, demand response, energy management and self generation measures, through coordinated marketing and regulatory integration.”

The budget for Behavioral Change is \$2,485,189

Q66. Describe why the following elements are deleted from the proposed PIP and why the utilities believe this complies with previous Commission decisions (page numbers correspond with the PG&E redlined version but questions are applicable to all IOUs unless specifically indicated):

- a. Description of Strategic Plan activities (p. 2)**
- b. ME&O Coordination Efforts with IDSM Taskforce (p. 2)**
- c. References to AB 51 in PG&E’s PIP (p.3)**
- d. Objectives to design effective metrics to measure the progress of IDSM and report to the CPUC...” in PG&E’s PIP (p. 4)**
- e. Language describing uses for online and onsite audits (p. 8)**
- f. Most of the narrative describing Pilots (p. 13)**
- g. Pilot metrics as part of the issues the quarterly report will include (p. 21)**
- h. The language describing “regular meetings and quarterly reports” as IDSM taskforce objectives (p. 21)**
- i. The section on “internal and external barriers to integration” (p. 21)**
- j. The language indicating the taskforce will “work with different programs and delivery channels...” (p. 25)**
- k. Language describing CPUC staff participation in the taskforce? (p. 25)**

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

SDG&E Response:

- a. The text was removed since it is redundant; page 1 describes the impetus for IDSM as the Strategic Plan.
- b. The text was removed since it is redundant; the top paragraph on page 2 summarizes Task Force responsibilities, one of which is, “(coordinating) with the statewide Marketing, Education and Outreach (ME&O) efforts.”
- c. This reference was removed since it is outdated; AB 51 did not make it out of the Senate Committee, so it should be removed from all IOU PIPs.
- d. The text was removed since it is redundant; pages 6, 21, 27, and 28 discuss the Task Force’s role in identifying and measuring progress of IDSM via metrics.
- e. This text was removed since this information appears in PG&E’s Commercial PIP under the Energy Advisor Program (starting on page 39).
- f. The text was removed since it was obsolete; it described 2010-12 activities. The top of page 14 discusses relevant work in 2013-2014.
- g. This language was removed and replaced with “as appropriate” to include all reporting targets and metrics.
- h. The text was removed since it is redundant; page 15 provides this information.
- i. This text was removed since it was ambiguous and confusing. The remaining text is clear and more descriptive.
- j. The text was removed since it is redundant; pages 3, 15, 16, 20, 29 discuss working with different programs and delivery channels.
- k. The text was removed since it is redundant; pages 15, 20, 27 discuss CPUC staff participation in the Task Force.

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

Third Party Programs

Q67. Utilities provided Third Party Procurement Tables in the applications, including all services provided to the IOUs by third parties and relevant information about those services. Within these tables, each IOU identified “whether service is provided on a performance basis” and, if so, a “description of performance basis terms and conditions, as applicable.”

- a. To build on this initial data entry, each IOU should provide a detailed description of how risk of program performance is allocated through each third party contract identified as serving on a performance basis.**
- b. Each IOU should explain how it determines the appropriate risk allocation.**
- c. Explain how a contract performing on a “fixed unit price” basis differs from a “hybrid” basis.**
- d. Explain how it is determined whether the contract should be fixed unit price or hybrid.**

SDG&E Response:

Each of the programs listed as performance based in SDG&E’s procurement table has a large proportion of the program’s budget tied to performance of program services. Risk of program performance is, therefore, mainly borne by the contractor although the utility still must actively manage the contract to help ensure that the utility’s risks are minimized. With resource programs, these services are energy savings. For non-resource programs, these services are not necessarily directly connected to energy savings and may include audits, curriculum kits, or emerging technology reports (among other services); however, the utility strives to connect services to energy savings as much as possible.

SDG&E aims to maximize the proportion of the contract that is tied to delivery of services but a portion of the contract will provide compensation on a time and materials (T&M) basis, which is not performance based. Aspects of the contract that are T&M could include marketing and administrative expenses, start-up costs, and other tasks that are not easily tied to specific deliverables.

SDG&E determines the appropriate risk allocation on a contract-by-contract basis with no specific formula for risk allocation based on type of contract. That said, factors such as contractor performance history, riskiness of the particular technology/target market, or type of program can affect the degree to which the contract places the risk on the contractor.

Contracts based on a “fixed unit price” are those that are 100% performance-based and, therefore, only compensate contractors based on delivery of identified services. Hybrid contracts

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

have a portion that is performance-based (or fixed unit price) and a portion that compensates the contractor on T&M basis for other activities such as marketing or admin.

The Statewide RFPs directed contractors to describe how they proposed to be compensated, whether on a fixed unit price or hybrid basis. Contractors primarily determined how to bid their proposals although RFPs strongly encouraged that a large portion of the compensation should be in the form of pay for performance.

Q68. Provide a detailed description of the IDEEA365 and plan for how it would be used in 2013 and 2014.

a. Provide further explanation of the advantages and disadvantages of approving IDEEA365 as a means of soliciting new third party programs as compared to solicitation models from previous cycles.

b. Clarify whether you propose IDEEA365 to be the sole solicitation mechanism for the 2013-2014 portfolio period or whether additional solicitations may be used.

SDG&E Response:

The IDEEA365 program was designed to respond to the Commission’s request in Section 17.2 of Decision 12-05-015. The Commission states, “In our guidance to the utilities in A.08-07-021, we “found merit in the proposal of some parties for a ‘rolling’ budget cycle” and directed the IOUs to explore this approach with parties and Staff and submit proposals in their applications.” IDEEA365 is designed to allow contractors to submit ideas through Requests for Abstracts (RFAs) for new programs in 2013. These ideas will then be used to develop RFPs to solicit applications with the aim of implementing programs as soon after the PUC approves utilities’ applications.

The advantages of approving IDEEA365 are that it opens up opportunities for contractors with good ideas for new programs to submit their ideas on an ongoing basis, all IOU’s at one time and using one web location. This would allow for the new programs to be reviewed by all utilities in a more timely fashion. The process also allows the utilities to proactively issue RFPs to third-parties mid-cycle based on portfolio needs and stakeholder input.

The main disadvantage of this process would be that all funds will not be committed at the beginning of the cycle and leveraged to obtain energy savings.

SDG&E is proposing that IDEEA365 be the primary venue for additional solicitations that have not been included in its current application to the PUC.

Q69. Describe what sub-programs will be addressing the MUSH market.

a. What is the percentage increase of third party programs that will be targeting the MUSH market?

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

SDG&E Response:

Currently, there are two third party programs (competitively bid programs and part of 20% portfolio funding) that directly address the MUSH market. The Healthcare Energy Efficiency Program (HEEP) provides detailed energy efficiency audits and has performance goals to assist healthcare centers in completing projects through SDG&E’s core commercial programs. Also, the K-12 Energy Efficiency Education (E3) Program provides curriculum and teacher training for elementary and secondary schools.

SDG&E has also chosen per policy manual direction to use the Local Governmental Partnership and Local Institutional Partnership to address the municipal and university portion of the MUSH market.

At this time, SDG&E is not proposing any new third party programs targeting the MUSH market. However, as we review our program portfolio, MUSH market may be an area that is a targeted.

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

Local Government Partnerships (LGPs)

Q70. In this funding cycle, are you proposing an expansion of LGPs? If so, do you define expansion by the number of LGs participating, the geographic scope, or the funding level? Explain.

SDG&E Response:

SDG&E is proposing an expansion of its LGP program. SDG&E viewed expansion as an increase in program scope and worked with LGP partners to ensure expanded programs focused on deep retrofits, as prescribed in D.12-05-15.

Q71. Describe how your application addresses the required disclosure on criteria for rejecting any LGPs proposed. Disclose any LGPs proposed by governmental entities or agencies that were not advanced in the applications for funding.

SDG&E Response:

As detailed in SDG&E’s Local Government Partnership PIP, there were no criteria or PIPs rejected by SDG&E.

Q72. What do you feel is the appropriate role of IOUs in the arena of Codes and Standards, particularly at the local level, and how would you characterize the effectiveness of such IOU efforts and expenditures to date?

SDG&E Response:

At the local level, SDG&E feels that is vitally important to have active relationships with Codes & Standards staff. The IOUs believe that active involvement by the utilities has improved and expedited the Codes & Standards related to energy efficiency and has resulted in meaningful energy savings. The extent of the relationship is variable based on local need and capacity but often it is focused on enhanced trainings for staff to develop knowledge capacity, and facilitation of reach code development though no-cost consulting services provided by SDG&E to the jurisdiction. In some cases, SDG&E will fund staff when there is a very specific scope of activities that staff person will be engaged in and those activities support the enhancement of Codes and Standards in the jurisdiction.

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

Emerging Technologies Program (ETP)

Q73. Explain how your utility has been or is planning to use existing research, including EM&V studies and the Commission Potential and Goals studies to help target potential technologies (OP 96).

SDG&E Response:

The ET Program relies on an open and collaborative process with program managers from program areas, ETP, staff engineering, and market researchers to ensure that proper due diligence is done on new technologies under consideration for incentive programs. Existing research is and will be used in many ways; for example, EM&V studies that look at customer acceptance of emerging technologies will be used to develop conclusions about the rate of customer adoption of ETs. If customers are slow to adopt ETs, the ETP may conduct research into the underlying reasons as a way to determine whether modifications to the technology should be suggested to the manufacturer. The Potential and Goals Studies will be used during the scanning and selection process so that initial scanning for new technologies covers areas identified by the Commission. The Commission's Goals Studies will also help direct initial consideration of which ET candidates are selected while technology candidates are being assessed.

Q74. For the proposed Technology Resource Innovation Program (TRIP), provide:

- a. An outline of the tactics, including: Description of the tactic, Objectives of the tactic, How the tactic will help meet the subprogram’s Technology Introduction Support objectives and how the tactic will help meet the ETP goals**
- b. A description of the solicitation process, including: Plan to define the target audience, Plan for reaching the target audience, How the candidates will apply for the solicitations, Outline the selection process, including screening process and criteria for selection**
- c. For winning programs, describe how they will be administered and ETP’s role in the program administration, if any**
- d. Explain how the savings produced by this tactic will be claimed (under ETP or another program)**
- e. Estimated budget set aside for winning programs and from which program**
- f. Will incentives be awarded? If yes: Expected level of incentives for each successful program, Criteria for awarding incentives, Relationship between ETP-funded activities and third party program administration.**

Attachment A—San Diego Gas & Electric Company’s Response to Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E

SDG&E Response:

It is to be noted that SDGE has not fully developed the TRIP program. However, we intended to follow the format layout by SCE to be consistent as a statewide program.

An outline of the tactics, including:

- Description of the tactic- The intent of the TRIP program is to find, fund, and field test new energy efficiency (EE) or IDSM (combined Energy Efficiency and Demand Response) emerging technologies and delivery approaches that are discovered through the marketplace and IOUs’ s Technology Resource Incubator Outreach (TRIO) activities.
- Objectives of the tactic- The TRIP program will support the introduction of new measures and/or program approaches while supporting EE programs in achieving the CPUC’s energy savings and demand reduction goals. The program aims to achieve greater market acceptance of new technologies through customer incentives, information/education, and technical assistance to help overcome market barriers.
- How the tactic will help meet the subprogram’s Technology Introduction Support objectives and how the tactic will help meet the ETP goals- The TRIP program will help meet ETP’s goals by encouraging the market introduction of new and emerging technologies through third party offerings. The tactic includes moving promising technologies from development stage quickly into the commercial marketplace.

A description of the solicitation process, including:

- Plan to define the target audience- The TRIP solicitation will seek proposals for the design and implementation of an innovative program. The targeted audience includes, but is not limited to TRIO participants and other entities engaged by ETP. TRIO participants include entrepreneurs, third party vendors, investors, EE and DR technology companies, as well as universities. The goal is to leverage relationships through various ETP efforts to support a diverse and qualified set of bidders. The targeted audience also includes firms discovered through the marketplace and other IOU relationships.
- Plan for reaching the target audience- The targeted audience will be added to a bidders list and notified through email. The release of the TRIP RFP will be made public on the IOU statewide solicitation website called PEPMA (Proposal Evaluation and Proposal Management Application). The targeted audience will also extend to pre-registered bidders of the PEPMA website who will be notified of a new solicitation posted.
- How the candidates will apply for the solicitations- The candidates (i.e., potential bidders) will register through the PEPMA website if they haven’t done so previously. Registration

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

includes answering a series of questions and gives the potential bidder a username and password to access the competitive solicitation online.

- Outline the selection process, including screening process and criteria for selection- The evaluation process consists of two parts, threshold and weighted. Part 1 (threshold) will first evaluate the responsiveness criteria on a pass/fail basis. Proposals will be deemed non-responsive (fail) if they neglect to include all information as called for in the request for proposal (RFP). The proposals that receive a passing score in Part 1 will be advanced to Part 2. Part 2 is scored according to the criteria and weights listed below:
- The technical documentation is reviewed by SDGE to determine whether the information meets the RFP requirements. SDGE may provide notice to the Bidder of any technical deficiencies to be resolved by the Bidder within a predetermined timeframe.
- Proposals with technical deficiencies that are not resolved by the Bidder within the predetermined timeframe may be deemed technically non-responsive and will not be scored further.

Each proposal is evaluated based on the information outlined in the **Error! Reference source not found.** table below.

All proposals are then ranked according to their overall score.

Approach to the Work– 35%
<p>In judging the Approach to Work of the Bidder, SDGE will evaluate, at a minimum, the following criteria:</p> <p>The individual components of the Program design (e.g., staffing plan, marketing plan effectiveness, work plan, and timeline, etc.) and how the components contribute towards the potential success of the implementation of the Program;</p> <p>The Bidder’s overall understanding of what is required to accomplish the Program’s deliverables and goals;</p> <p>The Bidder’s strategies to overcome market barriers and customer hurdles to installing Measures; and</p> <p>The Program design incorporates one or more of the <u>five (5) Innovation</u></p>

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

<u>categories</u> of the RFP and incorporates best practices.
Program Cost Effectiveness – 30%
In judging the Program’s cost effectiveness, SDGE will evaluate the first-year costs versus first-year energy savings, levelized cost, TRC, and PAC.
Skill and Experience – 25%
In judging the skill and experience of the Bidder, SDGE will evaluate, at a minimum, the following: That the Bidder has successfully (based on goals and budgets versus actual results) implemented a Program with similar breadth and scope (same end-uses and technical skill set); The degree to which the Program concept and implementation have been successful in the past; The team’s overall relevant experience; and The team has identified and presented the required licenses, insurance, and financial information required to complete the Work.
Supplier Responsibility– 10%
SDGE requires, upon SDGE’s request, bidders to provide documentation of their policies, programs, and performance reports that support supplier responsibility, including: <ul style="list-style-type: none">• Safety policy and management program• Injury and Illness Prevention Plan• Environmental policy and management program• Ethics and Compliance or Code of Conduct policy statement

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

For winning programs, describe how they will be administered and ETP’s role in the program administration, if any.- The awarded TRIP Programs will be administered by the utility’s EE program management staff that oversees the implementation of third party programs. TRIP Programs will follow standard Third Party Program Policies and Procedures manual given to all third party implementers.

Estimated budget for the solicitations- SDG&E has not finalized the planning and budget for TRIP with EE program manager. However, SDGE ETP considers allocating \$100,000 for activities related to TRIP solicitation

SDG&E proposes to pay incentives directly to the customer. The determination of customer incentives levels will vary depending on the technology. Typically, the customer incentives will be consistent with like measures offered through the statewide programs. SDG&E will also consider the cost effectiveness analysis of the measure and the overall program in determining a customer incentive level. Final customer incentives are paid after the measure is installed.

The relationship between ETP-funded incentives and third party program administration is as follows. The TRIP program focuses on market introduction of new and emerging technologies as part of the statewide ETP activities. The administration of TRIP-third party programs will be managed by SDGE program staffs that are most familiar with managing third party program implementers. The proposed budget for the TRIP activities is contained within the ETP.

- Q75. Provide an explanation for how the programmatic initiatives will be used to:**
- a. Advance building integrated design for Zero Net Energy goals**
 - b. Achieve reduction in plug loads (OP 103).**

SDG&E Response:

In the current 2010-12 cycle, the ET program is engaged in some various whole-building efforts **that demonstrated** how integrated building design is conducted. These efforts included collaborating with internal and external groups. such the Demand Response’s Emerging Markets & Technology Program, the U.S. Department of Energy's, and several EE programs. In the 2013-2014 application, ET will continue to develop whole-building efforts that support deep energy reduction goals as describe in the Zero Net Energy Big Bold Goals. Central to whole-building efforts is the need to address all cost-effective measures including plug-loads, behavior, energy/load management strategies, HVAC, etc.

Specific to plug-loads and in collaboration with other internal and external stakeholders, the program will continue to address plug loads from both energy efficiency and energy management perspectives. SDGE will be collaborating with other electric utilities on their effort of pilot program. Lesson learned and outcome from the pilot program will be sharing among participants so that consistent program strategy can be implemented. It is also important to note that because of the fast pace of technology innovation and development in the electronics arena, the role of

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

ETP will be somewhat limited to energy management and behavior areas and less so to energy efficiency improvements. An effective strategy will require close coordination of all stakeholders that include the electronics industry, DOE, UC Irvine Plug Load Center, Codes and Standards program, California Energy Commission, and IOU incentive programs.

Q76. Provide the budget and scope of work for the residential and commercial roadmaps (OP 104 and p. 272).

SDG&E Response:

The scope of work for the residential and commercial roadmaps has not yet been developed, but will likely include research and alignment with applicable past efforts, such as market research and saturation studies. Similarly, there will be close coordination with all relevant current and planned efforts, internal or external to IOUs efforts (e.g., the 2013-2014 market assessments that will be planned through the joint ED/IOU EM&V group). The statewide ET Program expects that the development of roadmaps will require close coordination with other similar planned or ongoing efforts that EE programs, regional players, and/or stakeholders are involved in. ETP envisions the following timeline for the development of the budget and scope:

- 1) Develop general scope and solicit bids - Q1 2013
- 2) Review bids and award - Q2 2013
- 3) Roadmap activities - Q2 to Q3 2013
- 4) Complete work by Q4 2013

A final budget will be determined in conjunction with finalizing the scope of work. The SW ETP estimates these efforts could be in the range of \$100,000 to \$1 million. SDGE will be coordinating with other IOUs in a Statewide effort to determine the appropriate amount of contribution.

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

Workforce, Education, and Training (WE&T)

Q77. Regardless of whether Market Transformation Indicators (MTIs) were identified in the staff guidance on 2013-2014 MTIs, provide a list of MTIs the IOUs believe are pertinent to portfolio-wide WE&T efforts.

SDG&E Response:

The Guidance Decision (D.12-05-015) directed the utilities to include Market Transformation Indicators (MTIs) in the PIPs of programs identified as “market transformation-oriented” programs (p.353). WE&T was not identified as a market transformation-oriented program, and, therefore, no MTIs were proposed in the 2013-2014 WE&T PIP. The IOUs do not feel it is appropriate to develop new MTIs for WE&T at this time, given that the market transformation experts from the MTI workshop unanimously agreed that the creation of new market indicators should be one of the last steps in a market transformation program planning methodology, as summarized on p.3 of DRA's Comments on the November 7, 2011 Market Transformation Indicator Workshops (filed 11/21/2011):

B. The indicators contained in the ED MTI Spreadsheet should not be finalized outside the sequenced 13-step market transformation program planning methodology.

The determination of market transformation indicators cannot be divorced from the sequenced 13-step market transformation program planning methodology. This is because the indicators should measure progress toward the objectives of a specific market transformation program and the desired “difference” the program logic model is designed to effect. The determination of market transformation indicators, which is the 10th step of the sequenced 13-step methodology, should follow and not precede the other steps in the market transformation program planning methodology. How can the appropriate market transformation indicators be determined if one has not yet precisely defined the market, the leverage points, the barriers, the intervention, the desired “difference” from a baseline, and the data set and data collection strategy? Failure to define the market, the leverage points and the other building blocks for a successful market transformation strategy before determining market transformation indicators is akin to putting the cart before the horse.

Such an out-of-sequence approach will likely result in measuring the wrong things, with the result that these incorrect metrics will improperly influence how a program will be planned, designed, executed, evaluated, and adjusted. This will make it difficult to recognize unwanted results at the earliest possible stage of program implementation, when it is less expensive to adjust the program to improve outcomes. The result will be less useful and less actionable market transformation and progress indicators, inaccurate or misleading evaluation outcomes, delays in transforming markets, and imprudent investment of ratepayer capital. Therefore, DRA recommends development of MTIs as part of the programs proposed for the bridge years and beyond.

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

The IOUs will work with Energy Division to consider appropriate MTIs for WE&T through the MTI Project Coordination Group which will be established by Commission staff.

Q78. The IOUs appear to identify the HVAC sector strategy as the only “pilot” effort they will seek to pursue in 2013 – 2014. Describe any other sector strategy efforts that have been initiated or are planned to be initiated in 2013 – 2014. If none, why?

SDG&E Response:

The IOUs appreciate the need to integrate the sector strategy approach as a critical component to their diverse portfolio of education and training efforts. In 2012, the IOUs have embarked upon the creation of a commercial HVAC sector strategy focused on quality maintenance. Sector strategy efforts that the IOUs have started in 2012 and will continue into 2013-2014 include:

- California Advanced Lighting Controls Training Program will continue to receive direct and indirect support through IOUs to train electricians, marketing executives, and lighting specifiers on advanced lighting controls. Approximate timeline provided below.
- HVAC Non-Residential with a focus on quality maintenance (later to include quality installation) to ensure proper methods and procedures for new and existing HVAC system performance to optimize comfort and minimize energy use. Approximate timeline provided in Appendix 1.
- Integrated Demand Side Management Energy Professional/Program Manager sector strategy focuses on the management and implementation of California’s energy efficiency, demand response, and distributed generation programs. Approximate timeline provided in Appendix 1.
- Architectural Design Professional to improve the collaborative design and retrofit efforts of new and existing buildings toward meeting California’s goal of zero net energy by 2020 for residential and 2030 for commercial buildings. Approximate timeline provided in Appendix 1.
- Solar and Renewables Professional to develop and enhance the workforce necessary to sustain a rapidly-growing renewables industry, integrate renewables with energy efficiency and demand response, while meeting the state’s RPS goal (33% by 2020) and GHG emissions goals. Approximate timeline provided in Appendix 1.
- Residential Sector: Entry level weatherization workers, including those from disadvantaged communities and programs supporting them (see additional strategies for minority, low-income, and disadvantaged workers in the answer to Q 81), will be supported in concert with the Low Income Energy Efficiency program. Additional residential support for Whole House Upgrade programs will focus on peripheral

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

industries, including realtors, appraisers and construction trade contractors who could help with the expansion and promotion of the program from a collaborative education and training effort.

- Energy Education Sector Strategy efforts will increase student engagement in energy-related coursework and programs, positioning them for successful careers and a life-long appreciation of energy conservation and efficiency. The IOUs will work to facilitate the linking and leveraging of stakeholders, resources and existing programs to increase our overall ability to cultivate the next generation of energy workers.
- Other efforts prioritized among the WE&T program, giving consideration to the long-term strategic plan and IOU energy efficiency goals, include collaboration on workforce education to expedite adoption of emerging technologies once approved for market rollout, coordination with the Energy Savings Assistance Program (ESAP), increased training to help increase code and installation standards compliance, as well as integration of continuous energy improvement curriculum into higher education institutions.

Furthermore, other educational opportunities for various professional sectors that are not part of a formal certificate or series program will be influenced by what the IOUs learn through their more formal sector strategy efforts and partnerships.

Approximate Sector Strategy Timelines.

The timelines below reflect IOU efforts on a statewide and local/IOU level. Times and deliverables/action items are approximations that are subject to change.

California Advanced Lighting Controls Training Program (Statewide Program)	
Q3 & Q4 2012	<p>Continue Offering CALCTP Courses for Contractors and Electricians at all-three IOUs Energy Centers, JATC’s, ATTE Campuses leading to the following training targets:</p> <p>75 CALCTP Certified Contractors</p> <p>2,000 CALCTP Certified Electricians</p> <p>Expand CALCTP model to 1 additional state to diversify program funding.</p> <p>Release new CALCTP model, version 5</p> <p>Market CALCTP program to electrical contractors at various events and</p>

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

	webinars.
Q1 & Q2 2013	<p>Training Targets as a result of trainings conducted at IOU Energy Centers and other training sites:</p> <p>90 CALCTP Certified Contractors</p> <p>2,400 CALCTP Certified Electricians</p> <p>New IOU incentives for businesses that work conducted by CALCTP certified contractors and electricians.</p> <p>Develop new CALCTP module based on technology changes</p> <p>Educate municipal owned utilities and cities about CALCTP program.</p> <p>Include CALCTP in at least 3 cities municipal codes.</p>
Q3 & Q4 2013	<p>Training Targets as a result of trainings conducted at IOU Energy Centers and other training sites: 120 CALCTP Certified Contractors</p> <p>2,800 CALCTP Certified Electricians</p> <p>Expand CALCTP Model to 1 additional state to diversify program funding.</p> <p>Initiate study which demonstrates the energy savings and customer satisfaction when work is conducted by CALCTP certified electricians and contractors.</p> <p>Release additional CALCTP model, version 6</p>
Q1 & Q2 2014	<p>Training Targets:</p> <p>150 CALCTP Certified Contractors</p> <p>3,200 CALCTP Certified Electricians</p> <p>Initial study findings is released on customer satisfaction with CALCTP certified electricians and contractors</p>
Q3 & Q4 2014	<p>Training Targets:</p> <p>180 CALCTP Certified Contractors</p>

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

	3,600 CALCTP Certified Electricians
	Expand CALCTP Model to 1 additional state to diversify program funding.

Q79. Why is the Green Pathways program transitioning into a local program offered only in PG&E’s territory for 2013 – 2014? Explain the rationale for the other IOUs not pursuing this program.

SDG&E Response:

The Green Pathways program represents a PG&E proof of concept that was initiated in the 2010-2012. In 2013-2014, PG&E plans to scale up the Green Pathways K-12 program in 2013-2014. . An important goal for 2013 is to identify the tools and strategies that support cost-effective scale in order to expand beyond PG&E’s territory.

Green Pathways provides not only the envisioned online community, but also an online course with more than 15 sessions that provide information about the importance of and the need for green work. In addition, the program develops students’ ability to productively interact with adults and peers in the envisioned online community on green issues, a requisite skill in which we found students to be very deficient. .

SDG&E, SCE, and SoCalGas currently offer programs that target similar demographics using similar approaches as Green Pathways’, such as PEAK. At this time, SDG&E is meeting regional needs by leveraging existing programs to incorporate local flavors into programs that serve K-12 students, but will evaluate restructuring current programs to more closely match the Green Pathways’ model as PG&E demonstrates continued success. The other IOUs will consider this program, as well as current and other programs for the 2015 program cycle and beyond, based on demonstrated program effectiveness and cost effectiveness. The other IOUs presently serve – students through the following programs:

SCE, SDG&E, SoCalGas:

PEAK (3 - 12 grade) – a comprehensive standards-based educational program designed to empower students with the knowledge to manage energy use in their homes, schools and communities.

Q80. What are the lessons learned resulting from the existing WE&T process evaluation? Provide a table or attachment listing the findings, lessons learned, and recommendations resulting from this evaluation. Include in the table a column indicating how the IOUs will address these recommendations.

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

SDG&E Response:

The recommendations listed in these tables may not be comprehensive and are subject to change since the process evaluation is still under development and has not yet been published.

Centergies Findings, Lessons Learned, Recommendations	IOU Response
<p>1) Consider other approaches to information dissemination</p> <p>The Internet can be a highly effective means of “sharing knowledge” (webinars, podcasts, expert videos, web-based self-study, live webcast, on-demand web courses)</p>	<p>During 2013-2014, the IOUs plan to assess new knowledge sharing opportunities. In particular, web-based approaches as described in the process evaluation will be considered. The IOUs will begin developing materials to implement these approaches once cost and efficacy of delivery methods have been determined. IOUs have already embarked upon creating and posting on-demand classes. Other opportunities include posting energy fundamentals classes as on-demand. Such fundamentals courses will be cross-cutting across various sectors and can be shared across IOUs.</p>
<p>2) Consider developing a few well-targeted and effective courses. Consider other program’s offerings; identify major gaps in serving key sectors then develop training to meet the most pressing gaps</p> <p>Build from performance objectives based on roles and responsibilities</p> <p>Emphasize “hands-on” practice of skills and application of knowledge</p> <p>Include ample examples based on "real world” scenarios</p> <p>Provide job aids to support performance after class</p>	<p>As part of the emphasis on sector strategies during 2013-2014, the IOUs plan to target training gaps in key sectors. While the sector strategies are still under development, they will support key training certifications and guide the IOUs in restructuring portions of their programs to target audiences from key sectors. The IOUs plan to focus these courses on practical skills and scenarios relevant to the sector and provide reference materials and job aids to encourage knowledge gained to be implemented in the field. The IOUs will increase their use of adult learning principles to encourage active learning and knowledge retention in these areas. IOUs will review student evaluations for courses where there were significant changes to the course delivery method to assess student feedback on the changes to the courses.</p>
<p>3) Use more flexible delivery options for</p>	<p>The IOUs currently offer select courses on</p>

Attachment A—San Diego Gas & Electric Company’s Response to Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E

Centergies Findings, Lessons Learned, Recommendations	IOU Response
<p>information dissemination: Night/weekend classes</p>	<p>evenings and weekends. The IOUs will explore participant interest in expanding evening and weekend course offerings.</p>
<p>4) Make course information easily transferable to other to extend reach.</p> <p>Materials available online/electronically (e.g., PowerPoint files)</p> <p>More handouts - step-by-step guides, booklets, brochures</p> <p>More visual materials (i.e. photos, diagrams)</p> <p>Additional references/links/resources to supplement coursework</p> <p>Online guide</p>	<p>The IOUs plan to increase the number of reference materials and/or modify course materials and/or refer people to existing course materials that course participants can take away from courses and distribute among colleagues. Emphasis will be placed on those materials that are easily accessible and provide clear visual representations, step-by-step guides and “how-to’s” for application in the participants’ workplaces after course completion. The course materials will be made available to participants online or sent electronically. Some materials employed by the IOUs may be copyrighted, so IOUs will need to ensure that copyright laws are adhered to prior to facilitating distribution of any materials.</p>
<p>5) The following Sectors need more IDSM training; increasing IDSM content will help meet the need:</p> <p>HVAC</p> <p>Lighting/Daylighting (especially demand response)</p> <p>Architects/Engineers/Design</p> <p>Building Management and Maintenance (some offerings currently available, very important topic for this sector)</p>	<p>The IOUs have an agreed-upon definition of IDSM and will expand the number of IDSM courses as appropriate. The IOUs plan to expand their existing IDSM course content with a particular focus on the areas identified in the process evaluation. Where appropriate, these courses will include content on EE, DR, DG and buildings as systems.</p>
<p>6) Learning objectives need to be written from the perspective of what the student will get out of the class, as opposed to what the instructor’s</p>	<p>The IOUs will focus course learning objectives on the perspective of the student, rather than the instructor such that the learning objectives have clear goals for what the student will learn/do in the class and, as appropriate, do or be able to with the</p>

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

Centergies Findings, Lessons Learned, Recommendations	IOU Response
objective is to do in the class.	material after the class.
<p>7) Food Service-Specific Findings: Likely levers for increasing positive action after class include:</p> <p>Focus courses around a few key “do” objectives</p> <p>Provide guidelines and job aids to assist in assessing options and taking appropriate action</p> <p>Include in-class activities based on “mini-scenarios” in which participants choose an appropriate plan of action</p>	<p>Participants responded very favorably to the food service component of the IOU offerings. However, the IOUs plan to implement several key recommendations from the process evaluation. These include structuring course content and materials around specific actionable objectives, expanding reference materials and job aids to help food service personnel assess options and make decisions with regard to food service technologies, and providing practical examples and applications in food service courses.</p>

Connections Findings, Lessons Learned, Recommendations	IOU Response
<p>Energenius (PG&E only):</p> <p>1) Consider online training/pre-recorded videos where teachers can learn from a trainer and watch teachers teaching some of the more challenging lessons.</p>	<p>During 2012-2013 school year the Energenius Survey will include a question determining the extent to which teachers would attend a training session and/or watch a training video on specific lessons within a Energenius Program.</p> <p>The Energenius program team plans to evaluate the amount of interest in such training materials against the cost of production and distribution.</p> <p>All Energenius Teacher Guides will now include on the inside front cover and inside back cover a prominent call out box suggesting that if the teacher has any questions about the lessons/activities to contact the PG&E Program Manager (with an email address). The PG&E Program Manager will keep a log of all such calls. This information will also be helpful in</p>

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

Connections Findings, Lessons Learned, Recommendations	IOU Response
	determining the need for additional contact/training of the teachers.
<p>Energenius (PG&E only):</p> <p>2) Consider adding online student activities to the curriculum.</p>	<p>During 2012-13 school year, the Energenius program team plans to conduct research to identify existing online student activities (non-commercial) that support learning about energy efficiency and other content/concepts specified in the Strategic Plan and Needs Assessment.</p> <p>Online student activities will be incorporated in the lessons and/or the appendices of the various Teacher Guides (excluding the preschool and Kindergarten level programs).</p>
<p>Energenius (PG&E only):</p> <p>3) Consider incorporating lesson around KW reductions and demand response into the curriculum where appropriate.</p>	<p>New Energenius programs under development have KW reductions and demand response incorporated into the curriculum as age appropriate.</p>
<p>PEAK Program (PG&E only):</p> <p>1) Consider a requirement that fifty percent of the schools participating in PEAK annually be new recruits to the program.</p>	<p>The PG&E Connections program team plans to discuss this recommendation with the PEAK program implementer as part of the contract negotiations.</p>
<p>PEAK Program (PG&E and SCE):</p> <p>2) Consider developing online training or pre-recorded videos where teachers can learn from a trainer and watch teachers teaching some of the more challenging lessons. This has already been completed.</p>	<p>This recommendation has already been implemented.</p>
<p>PEAK Program (PG&E and SCE):</p> <p>3) During the teacher training session</p>	<p>The PG&E and SCE Connections program teams plan to discuss this recommendation with the PEAK program implementer as part of the contract</p>

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

Connections Findings, Lessons Learned, Recommendations	IOU Response
consider increasing the time spent on hands-on training and covering unit materials. Will be discussed during the contract negotiations.	negotiations.
<p>Green Pathway Program (PG&E only):</p> <p>1) The ODC evaluation was very favorable of the concept and design. It found that this on-line program has the potential to start to expose students to career options and connect them with resources to help them. It is in alignment with the expectations of the Strategic Plan and the NEEDs Assessment and is unique in both its delivery and the only one of its kind (in terms of alignment with the objectives) for targeted high schools.</p>	<p>The Green Pathway program is still under development and pilot will be completed at the end of 2012. As described in the 2013-2014 Program Implementation Plan, PG&E plans to offer Green Pathway as part of their Connections portfolio of programs.</p>
<p>LivingWise (SCE only):</p> <p>1) LivingWise is currently targeted at 6th grade classrooms. Consider expanding the reach of LivingWise by expanding the curriculum to other grade levels.</p>	<p>The topics in the current curriculum align better with 6th grade than other grades. However, the SCE Connections program team plans to discuss the possibility of expanding this program to other grades with the program implementer, giving consideration to teacher interest and resources available.</p>
<p>LivingWise (SCE only):</p> <p>2) Consider fine-tuning lesson plans and program objectives to better meet teacher objectives and needs. Guidance for some classroom activities is vague or incomplete.</p>	<p>The LivingWise program implementer is continually improving the program. They recently conducted a focus group among teachers to get more feedback from teachers/users to improve the program these regards.</p>
<p>LivingWise (SCE only):</p> <p>3) LivingWise is generally conducted via a “passive learning” design.</p>	<p>The LivingWise program implementer is currently redesigning the program to be more interactive and to engage more critical thinking in students.</p>

Attachment A—San Diego Gas & Electric Company’s Response to Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E

Connections Findings, Lessons Learned, Recommendations	IOU Response
Consider restructuring the curriculum and teaching modalities to encourage an active learning environment.	
<p>Green Schools (SCE only):</p> <p>1) Consider revising program content and training materials. The curriculum seems to be poorly aligned with California Content Standards, teacher training effectiveness scores and overall program satisfaction were quite low, and student learning materials are not always age appropriate.</p>	<p>The SCE Connections program team will discuss this recommendation with the program implementer and encourage them to consider engaging with a consultant group specializing in education and curriculum. In addition, the program team will encourage the implementer to conduct focus groups to identify specific opportunities for program improvement.</p>
<p>Green Schools (SCE only):</p> <p>2) Consider adding program content on demand response.</p>	<p>The SCE Connections program team plans to arrange for greater collaboration with the SCE demand response (DR) group to help ensure that DR and IDSM are imbedded in the Green Schools program</p>
<p>Green Schools (SCE only):</p> <p>3) The program focuses on energy savings at schools at the expense of educating students. Consider leveraging other materials such as Energenius to encourage more classroom education.</p>	<p>The SCE Connections program team plans to work with program implementer to modify the program structure so that the focus is:</p> <p>Energy Education</p> <p>Achieving energy savings at schools/homes</p> <p>Focusing on “Green Workforce”</p>
<p>Green Campus (PG&E and SCE):</p> <p>1) Green Campus has a goal for interns to engage 1,000 students per semester/quarter through outreach and educational activities. Consider restructuring this goal, as it is more challenging for small schools and those on the quarter system to meet this goal</p>	<p>The Connections program team will suggest to the Green Campus program implementer that the outreach goal be adjusted based on student population and quarter verses semester.</p>

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

Connections Findings, Lessons Learned, Recommendations	IOU Response
than for large schools and those on semester terms.	
<p>Green Campus (PG&E and SCE):</p> <p>2) Consider new options for those campuses that have already implemented many demand side management and sustainable measures. Some campuses are so green that interns are limited in the energy saving potential they can achieve.</p>	<p>The Connections program team will suggest to the Green Campus program implementer that the program move to new campuses and set up sustainability plans for those campuses that have participated the longest or have limited energy saving potential.</p>
<p>Green Campus (PG&E and SCE):</p> <p>3) The strength of the relationship with campus facility departments varies by school, and weak department support limits energy saving potential.</p>	<p>The Connections program team plans to work with the Green Campus program implementer to identify how the IOUs can support the Green Campus interns on campuses where the support is weak.</p>
<p>Green Campus (PG&E and SCE):</p> <p>4) Consider ways to make the program more challenging for interns that participate over several years.</p>	<p>The Connections program team will suggest to the Green Campus program implementer that they come up with several options for veteran Green Campus participants. For example, they may wish to develop a two to three year developmental plan for the interns that gives them additional training as they become more senior, or they may wish to facilitate opportunities for interns to provide mentoring support to local high school students and or Green Pathway program.</p>

Q81. What strategies are the IOUs pursuing to ensure not only training for minority, low-income, and disadvantaged workers, but also employment opportunities after training is complete?

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

SDG&E Response:

For the Energy Savings Assistance program, as directed in D.12-08-044, SDG&E will begin tracking (1) contractor and subcontractor contract terms (competitive bid, direct award, etc.); (2) contractor and subcontractor compensation schemes (hourly, piecemeal, salaried, etc.); (3) number of inspection failures and the types of failures (including the number of enrolled customers later deemed ineligible, number of incorrectly assessed households and instances of measure installation inspection failures); (4) level and type of IOU training (including lead safety training) and screening (including background check) these specific contractors have completed; (5) customer feedback for these contractors, positive and negative; (6) demographic data of the current ESA workforce, including minority, local, low income, disabled, displaced, and other disadvantaged communities; and (7) the IOU’s assessment of any other needs of the existing workforce to meet the current and future ESA Program demands. In February 2013, SDG&E will submit a report with preliminary findings and a summary of WE&T data collected in the seven WE&T areas for program year 2012 to begin assessing its WE&T needs, if any, of the existing ESA Program workforce in yielding effective and quality program outcomes. This report will be evaluated by the CPUC’s Energy Division and the WE&T Working Group established by D.12-08-044.

Q82. What requirements do the IOUs currently have, related to their programs that support health and safety training requirements (p. 281)? Provide a specific list of the health and safety requirements currently included in certification or other IOU program requirements.

SDG&E Response:

SDG&E expects contractors to work safely with any hazards presented during the course of providing services for their respective programs. Contractors are required to follow all federal, state, and local requirements. In addition to requirements associated with lead and asbestos, and Environmental Protection Agency (EPA) Lead Renovation, Repair and Painting (RRP) rule, the Weatherization Installation Standards (WIS) manual also references health and safety requirements stemming from OSHA regulations which are meant to protect the employee when working with lead (Title 8 Section 15321.1 and Title 17 Section 3600 et . seq.).

In addition, all workers are trained to recognize asbestos and instructed not to disturb the material if suspected. The ESA Program does not include training on asbestos or lead certification, however all participating contractors are required to be Renovation, Repair, and Painting (RRP,

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

an EPA certification) certified. There is no requirement for contractors to be asbestos certified if not involved in remediation; the same also applies to lead with the exception of RRP

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

Cost-Effectiveness

Q83. Clarify whether the Emerging Technology Program (ETP) costs were included or excluded from portfolio-level cost-effectiveness calculations (see D.09-09-047, pp. 68-69). Provide a table showing the overall portfolio PAC and TRC values with and without ETP program costs.

SDG&E Response to Q83:

For the July 2, 2012 Application SDG&E included the Emerging Technology Program (ETP) costs. The attached table shows the overall portfolio PAC and TRC values with and without ETP program costs.

SDGE Compliance Portfolio as filed July 2, 2012 with Emerging Technology Program (ETP) Costs							
Cost Effectiveness (Lifecycle Present Value Dollars)							
	Cost	Benefits			Benefit - Cost		
		Electric	Gas	Incentives	NPV	B/C Ratio	
Program TRC (\$)	\$ 279,102,538	\$353,043,331	\$38,122,261	NA	\$112,063,055	1.40	
Program PAC (\$)	\$ 206,813,078	\$353,043,331	\$38,122,261	NA	\$184,352,514	1.89	
SDGE Compliance Portfolio with Emerging Technology Program (ETP) Costs Removed (per Question 83)							
Cost Effectiveness (Lifecycle Present Value Dollars)							
	Cost	Benefits			Benefit - Cost		
		Electric	Gas	Incentives	NPV	B/C Ratio	
Program TRC (\$)	\$ 276,495,010	\$353,043,331	\$38,122,261	NA	\$114,670,583	1.41	
Program PAC (\$)	\$ 204,205,550	\$353,043,331	\$38,122,261	NA	\$186,960,042	1.92	

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

Responses to A.2: Specific Questions for SDG&E

Residential Programs

Q1. For the Whole House Upgrade Program, include and separate the budget projections and savings estimates for the Advanced and Basic path components of the single-family and multi-family programs.

SDG&E Response:

The WHUP Advanced, Basic and Multifamily Path budgets and savings estimates are considered part of the overall WHUP budget and savings goals and are difficult to parse out in terms of budget to savings related to the specific paths as many expenses will be shared and leveraged across the three paths in order to streamline and reduce administrative and implementation costs.

However, in order to create a budget and estimated savings for WHUP, SDG&E estimates:

- Approximately 2,800 multifamily dwelling units will be served with estimated savings of approximately 1,800,000 kWh, and 72,000 therms;
- Approximately 1,300 single family customers will participate in the Advanced Path with estimated savings of approximately 2,300,000 kWh, and 225,000 therms; and
- Approximately 350 single family customers will participate in the Basic Path with estimated savings of approximately 40,000 kWh, and 14,000 therms; and

Q2. Is it correct that your Whole House Upgrade Program budget decreased by 80% compared to the Energy Upgrade California annual budget for 2010-2012? If so, explain why.

SDG&E Response:

This seems to be incorrect. The requested budget for WHUP includes what was previously in the 2010-2012 cycle two residential programs combined into a singular subprogram. Additionally, the 2010-2012 cycle was 3 years and the 2013-2014 transitional cycle will be 2 years. On an annualized basis, the 2013-2014 budget is higher.

For the 2010-2012 cycle (3 yrs) the total budget for the SW Whole House Prescriptive Program and the local Whole House Performance Program was \$15,011,632.47. For the 2013-2014 (2 yrs) proposed WHUP budget, SDG&E is requesting \$12,544,279.

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

Industrial and Agricultural Programs

Q3. Explain the rationale for eliminating funding for the Continuous Energy Improvement program.

SDG&E Response:

SDG&E has not eliminated funding for the Continuous Energy Improvement (CEI) program. In the 2010-12 cycle, SDG&E’s CEI program was limited to the Commercial Sector. For the 2013-14 period, SDG&E included funds for CEI in its Commercial (SDGE3215) and Industrial programs (SDGE3227); note that SDGE3227 was mistakenly included within SDG&E’s Commercial program in budget tables. No funds were allocated to the Agricultural Sector because of the limited opportunity available in SDG&E’s service territory.

Q4. Explain the rationale for eliminating funding for third party industrial and agricultural programs.

SDG&E Response:

No SDG&E third party industrial or agricultural programs have been discontinued for the 2013-14 period. SDG&E has one third party program targeted at Industrial customers and this program is a continuation of the 2010-2012 program (Comprehensive Industrial Energy Efficiency-SDGE3230-see PIP at page 1145 of SDG&E’s application). SDG&E also has one third party program targeted at Agricultural customers and this program is a continuation of the 2010-2012 program (Energy Efficient Water Pumping-SDGE3235-see PIP at page 1155 of SDG&E’s application).

Q5. Explain the rationale for increasing the commercial calculated budgets.

SDG&E Response:

The primary driver of the increase in SDG&E’s SW Commercial Calculated program’s budget. The first and most significant is the elimination of SDG&E’s local calculated program, Energy Savings Bid. This program is being discontinued because of its similarity to the SW Calculated programs and the direction from the Commission to simplify the portfolio structure. The funds from this local program have been integrated into the SW Calculated program. Furthermore, with the emphasis for deeper savings, SDG&E would like to ensure adequate funding to support customers interested in pursuing these projects.

Third Party Programs

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

Q6. Explain why the twelve third party programs as described and labeled in the PIPs differ in the placemats? Resubmit placemats with all third party programs in one category, as some currently show up in the statewide program sections.

SDG&E Response:

SDG&E acknowledges that the names for third party programs in the placemat and the PIPs are confusing but there is a reason for the differences. The names of the third party programs in the PIPs are the actual names that SDG&E uses for the programs. The references to the programs in the placemat differ because, in many cases, SDG&E is delivering the statewide subprogram through the services of a third party contractor that was selected as part of the third party competitive bidding process. SDG&E kept the naming convention for the subprogram consistent with the program in which it resides, even if the subprogram was delivered by a third party to maintain consistency with the statewide nomenclature. A revised version of the Placemat and Table 3-4 with a list of the third party portfolio is provided. See Table 3.4 Third Party Portfolio Budget.xlsx and SDG&E 2013-2014 Program Budget Workbook 8-31-12.xls.

Local Government Partnerships

Q7. SDG&E proposes to administer its own “REN” under the LGP program, but the PIP does not show a budget line item for these activities. Is SDG&E seeking funding for its proposed San Diego “REN,” and if so, how much?

SDG&E Response:

The budget for the REN is captured within each individual partnership. Additionally, some of the activities will be leveraging funding from other programs, such as the whole house upgrade program and Continued ARRA programs. SDG&E is meeting with SDREN partners to fully flush out the scope but is anticipating a total budget of approximately \$750,000-800,000 that will be funded out of the LGP program. This budget is already “baked” into the LGP budget request.

Q8. Tables 3&4 of the PIP are supposed to contain MTIs for LGPs. Please provide.

SDG&E Response:

Presently tables 3 & 4 do contain MTI’s for LGPs. SDG&E is open to adding and changing MTI’s proposed by the Commission and other stakeholders and welcomes input on how to better evaluate market transformation in the LGP arena.

Q9. The City of San Diego partnership proposes to install self-generation systems, explore revenue generating opportunities using landfill gas, and pursue cost containment strategies

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

including participating in rate design settlement conferences and entering into PPAs for solar power. Are these appropriate activities to fund with energy efficiency ratepayer funds?

SDG&E Response:

The intent of these “implementation activities” was to describe areas of collaboration and leveraging between energy efficiency program activities and other demand side activities that the City will be engaging in. However, because the San Diego PIP, like all of the LGP PIPs, were redlined and submitted, these activities have primarily come to a close (without the use of EE funds) and should have been removed and updated with implementation activities that highlighted a more IDSM focused approach in the new cycle.

Q10. The City of Chula Vista partnership proposes to pursue the development of a “green” business park to assist in attracting new clean technology companies and assist existing businesses to identify new “green” product and service opportunities. Are these appropriate activities to fund with energy efficiency ratepayer funds?

SDG&E Response:

Chula Vista has a history of actively working with the business community to develop opportunities related to energy and sustainability. Similar to many efforts our local government partners engage in, rate payer dollars will be leveraged with additional funding sources. Rate payer dollars are only invested in activities that have a clear correlation to energy efficiency (such as making business aware of locally developed/manufactured EE products that can purchase/installed at a discount for example). SDG&E, through our oversight of the program, ensures rate payer dollars are never invested in an activity or program that is not appropriate for the funding source.

Lighting

Q11. Explain the rationale for the 26% of the lighting budget allocated for the Lighting Innovation Program.

SDG&E Response:

SDG&E allocated 26% of the lighting budget to the Lighting Innovation based on historical data to support advance lighting measures. The SDG&E allocation supports the newer advance lighting solutions based on higher efficiency and longer life but more expensive LED based systems, advance lighting control systems, development of new go-to-market channels, and other activities supporting newer advance lighting solutions in the early commercialization phase that have not crossed the “chasm” to the early majority market phase.

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

IDS

Q12. Explain the rationale for the budget increase for this program, which appears to have increased seven-fold from 2010-2012 to 2013-2014.

SDG&E Response:

The proposed budget for 2013-2014 is not a significant increase from the 2010-2012 program cycle. The table below illustrates how the marketing budgets from each cycle are being presented and how the IDS program and operating budgets compare.

Non-Program Specific Marketing Budget Comparison

	2009-2011 DRP Approved Budget	2012 DRP Approved Budget	2012-2014 DRP Approved Budget	CEAO% Reduction	2013-2014 Proposed Budget	3 Year Proposed CEAO+IDS Total	CEAO+IDS Marketing% Reduction
CEAO (DR)	\$6,029,209	N/A	\$1,100,000	-81.80%	N/A		
IDS (EE+DR)	\$0	\$984,359	N/A	N/A	\$3,764,607	\$5,848,966	-3.00%

The SW IDS operating budget for 2010-2012 averaged roughly \$200,000.00 a year and the operating budget for 2013-2014 essentially held the same at \$207,000.00 a year. Below is a comparison of the two program cycles:

IDS Budget Elements for 2010-2012

SW IDS	\$600,122.25
Local Island Program (Microgrid)	\$2,572,180.28
Local Sustainable Communities (Civita & Erma Rd)	\$964,081.17
Total	\$4,136,383.70

IDS Budget Elements for 2013-2014

SW IDS	\$415,050.00
Behavioral Change (EE)	\$2,485,189.00
Behavioral Change (DR)	\$595,220.00

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

Total \$3,495,459.00

Workforce, Education, and Training

Q13. The IOUs were directed to include a list of workforce training courses and programs they propose to offer in the 2013-2014 program period (p. 276). SDG&E apparently has not provided this information. Please provide.

SDG&E Response:

Please see the following table.

Attachment A—San Diego Gas & Electric Company’s Response to Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E

2013-2014 Courses Titles	2013-2014 Courses Titles
2013 Title 24 - Nonresidential Mechanical Compliance	Green Schools in a Red Economy
2013 Title 24 - What's New?	How do LEDs Compare
Adjustable Speed Drive	How to Achieve Net Zero Energy
Advanced Lighting Controls	How to Manage Your Business Energy Costs
Air Handling Systems	How to Sell an Energy Efficiency Project
An Introduction to a Microgrid	HVAC 101
Benchmarking Energy Use in Commercial Buildings	Identifying Energy Efficient Upgrades
Benchmarking for Property Managers Part 1	IHACI - Air Conditioning and Heat Pump Module, Part 1
Benchmarking for Property Managers Part 2	IHACI - Air Conditioning and Heat Pump Module, Part 2
BOC Series Level I	IHACI - Air Conditioning and Heat Pump Module, Part 3
BOC Series Level II	IHACI - Air Conditioning and Heat Pump Module, Part 4
Boilers Energy Efficiency Training for Boiler Contractors	IHACI - Air Distribution Module, Part 1
BPCP Sustainable Series - Basics of Sustainability, Part 1	IHACI - Air Distribution Module, Part 2
BPCP Sustainable Series - Energy, Water and Waste, Part 2	IHACI - Air Distribution Module, Part 3
BPCP Sustainable Series - Green Economy & Green Jobs, Part 4	IHACI - Air Distribution Module, Part 4
BPCP Sustainable Series - Sustainability and Our Surroundings, Part 3	IHACI - Gas Heating - Part 1
Building Information Modeling (BIM)	IHACI - Gas Heating - Part 2
Building Integrated Photovoltaics	IHACI - NATE Part 1
CALCTP Business Development Seminar	IHACI - NATE Part 2
CALCTP Systems Course	IHACI - NATE Part 3
CALCTP Technical Series	IHACI - NATE Part 4
Centralized Hot Water Analysis Optimization & Savings	IHACI - NATE Part 5
Chill Out - Optimizing Food Service Refrigeration	IHACI - NATE Part 6
Chilled Water Systems	IHACI - NATE Part 7
CHPS Modernizations Boot CAMP Pt 1	IHACI - NATE Part 8
CHPS Modernizations Boot CAMP Pt 2	IHACI - System Performance Module - Four Part Series, Pt. 1
Compressed Air System Efficiency	IHACI - System Performance Module - Four Part Series, Pt. 2
Compressed Air System Efficiency	IHACI - System Performance Module - Four Part Series, Pt. 3
Converting Energy Audits to Business Plans	IHACI - System Performance Module - Four Part Series, Pt. 4
Cooling Towers Efficiency	Intro to Sustainability - UCSD Part 1
Core Concepts of Sustainable Design - Part 1	Intro to Sustainability - UCSD Part 2
Core Concepts of Sustainable Design - Part 2	Intro to Sustainability - UCSD Part 3
Core Concepts of Sustainable Design - Part 3	Intro to Sustainability - UCSD Part 4
Demand Response - Calculating Load Reduction	Intro to Sustainability - UCSD Part 5
Effective & Efficient Foodservice Lighting	Intro to Sustainability - UCSD Part 6
Efficiency Sales Professional Certification Series	Intro to Sustainability - UCSD Part 7
Energy & Carbon Management	Intro to Sustainability - UCSD Part 8
Energy Cost Control: How the Money Works	Intro to Sustainability - UCSD Part 9
Energy Efficiency for Chefs	Introduction to Residential EnergyPro
Energy Management Systems	Justifying Investment in Energy Efficiency
Energy Optimization Strategies for Commercial Buildings	LEED BD+C - Technical Review
Energy Savings Opportunities in the Boiler House	LEED EBOM - Technical Review- Existing Buildings
Energy Savings through Process Improvement	LEED Green Associate (LEED GA) Workshops
Energy STAR Best Practices	Lighting 101
Energy Star Building Upgrade Manual - Part 1	Outdoor Lighting Design & Comp. for 2008 T24 Standards
Energy Star Building Upgrade Manual - Part 2	Project Financial Analysis
Energy Star Portfolio Mgr Benchmarking	Saving Energy at Hospitals & Healthcare Facilities
Energy Star Portfolio Mgr Energy Performance Tools	Selling Efficiency: A Primer for Building Engineers
Envelope Title 24 Compliance	Selling Efficiency: A Primer for Vendors and Service Providers
eQUEST Advanced	So You Want to Be an Energy Manager?
eQUEST Intermediate	Specifying Energy Efficient Equipment
eQUEST Introduction	Sustainable Architecture without Architects
Facility Managers 101	Sustainable Building Envelopes
Facility Manager Series - Operations & Maintenance Basics, Part 1	The Commercial Tenant's Perspective on Energy Efficiency
Facility Manager Series - Human & Environmental Factors for the Ideal Workplace, Part 2	The Commercial Tenant's Perspective on Energy Efficiency
Facility Manager Series - Optimizing Building Systems & Technology, Part 3	Title 24 Energy Code for Non-Residential
Facility Manger Series - Project Management, Part 4	Title 24 Energy Code for Residential
Green Buildings Through Integrated Project Delivery	Towards Zero Energy Buildings
Where, When and Which Lighting Controls	Update on Food Safety
You Benchmarked Your Building ~ What's Next?	Using EnergyPro with the Energy Upgrade CA Program
What is Smart Grid?	What is Microgrid?

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

Emerging Technologies Program

Q14. Provide revised quantity targets (numerical goals) that reflect your 2013-2014 cycle requested budget for:

a. Subprogram #1: Technology Development Support

- i. Number of technology development support projects for the cycle**
- ii. Number of technology development outreach workshops for the cycle**

b. Subprogram #2: Technology Assessments

- i. Number of technology assessments for the cycle**
- ii. Number of measures expected to be transferred into the energy efficiency programs for the cycle**

c. Subprogram #3: Technology Introduction Support

- i. Number of technology introduction activities**
- ii. Number of TRIP solicitations**

SDG&E Response:

The information below is provided in the 2013-2014 PIPs under section 5 “Program Goals, Objectives, Action Strategies & Performance Metrics”

Table 4. 2013-2014 Numerical Goals

2013-2014 Subprogram	Objective	Cycle Numeric Goal
Sub-program #1 Technology Development Support Subprogram	Screen, select, and implement targeted technology development support projects to benefit EE measure development.	2
	Conduct technology developer outreach through workshops	2
Sub-program #2 Technology Assessments Subprogram	Assess EE measures, including integrated demand-side management (IDSMS) measures	10
	Transfer measures from the ETP into the EE programs, with the goal of producing energy savings and/or demand reduction.	4

Attachment A—San Diego Gas & Electric Company’s Response to Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E

Sub-program #3	Conduct technology introduction activities	2
Technology Introduction Support Subprogram	Conduct Technology Resource Innovation Program (TRIP) Solicitations	1

Q15. Provide revised ETP 2013-2014 planning budget that reflects the requested budget (OP 98 a-f).

SDG&E Response:

	Direct Implementation	Admin	Marketing & outreach**	Total Budget
Total ET program*	\$2,403,000	\$270,000	\$27,000	\$2,700,000
Technology Development Support Subprogram (TDS)	\$360,450	\$40,500	\$4,050	\$405,000
Technology Assessments Subprogram (TA)	\$1,297,620	\$145,800	\$14,580	\$1,458,000
Technology Introduction Support Subprogram (TIS)	\$744,930	\$83,700	\$8,370	\$837,000

*Note: Administrative costs in addition to exhibited program element costs. Funding for activities, operations, and projects previously funded under program elements Technology Test Centers, Market and Behavior Studies, Scaled Field Placements, Demonstration Showcases, Business Incubation Support, and Program Management & CPUC Reporting have been distributed to the three ET subprograms. A planning budget breakdown as per the guidance decision is included in Appendix 1.

** Outreach efforts is part of the direct implementation budget.

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

	HVAC	Plug Load/Controls	Lighting	Integrated. Bldg Design & Ops	Other	Total
Technology Development Support	\$81,000	\$81,000	\$81,000	\$81,000	\$81,000	\$405,000
Technology Assessment	\$291,600	\$291,600	\$291,600	\$291,600	\$291,600	\$1,458,000
Technology Introduction Support	\$167,400	\$167,400	\$167,400	\$167,400	\$167,400	\$837,000
Total	\$540,000	\$540,000	\$540,000	\$540,000	\$540,000	\$2,700,000

Q16. Provide a rationale for the approximately 85% increase in your ETP budget.

SDG&E Response:

SDGE ETP budget for 2013-2014 remained unchanged as 2010-2012 program cycle, which is (\$1.350 million per year)

Cost-effectiveness Showings, E3 Calculators, and Workpapers

Q17. Provide DEER Run IDs and workpaper links in the E3 Calculator spreadsheets for both the “compliant” and “alternate” scenarios.

SDG&E Response:

The Portfolio level E3 and E3 I/O files now included in the DEER Run IDs and work paper references.

Q18. The E3 Calculators submitted are not clearly identified as either the “alternate” or “compliant” scenarios for cost-effectiveness purposes. Provide clear identification of the appropriate scenario in each E3 Calculator.

**Attachment A—San Diego Gas & Electric Company’s Response to
Ruling Attachment A: Utilities and A.2. Specific Questions for SDG&E**

SDG&E Response:

The names of the E3 files submitted in the July 2, 2012 Application have been modified to include the word “COMPLIANT” in the name. SDGE did not file an “Alternate” scenario on July 2, 2012.

Q19. Provide a response to all requests in the Commission Staff data request of August 17, 2012 posted at this site:

[ftp://deeresources.com/pub/E3CostEffectivenessCalculators/2013-](ftp://deeresources.com/pub/E3CostEffectivenessCalculators/2013-14ApplicationDR/)

[14ApplicationDR/](ftp://deeresources.com/pub/E3CostEffectivenessCalculators/2013-14ApplicationDR/). The site contains both a Word document, and an associated Excel file referenced by the Word document, for each utility. Updated files in response to the data request should be made available to all interested parties.

SDG&E Response:

Please refer to ACR A2 Q19 -SDGEDataRequest17Aug2012.6176 - SDG&E Response.doc which provides further clarification on all of the subsequent files being submitted.