

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

Order Instituting Rulemaking Concerning  
Energy Efficiency Rolling Portfolios, Policies,  
Programs, Evaluation, and Related Issues.

Rulemaking 13-11-005  
(Filed November 14, 2013)

**SAN DIEGO GAS & ELECTRIC COMPANY (U 902 M) 2015 ENERGY EFFICIENCY  
PROGRAM PORTFOLIO CHANGES PURSUANT TO THE ASSIGNED  
COMMISSIONER'S RULING AND SCOPING MEMORANDUM REGARDING 2015  
PORTFOLIOS (PHASE 1 OF RULEMAKING 13-11-005)**

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**I.  
EXECUTIVE SUMMARY**

San Diego Gas & Electric Company (“SDG&E”) submits this request for approval of its 2015 Energy Efficiency (“EE”) Program Portfolio proposal in response to guidance provided in the January 31, 2014 *Assigned Commissioner and Administrative Law Judges’ Ruling Providing Guidance for Submitting Demand Response Program Proposals* (“Ruling”). As discussed in further detail below, SDG&E seeks Commission authority to: (1) implement the revisions to its 2014 EE programs; (2) implement several new program proposals; (3) approve several policy and program changes; (4) approve its proposed 2015 EE portfolio budget of \$119, 419,591; and (5) approve a Demand Response (“DR”) budget of \$4,640,247 to fund the DR component of its 2015 Integrated Demand Side Management (“IDSM”) programs.

A discussion of the various program proposals are provided below with detailed technical assumptions and budgets in the following Appendices: Appendix A—SDG&E Budget Request Filing Summary Tables; Appendix B—SDG&E 2015 Placemat Tables; Appendix C—SDG&E 2015 Savings Allocation and Funding Sources; Appendix D—SDG&E Cost Effectiveness E3 Calculators; Appendix E—SDG&E 2015 Savings Values Adjustment Factors; and Appendix F—SDG&E List of Workpapers Submitted for New Measures. Due to the volume and

complexity of the Appendices, SDG&E is making the original files available at <http://www.sdge.com/regulatory-filing/914/energy-efficiency-filings>.

SDG&E, as directed by the January 2014 ACR (at page 10), has worked with Commission staff and the other utilities to determine the general outline of this filing and the format requirements for the various technical documents required to support this filing.

## **II. REGULATORY BACKGROUND**

In November 2013, the Commission opened a new Energy Efficiency Rulemaking R.13-11-005 to fund current energy efficiency portfolios through 2015, implement energy efficiency “Rolling Portfolios,” and address various policy issues relating to energy efficiency. The Commission divided R.13-11-005 into three phases, with review of the 2015 Energy Efficiency portfolio within the scope of the first phase.

On January 22, 2014, the January 2014 ACR was issued, with more specific details on Phase I which is intended to establish the 2015 portfolios and funding. In particular, the January 2014 ACR set the expectations for the 2015 EE goals, identified and provided guidance for portfolio changes for 2015, which programmatic changes were excluded at this time, appropriate 2015 funding level, the filing format for 2015 portfolios and the Phase 1 regulatory proceeding schedule.

On March 3, 2014, the Commission issued “*Assigned Commissioner’s Ruling Amending Scoping Memorandum, and Providing Guidance on Energy Savings Goals for Program Year 2015*” (“March 2014 ACR”). This Ruling provided recommended EE goals for adoption. In addition, the March 2014 ACR amended the original 2015 regulatory proceeding schedule.

SDG&E’s current 2013-2014 Energy Efficiency Program portfolio, and associated budgets, were approved by the Commission in Decision (“D.”) 12-11-015, dated November 15, 2012. SDG&E’s current two-year EE budget, as adopted by this decisions, is \$212,909,000 for Energy Efficiency and \$9,888,000 for the DR component of the IDSM programs. D.12-50-015 provided guidance on policies and programs for the 2013-2014 portfolio cycle. This same

guidance, in addition to the guidance from the January 2014 ACR, was used in the preparation of the 2015 program portfolio.

The 2012-2014 DRP Decision, D.12-04-054 OP 74, allows the utilities to request continued funding for identified IDSM activities in the 2013-2014 EE Application. Consistent with this decision, SDG&E proposes the continuation of the DR funding for IDSM in this filing.

D.13-12-038 approved the Statewide Marketing, Education and Outreach (“SW ME&O”) plans for 2014 and 2015 in a separate proceeding (A.12-08-007 et. al.) from the 2013-2014 EE application proceeding (A.12-07-001, et. al.).<sup>1</sup> SDG&E does not include any funding for SW ME&O in any calculations of cost effectiveness and caps and targets for 2015.

D.13-09-044 approved the 2013-2014 EE Financing pilot programs. However, it was anticipated that the implementation of both the CHEEF and the pilots would be phased in beginning in the fourth quarter of 2013, and all pilots would be online by mid-2014. Due to the legal, policy, and practical hurdles presented by the expert recommendations, authorization and implementation of the pilot programs has fallen almost a year behind initial hopes. Therefore, D.13-09-044 extended the 2013-2014 authorized funding and pilot programs through 2015.<sup>2</sup> With the exception of program administration funds, SDG&E is not requesting any additional funding for these financing pilots. In addition, any funds authorized in D.13-09-044, with the exception of the incremental 2015 pilot administration funds, SDG&E does not include the 2013-2014 financing pilot funds in any calculations of cost effectiveness and caps and targets for 2015.

### **III. POLICY RECOMMENDATIONS**

The January 2014 ACR anticipates that administrators shall propose incremental changes as needed in 2015 to achieve EE goals. SDG&E proposes program modifications and new

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<sup>1</sup> D.13-12-038, *Decision on Phase 2 Issues: Statewide Marketing, Education, and Outreach Plans for 2014 and 2015*, December 27, 2013, page 15.

<sup>2</sup> D.13-09-044, *Decision Implementing 2013-2014 Energy Efficiency Financing Pilot Programs*, September 20, 2013, page 6.

programs that would address concerns such as constrained areas, Proposition 39 and the Energy Upgrade California Home Upgrade program. Some of SDG&E's recommendations would require the Commission to approve some policy changes before they can be implemented. These changes are discussed in this section. Actual program changes within current approved guidelines and policies will be discussed in the Program Section.

## **A. UPDATING AVOIDED COSTS**

The January 2014 ACR suggested (at page 5), "...administrators might ask that we use a 'locational premium' when calculating the avoided cost for generation capacity, effectively lowering the cost effectiveness bar for peak reducing EE measures in transmission-constrained areas." Since SDG&E's entire service territory is considered a constrained area, SDG&E proposes slight modifications to improve cost effectiveness.

### **1. Resource Balance Year Update for 2015**

In its October 1, 2012 regarding post-workshop comments on Demand-Side Cost-Effectiveness, SDG&E had made recommendations to update the resource balance year to calculate the generating capacity costs. SDG&E believes, given the Commission's expressed concerns regarding constrained areas, that this proposal should be approved for 2015. SDG&E stated in its October 2012 comments:

The resource balance year approach to calculating generating capacity cost is based on a short-run market approach for the near term capacity combined with a long-term cost of new capacity beginning at the resource balance year. The Joint Utilities believe it is crucial that avoided capacity costs reflect reality and depend on a region's projected physical resources over the life of the asset.... The Joint Utilities propose one change to the existing approach to the resource balance year issue. Utilities should be allowed to have a different resource balance year than the statewide resource balance year if local capacity is needed in the service area before system capacity is needed. In the 2010 Long Term Procurement Plan ("LTPP") proceeding, local resource considerations led to further analysis of the SDG&E needs for local capacity. Ignoring differences among

utilities may undervalue DSM measures in areas that are more constrained.<sup>3</sup>

The impact of such a change can be substantial depending on the EE measure being considered. Using the E3 avoided cost calculator and using the cost of building new capacity immediately for local capacity rather than waiting 5 or 7 years into a future based on statewide needs for system capacity can increase average avoided costs by 2 percent to 8 percent depending on the life of the measure and its contribution to peak demand reduction.

In addition, SDG&E has longer term recommendations for avoided costs that should be addressed in either Phase II or Phase III of this Rulemaking. First, the distribution avoided costs should be allocated to hours based on utility-specific data on when distribution circuits peak. Again, this change was recommended in the October 2012 Workshop comments to more accurately assess the distribution avoided costs:

...the allocation of deferred distribution capacity value to hours and months based on weather data as is currently in the avoided cost calculator is flawed. The assumption is that air conditioning load drives peak usage on all feeders. But prior analysis by ITRON, figure 5-7 of the Self-Generation Incentive Program Sixth-Year Impact Evaluation Final Report, reproduced below, has shown that many feeders are not driven by temperature, especially for feeders with largely mixed use and residential customers.<sup>4</sup> There is a distribution of circuit peaks ranging from afternoon through the evening that should be reflected in the allocation of deferred distribution costs to hours and months for each utility, especially given the impact of distributed solar on circuit peaks going forward.<sup>5</sup>

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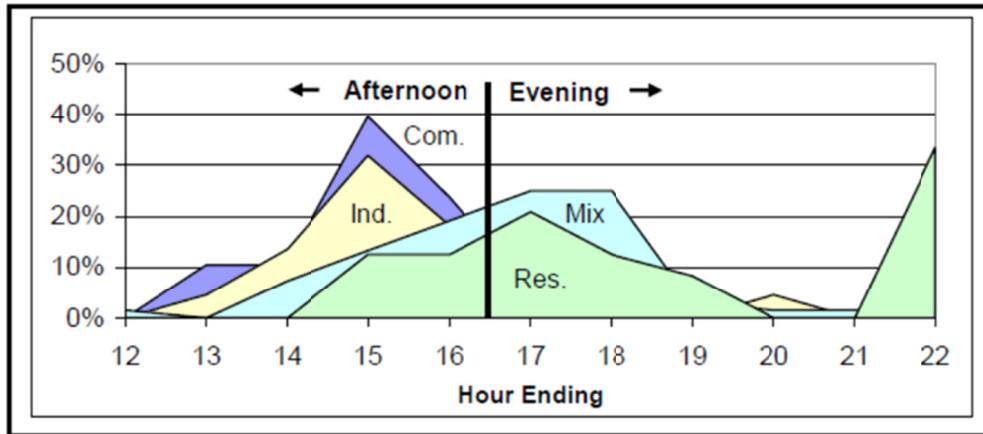
<sup>3</sup> *San Diego Gas & Electric Company and Southern California Gas Company Post-Workshop Comments on Demand-Side Cost –Effectiveness Issues, R.09-11-014*, October 1, 2012, page 4.

<sup>4</sup> Itron, CPUC Self-Generation Incentive Program Sixth-Year Impact Evaluation Final Report, August 2007, Figure 5-7, page 5-18.

<sup>5</sup> October 1, 2012 Comments, pages 14-15.



**Figure 5-7: Distribution of Feeder Peak Hour by Customer Types**



In addition, the distribution planning process required by AB 327 should provide useful information to target EE marketing to particular circuits. Rather than a distribution of value, the entire avoided cost could go into the cost benefit calculation, improving the cost effectiveness.

Second, the hourly electricity cost profile will be changing dramatically as a large amount of solar is added to the generation mix. In spring months the prices are expected to follow load and be low midday and peaking in the evening. The avoided cost model should incorporate an hourly price profile related to 2020 and the 33 percent RPS. E3 has a production cost model (Plexos) that E3 can use to develop the hourly price profile of electricity prices, though such models tend to underestimate actual price variation since they do not capture the effects of shortage pricing.

Third, the allocation of capacity to hours of the day should be adjusted to reflect the additions of solar. A Loss of Load Probability model for 2020 such as E3's REFLEX model can be used to model the shifting peak net of renewable generation and the changing value of reducing loads in the evening. For SDG&E, the change is even more dramatic with a higher penetration of local distributed renewables and renewables serving the San Diego area from Imperial Valley. This utility-specific situation should be allowed to be used in the cost effectiveness analysis.

## **2. Update the WACC Discount Rate for 2015**

The discount rate is used to determine the net present value of each cost and benefit included in the California Standard Practice Manual tests. Each utility's Weighted Average Cost of Capital ("WACC"), which is the minimum return that the utility must earn on its existing asset base to satisfy its creditors, owners, and other providers of capital. D.12-05-015 (at pages 38-39) approves the use of the after-tax WACC adopted in D.10-12-024 for the 2013-2014 EE program cycle. SDG&E recommends that the Commission allow the utilities to update their WACC to the most recent value. For SDG&E, the current 2013-2014 after-tax WACC is 7.38% used in the E3 calculator. Its most recently adopted WACC would be 6.87%.<sup>6</sup>

In summary, the two immediate cost effectiveness recommendations that SDG&E requests the Commission approve are: (1) Update the Resource Balance Year to 2015; and (2) Update the WAC discount rate for 2015 to the most recent value. These changes would more accurately reflect the true value of the programs and increase overall portfolio cost effectiveness. SDG&E notes that it did not implement these recommendations in its cost effectiveness results at this time. Should the Commission approve these revisions for implementation in 2015, SDG&E will update these values in a subsequent 2015 compliance filing.<sup>7</sup>

## **B. PROPOSITION 39 CONSIDERATIONS**

Proposition 39 ("Prop 39") created a new Clean Energy Job Creation Fund. Over each of the next five fiscal years, Prop 39 is expected to accrue roughly \$550 million dollars per year, which will be allocated to public K-12 schools and California community colleges for EE and renewable energy projects. Implementation of Proposition 39 was codified in Senate Bill 73, passed in June 2013. Prop 39 represents a significant opportunity to support schools' efforts to

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<sup>6</sup> SDG&E derived this after tax WACC from D.12-12-034, "*Decision on Test Year 2013 Cost of Capital for the Major Energy Utilities*," December 26, 2012.

<sup>7</sup> The January 2014 ACR (at page 11) anticipates compliance filings.

improve their energy efficiency infrastructure. However, in order to receive a Proposition 39 funding allocation, a Local Education Agency (“LEA”) must first benchmark the schools in its territory, identify projects, submit a successful expenditure plan, and finally implement the energy savings projects. This process can be daunting for many LEAs.

SDG&E is committed to providing EE assistance to it’s the K-12 schools and California community colleges in its service territory. SDG&E has already been active with K-12 Schools and Community College customers in support of Prop 39. SDG&E works directly with K-12 schools to offer assistance on EE audits, identify existing SDG&E offerings to complement Prop 39 projects, facilitate data transfer, provide planning assistance, and educate school representatives at events such as the K-12 Schools Sustainability Collaborative. Through its participation in the California Community Colleges/Investor Owned Utilities Partnership program (CCC/IOU Partnership), SDG&E has also been fully engaged in the Prop 39 efforts with the California Community Colleges Chancellor’s Office (“CCCCO”) and its local Community Colleges. SDG&E was actively involved in the development of the California Community Colleges Energy Project Guidance. SDG&E will continue to provide Prop 39 utility coordination efforts during the quarterly Community College Campus Forums held in each region to discuss college facility needs.

SDG&E is leveraging this experience to expand its Prop 39 support in 2015. After carefully considering the impact of Prop 39 on its EE Portfolio offerings for 2015, SDG&E has identified four areas of proposed changes to better support its Prop 39 efforts: (1) claiming full savings; (2) utilizing an alternative baseline - existing conditions for Proposition 39 eligible sites; (3) modifying program eligibility criteria; and (4) providing additional technical assistance.

**1. Prop 39 Participants in SDG&E’s Programs Should Not Be Considered Free-Riders**

The California Energy Commission (“CEC”) and the Commission have strongly encouraged the IOUs to provide assistance and incentives for Prop 39 projects. SDG&E is committed to providing incentives to leverage the Prop 39 funding for LEA projects. Given that

70% of school buildings are over 25 years old and have not been upgraded, the state has recognized that these anticipated savings would not have occurred without significant outside influence. Schools that participate in SDG&E's energy efficiency should not be considered "free riders," for purposes of savings attribution. Proposition 39 was intended to maximize energy savings by complementing existing energy savings programs and encourage comprehensive projects, not compete with other programs and funds. Therefore, in order for the state to realize the full value of this collaboration between Prop 39 and ratepayer-funding, SDG&E recommends that the Commission approve the use of the ex ante net-to-gross values assigned to the programs in which these projects will participate: (e.g., use the current ex ante program/measure NTG values in Appendix B Table B-2). Another approach would be to designate Prop 39 participants as "Hard-To-Reach" given the CEC's finding that 70% of schools have not retrofitted in the last 25 years and that the utilities are providing additional technical and financial support to incent deeper savings. The default Hard-To-Reach NTG value is 0.85. Furthermore, SDG&E recommends that these ex ante NTG values not be subjected to further ex post review. SDG&E will only claim savings from measures offered in SDG&E's portfolio and supported by a SDG&E incentive.

## **2. Prop 39 Projects Should Be Allowed to Use Existing Conditions as the Baseline**

The appropriate baseline for school EE projects is the actual existing EE infrastructure conditions and energy use at a school, rather than a speculative, hypothetical lower level of energy use the school might have if it had already undergone retrofits to code. Again, studies show that 70% of schools have not upgraded in over 25 years<sup>8</sup>. Many of these schools are not up to current code and represent a significant savings opportunity that under current efforts is simply not being captured. Without the additional support provided by Proposition 39 and the utility EE programs, it seems unlikely that schools would have had the budgets to engage in any EE projects. The CEC has recognized the appropriateness of using existing site conditions as

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<sup>8</sup> Center for the Next Generation, Proposition 39: Investing in California's Future. (Dec. 11, 2012), pages 2-4, <<http://thenextgeneration.org/publications/prop39-investing-in-california>>.

baseline in its implementation of Proposition 39. The CEC specifies that all of the Proposition 39 measurement and verification (“M&V”) calculations shall be based on “as is” conditions rather than Code<sup>9</sup>, as well as the intent of the Prop 39 legislation.<sup>10</sup> SDG&E endorses alignment of the Commission with CEC policy on this issue.

Schools applying for Prop 39 funds must propose a bundle of energy projects at each school site that meet a Savings to Investment Ratio (“SIR”) of at least 1.05 in order to be approved for a Prop 39 award. Estimating project savings using the existing equipment as baseline, rather than a hypothetical “at-code” baseline, would provide a more realistic SIR and improve a school’s opportunity to actually receive Prop 39 funds. Leveraging Prop 39 funding with utility EE incentives would further improve the SIR of the bundled projects allowing schools to consider more and deeper EE projects. While Prop 39 is helping to support schools with funding, the funding levels on a per school basis may still be insufficient to promote deep, comprehensive EE investments. Additional utility incentives will help drive deeper energy savings and more comprehensive projects and assist schools in purchasing technologies that are more advanced and typically have higher first cost (e.g., LED lighting and lighting control systems). SDG&E recommends that projects under this proposal use the existing equipment for baseline for customized projects and for projects with deemed savings estimates use as baseline the DEER designation of “Above Pre-Existing”. Furthermore, the energy savings will be allowed to persist for the full effective useful life from the DEER database.

If the Commission approves the use of existing baseline equipment to estimate savings, SDG&E will provide higher incentives to these Prop 39 participants.

SDG&E recommends flagging Prop 39 projects to allow Commission staff to identify which projects would be eligible for this both the use of the ex ante NTG value and the use of existing baseline for savings calculations.

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<sup>9</sup> Bucaneg, et. al., 2013. Proposition 39: California Clean Energy Jobs Act –2013 Program Implementation Guidelines. CEC, Energy Efficiency Division Publication No. CEC-400-2013-010-CMF, page E-3.  
<<http://www.energy.ca.gov/2013publications/CEC-400-2013-010/CEC-400-2013-010-CMF.pdf>>

<sup>10</sup> Senate Bill No. 73 (2013-2014 Regular Session).

### **3. SDG&E Will Modify Program Eligibility Criteria Modification and Add Measures for Prop 39 Projects**

SDG&E expects that with the implementation of Prop 39, there will be an increase in the number of projects that will be incented through the Statewide Commercial Programs. SDG&E has accounted for increased participation by Prop 39 eligible sites in its funding request for the 2015 filing. SDG&E will offer a higher incentive for Prop 39 participants as compared to non-Prop 39 participants. Furthermore, SDG&E will modify the size eligibility for the Direct Install Program, which provides free installations, for Prop 39 eligible sites. The Direct Install Program can easily accommodate the scheduling limitations of campuses such as the need to install during summer, spring and winter breaks as well as weekends. To further aid Prop 39 sites SDG&E will also expand the measure offerings within the Direct Install Program to include items which are more commonly used on campuses (e.g., Wall packs, etc.).

SDG&E will also update its requirements to allow Prop 39 eligible custom projects to proceed with equipment pre-orders without the requirement for a signed agreement. Application submittal would be used to trigger eligibility and thus eliminate free ridership concerns. Time is of the essence with Proposition 39 projects. Thus, eliminating the requirement for agreements prior to pre-order of equipment will allow sites to leverage the use of Proposition 39 funds in a more timely manner. Additionally, SDG&E will flag Proposition 39 eligible projects during the ex-ante review process and will work with the Commission to prioritize their reviews. Due to the anticipated scheduling constraints of many of these projects prioritizing their reviews at the SDG&E and the Commission Staff will facilitate the successful, timely completion of projects.

### **4. SDG&E will Provide Additional Technical Assistance**

Supporting the implementation of Prop 39 projects during 2015 will require additional technical assistance, both internal and external to SDG&E. Internally, the primary assistance required will be in the area of data transfer to and from SDG&E. Prop 39 funded projects require school districts to sign the CEC's data authorization form to allow SDG&E to provide the school's electricity and gas consumption data annually to the CEC, through 2023.

SDG&E has also identified gaps in program offerings and technical assistance to external customers leveraging Prop 39 funding. As a result, SDG&E intends to leverage the work of its WE&T program to roll out supplementary training targeting school representatives in 2014. The training topics will include ASHRAE Audits and building systems/operations, with other classes to be added as identified. Besides the audit training, SDG&E will also offer fully-funded ASHRAE Level II audits and other applicable and cost-effective technical resources as requested by the schools and colleges in order to better identify and prioritize high-quality facility retrofits and installations that lead to persistent energy savings (as noted in Senate Bill 73). As part of the audit assistance Prop 39 sites will also receive assistance completing energy efficiency project applications for items identified in the audits.

#### **C. SUPPORT FOR CALIFORNIA’S WATER CONSERVATION EFFORTS**

R.13-12-001 highlights the Commission’s continued support for Water-Energy Nexus Programs. Previously, D.12-05-015 included directives to increase targeting of agricultural and industrial customers, and continue leak-loss detection and remediation, and pressure management services. SDG&E will continue to support these efforts in 2015. In addition, SDG&E is increasing the number of high efficiency water measures in its residential programs and coordinate rebates, audits and ME&O efforts with the San Diego water agencies. SDG&E will continue to work with the San Diego water agencies to identify energy efficiency opportunities to streamline water processes and water-energy nexus projects.

#### **D. SHAREHOLDER INCENTIVE MECHANISM**

The January 2014 ACR determined that the recalibration of the 2013-2014 Energy Savings Performance Incentive (“ESPI”) mechanism approved in D.13-09-023 and R.12-01-005 to account for changes in goals and 2015 budgets is within the scope of this proceeding. SD&GE recommends that the recalibration of the ESPI mechanism be done through a Tier 2 Advice Letter within forty-five days following the final approval of the 2015 EE portfolio. SDG&E will coordinate with Pacific Gas and Electric Company, Southern California Edison,

Southern California Gas Company and the Energy Division prior to the filing of this advice letter.

**IV.  
2015 SAVINGS FORECAST AND COST EFFECTIVENESS**

The March 2014 ACR recommends energy savings and demand reduction goals for 2015 EE program portfolios. The following sections provide summary information of SDG&E’s 2013-2014 proposed energy savings, budgets and cost effectiveness.

**A. SUMMARY OF PORTFOLIO ENERGY SAVINGS AND DEMAND REDUCTIONS**

The following table shows the Commission’s recommended 2015 goals and SDG&E’s proposed 2015 portfolio savings.

**Table IV-1: Projected Annual Portfolio Savings Targets for 2015**

	CPUC Goals			Portfolio Target		
	KWH	KW	THERMS	KWH	KW	THERMS
Core EE IOU Portfolio	172,700,000	29,200	2,300,000	187,079,108	31,574	2,649,118
Streetlighting	900,000	-	-	-	-	-
Codes & Standards	66,148,869	10,343	125,620	66,148,869	10,343	125,620
<b>Total Energy Efficiency Portfolio</b>	<b>239,748,869</b>	<b>39,543</b>	<b>2,425,620</b>	<b>253,227,978</b>	<b>41,917</b>	<b>2,774,737</b>

SDG&E requests the Commission clarify that the street lighting goal pertains to non-IOU street lighting as described in footnote 2 of the March 2014 ACR. Although, SDG&E does not identify at this time its street-lighting portfolio target, it will do so at its compliance filing once the Commission as clarified the street lighting goal. Appendix B shows SDG&E’s 2013-2014 forecasted energy savings by programs and measure groupings.

It should be noted that SDG&E’s nonresidential incentive programs have been designed to capture energy savings and incentives for the Institutional and Local Government Partnerships. Therefore, there are no savings forecasted for these partnerships. Pursuant to D.12-11-015 (at page 84), SDG&E will continue to provide reporting information on the number of installations of energy efficiency measures caused by LGP activity.

**B. SUMMARY OF PORTFOLIO BUDGET, BUDGET CAPS AND TARGETS**

The following table shows SDG&E’s requested 2015 portfolio budget to support meeting its aggressive EE energy savings goals and support activities. SDG&E notes that this budget



does not include 2015 Marketing, Education and Outreach (“ME&O”) and the 2015 Financing Pilot budgets. The preparation of the proposed portfolio budget, caps and targets is consistent with SDG&E’s preparation of its approved 2013-2014 EE compliance Advice Letter 2448-E/2167-G.

**Table IV-2: SDG&E 2015 Proposed Portfolio Budget and Budget Caps/Targets**

	2015 Budgets					
	Admin	ME&O	Direct Implementation	Incentives	EM&V	Total EE Budget
2015	\$ 9,104,300	\$ 7,505,969	\$ 42,340,088	\$ 60,469,234	\$ -	\$ 119,419,591
	GRC Admin Loaders	GRC ME&O Loaders	GRC DI Loaders	Total (EE + GRC)	OBF Loan Pool	Total Funds
	\$ 3,905,076	\$ 92,645	\$ 868,044	\$ 124,285,355	\$35,002,565	\$ 159,287,920
	%Admin	%MEO	%DI	%Incentives	EM&V %	
<b>2015</b>	<b>8.2%</b>	<b>4.8%</b>	<b>27.1%</b>	<b>59.9%</b>	<b>0.0%</b>	
Caps/Targets	10.0%	6.0%	20.0%	60.0%	4.0%	

The following assumptions are used for determining budget targets and caps:

- (1) Compliance with D.09-09-047 OP13:

For Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company in 2010 to 2012, the following caps and targets are adopted:

- a. Administrative costs for utility energy efficiency programs (excluding third party and/or local government partnership budgets) are limited to 10% of total energy efficiency budgets. Administrative costs shall be closely identified by and consistent across utilities. Administrative costs shall not be shifted into any other costs category. Utilities shall not reduce the non-utility portions of local government partnership and third party implementer administrative costs, as compared to levels contained in budgets approved herein, unless those levels exceeded 10% in the July 2009 utility supplemental applications in this proceeding;

b. Marketing, Education and Outreach costs for energy efficiency are set at 6% of total adopted energy efficiency budgets, subject to the fund-shifting rules in Section II, Rule 11 of the Energy Efficiency Policy Manual;

c. Non-resource costs (excluding non-resource direct implementation costs) are set at 20% of the total adopted energy efficiency budgets; and

d. The utilities shall not unduly reduce Strategic Planning non-administrative costs as compared to resource program direct implementation non-incentive costs. The base for calculating the targets and caps includes the GRC loaders in order to correctly calculate the percentages.

(2) SDG&E's EE authorized budget already includes costs for facilities, payroll taxes, vacation & sick leave; and is categorized consistent with December 28, 2008 Assigned Commissioner and Administrative Law Judge's Ruling Modifying Schedule and Public Utilities Commission 4 January 14, 2013 Requiring Additional Information for 2009-2011 Supplemental Filings Attachment 5-A and as modified by D. 11-04-005 OP 2.

(3) General Rate Case loaders associated with the EE program labor as directed by D.12-11-015 OP 39. On January 11, 2012, Energy Division conveyed ALJ Fitch's direction that the GRC costs are to be included in calculating portfolio budget administration cap.

(4) EM&V is four percent of EE authorized budget (at D.12-11-015 at page 60).

(5) In order to be comparable to PG&E and SCE, SDG&E includes its OBF loan funds as part of the total EE budget for the purposes of determining budget caps and targets (at D.12-11-015 OP 21).

(6) SDG&E will continue to report the status of its budget caps and targets based on actual expenditures in its quarterly reports submitted through the Commission's Energy Efficiency Statistics website (EEStats).<sup>11</sup>

SDG&E's 2015 budget above also includes \$36.4 million for competitively bid third-party implemented programs, which includes local third party programs as well as third parties who implement SDG&E's statewide programs. This constitutes 30.5% percent of the SDG&E's total portfolio budget of \$119 million, which exceeds the Commission's 20 percent requirement for competitively bid programs.

### **C. ASSUMPTIONS USED TO DEVELOP PORTFOLIO GOALS AND COST EFFECTIVENESS**

The savings for these programs are derived from savings estimates for each of the measures that the program is proposing to promote. The individual measure savings and other load impact estimates (e.g., kWh, kW and therm savings per unit, program net-to-gross ratios, incremental measure costs and useful lives) are primarily derived from the 2014 DEER, as directed by the January 2014 ACR (at page 15). If the measure is not documented in DEER, SDG&E provides documentation in its workpapers (see Appendix F) to support its estimates of the measure's load impacts. SDG&E provides its non-DEER workpapers consistent with Energy Division directions provided in D.12-05-015. It is also consistent with direction provided by Energy Division on May 24, 2012.<sup>12</sup>

SDG&E has used the E3 calculator developed and updated by E3 under the direction of the Commission's Energy Division staff using 2015 as the start year.<sup>13</sup> See Appendix D for the cost effectiveness parameters and E3 calculator results.

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<sup>11</sup> EEStats is available at <http://eestats.cpuc.ca.gov/>.

<sup>12</sup> See 2013-2014 Energy Efficiency Portfolio Application Information Requirements.

<sup>13</sup> Energy Division released an updated E3 calculator on June 22, 2012 to correct a material error in the previous model.

#### **D. TOTAL RESOURCE COST TEST AND PROGRAM ADMINISTRATOR COST TEST**

The Policy Manual directs the utilities to use the Total Resource Cost Test (“TRC”) as the primary indicator of energy efficiency program cost effectiveness, which is consistent with the Commission’s intent that ratepayer-funded energy efficiency should focus on programs that serve as resource alternatives to supply-side options. The TRC test measures the net resource benefits from the perspective of all ratepayers by combining the net benefits of the program to participants and non-participants. The benefits are the avoided costs of the supply-side resources (e.g., generation, transmission and distribution, ancillary services, renewable procurement) avoided or deferred as adopted in D.12-05-015. In addition, the avoided cost of greenhouse gas emissions, referred to as environmental benefits, are included as part of the benefits.

TRC costs, on the other hand, include the incremental cost to install the energy efficient measures/equipment relative to the standard case and the costs incurred by the program administrator to design and manage its EE portfolio. D.12-05-015 directs the utilities to use the after-tax weighted average cost of capital, as adopted by the Commission.

In addition to the TRC test, the utilities are also required to consider in evaluating program and portfolio cost effectiveness the Program Administrator Cost (“PAC”) test (Policy Rule IV.3 and D.12-05-015.). The PAC benefits are the same as the TRC test but costs are defined to include the costs incurred by the program administrator (including financial incentives or rebates paid to participants), but not the costs incurred by the participating customer. The discount rate used for the PAC test is the same as that of the TRC test.

Applying both the TRC and PAC cost effectiveness test is referred to as the “Dual-Test”. Policy Rule IV.6 requires a prospective showing of cost effectiveness using the Dual-Test at the portfolio level to qualify for program funding.

SDG&E calculated its TRC and PAC tests with the labor loaders and estimated 2015 ESPI values. The estimated TRC and PAC ratios of SDG&E’s 2013-2014 portfolio for its proposed Portfolio is as follows:

**Table IV-3: Portfolio Cost Effectiveness Results**

	<b>TRC</b>	<b>PAC</b>
<b>Without C&amp;S</b>	<b>1.05</b>	<b>1.27</b>
<b>With C&amp;S</b>	<b>1.38</b>	<b>1.78</b>

**V.  
2015 PROGRAMS**

As directed, SDG&E’s 2015 EE portfolio is primarily unchanged from the 2013-2014 program cycle; however, a limited number of new programs and program design changes have been made in response to the January 2014 ACR. This section describes those modifications. SDG&E notes that it does not provide updated Program Implementation Plans (“PIPs”) at this time, but expects that in its compliance filing PIPs for new programs and PIP addenda will be made available once these program modifications are approved.

**A. 2015 NEW PROGRAMS**

**1. Energy Marketplace Pilot**

Finding the right energy efficiency or demand response appliances or equipment at the right time can be challenging for many customers. To provide a comprehensive compendium of energy efficiency and demand response products and services, SDG&E proposes to initiate an Energy Marketplace pilot, to be funded by its shareholders. The pilot would be designed to make it easier for customers to connect with third party providers of Energy Efficiency and Demand Response products and services. For example, as customers complete their Home Energy Surveys, and develop their energy action plans on SDG&E’s My Account website, they can go to the SDG&E Energy Marketplace to find the recommended products and services to improve their home’s energy efficiency and ability to respond to demand response events or pricing. Products on the Energy Marketplace do not have to be participating in SDG&E’s Energy Efficiency and Demand Response programs (e.g., high efficiency windows).

While the details have yet to be developed, including the screening process to allow vendors to participate, the SDG&E Energy Marketplace website would provide an opportunity

for third party vendors of Energy Efficiency and Demand Response products and services to easily advertise their products and services to SDG&E customers, and would provide an opportunity for customers to gain easy access to a wide variety of potential suppliers and products and services. In the end, if this pilot proves successful, customers will benefit through greater knowledge of opportunities, incremental revenues that may be generated through payments by advertisers on the Energy Marketplace site, and the energy efficiency savings that result from wider deployment of EE products and services that result from this site, without the need for any incremental ratepayer investment.

If the pilot is successful, SDG&E currently intends to file an application in the future to request authority to implement an Energy Marketplace site that is expanded to cover other products and services as well as other distributed energy resources. While the details have yet to be developed, SDG&E anticipates that it would propose a sharing mechanism to provide for sharing of revenues generated through the site between ratepayers and shareholders. SDG&E's long-term goal is to create an Energy Marketplace site that is designed to expand conservation, demand response and energy efficiency, distributed energy resources, encourage innovation, reduce barriers to entry for new providers, and promote a more informed and empowered customer, all without the need for incremental ratepayer funding.

## **2. IDSM Conservation Voltage Reduction Pilot**

Conservation Voltage Reduction ("CVR") has been in place in California and at SDG&E for over 30 years. CVR improves customer equipment energy efficiency by reducing the voltage closer to the lower range of the ANSI requirements. This Pilot will determine if additional CVR efficiencies over what have been obtained to date can be gained by enabling enhanced monitoring and control using Smart Grid technologies. The table below provides some estimates of potential energy efficiency savings for the voltage range indicated:

## Powered-Down Appliances

118 VOLTS VS. 122 VOLTS

Appliance	Conserved power (watts)	Conserved power (percent)
INDUCTION MOTOR		
Fan	4.2	6%
DISPLAY		
CRT TV	2.1	4%
LCD TV	0	0%
Plasma TV	-2	0%
Desktop LCD	-0.6	-2%
LIGHTING		
13-W compact fluorescent lamp (CFL)	0.9	8%
20-W CFL	1	6%
LED (low quality)	0.2	6%
75-W incandescent	3.4	5%
42-W CFL	0.8	2%
LED (high quality)	0.1	1%
LED (medium quality)	-0.1	-1%

Source: Kelly Warner, Applied Energy Group, "CVR as an Energy Efficiency Resource," presented at the IEEE Innovative Smart Grid Technologies Conference, February 19, 2014

With California having had long-established EE programs, escalating goals and the impact of codes and standards, there is a need for new, innovative sources of cost-effective EE. CVR could be an attractive option for highly saturated EE markets. Therefore, SDG&E is proposing an IDSM pilot that expands its current CVR efforts to develop CVR factors to convert additional voltage reduction to an equivalent energy/demand reduction at the customer end-use level. The Pilot, using AMI data, will validate current CVR energy savings and determine how much additional energy savings is possible while maintaining customers' voltage within required ANSI limits. The Pilot would ideally develop a process for determining CVR factors based on a circuit's topology and customer mix. This will help determine what level of investment is appropriate to achieve incremental EE benefits. In addition, SDG&E will increase targeted EE and DR program efforts to customers who are on these selected circuits. Since SDG&E plans to implement this pilot with R&D funds, no Energy Efficiency funding is required for this pilot at this time.

The result of this pilot will estimate additional EE/DRP benefits and costs that would be presented to the Commission for consideration at the next program application or in Phase III of R.13-11-014 as additional energy savings and demand reductions that would be used to meet SDG&E's Energy Efficiency goals.

### **3. Small Commercial Customer on Dynamic Rates Behavior Pilot**

This pilot is being initiated in response to the Commission Staff pilot proposal in R.13-09-01 Attachment A<sup>14</sup>. This program is a behavior pilot associated with Time-Of-Use ("TOU") and Critical Peak Pricing ("CPP") rates. The pilot's goal is to identify the mix of strategies that enable small commercial customers to be successful on the rates so that a greater number of customers stay on CPP, save money by being on it, and reduce load when CPP events are called.

The small commercial customers on dynamic rates pilot will target small commercial customers on TOU or CPP rates. Even though this target has not been a focus in the past, it is recognized that small commercial customers collectively could contribute to peak load reductions worth pursuing. Planned marketing campaigns for small commercial customers switching to new rates will address short-term outcomes. This pilot will attempt to expand on the short-term strategies and encourage long-term behavior change for targeted customers.

Specific pilot goals include:

1. Make customers aware of when they are in peak periods and rates are higher
2. Communicate to customers to make adjustments to business practices during peak hours to use less energy
3. (Customers on CPP): identify types of businesses that could most utilize and benefit from automated technologies or test methods to encourage adoption and installation of devices

The Smart Pricing Program team will already be reaching out to small commercial customers in 2013-2014 as outlined in their General and Targeted Communications efforts. As

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<sup>14</sup> Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State's Resource Planning Needs and Operational Requirements.



part of this pilot SDG&E will leverage from their plan to complement communication between SDG&E and customer.

The focus of the pilot is on communication methods and technology adoption that clearly articulate when customers are in peak periods and provide timely feedback when customers respond to called events. Methods may include, but are not be limited to Programmable Communicating Thermostats, devices that display energy use, SmartPhones/Tablets, Automated Devices, SDG&E's My Account, Radio, or TV ads. SDG&E will segment the small commercial customers into sub segments that are most impacted by the transition.

To accomplish these objectives SDG&E proposes to utilize several test groups below.

Group A: Install Programmable Communicating Thermostats with built in displays into small businesses

Group B: Install automated devices such as A/C cycling, pool pump automated shut-offs, lighting control devices into businesses. (May have sub groups that display data real-time, 24 hours late, 48 hours later and no data at all.)

Group C: Comparison reports of usage for business with normal usage and personal usage. Recruit approximately 10,000 businesses.

SDG&E will leverage current behavioral and enabling technology pilots to improve the effectiveness of this pilot. Costs and impacts of this pilot will be tracked to understand feasibility of deploying similar concepts on a larger scale. Lessons learned will be identified, discussed, and documented.

#### **4. SPLASH (Third Party Program)**

SPLASH is a new third-party resource program, coming out of the IDEEA 365 procurement process. Starting in 2014, the program will recruit and train swimming pool contractors to enroll customers and install a package of cost-effective measures that go beyond traditional pool pumps to reach previously untapped savings potential with new measures and services.

The SPLASH program objective is to significantly reduce utility demand and customer operating costs of inefficient swimming pool pump equipment for approximately 550 customers.

The SPLASH program will provide installation and calibration services for variable speed pool pumps to capture new savings from new pumps and greater savings from existing pumps. The SPLASH program delivery model will utilize participating pool pump contractors to identify and enroll customers.

The SPLASH program will deliver and install the following cost-effective electric energy efficiency measures targeted at pools:

- (1) Robotic Swimming Pool Cleaners are energy efficient alternatives to traditional hydraulic swimming pool cleaners. Contractor will offer a total incentive of \$330 per cleaner, to be considered as a \$200 instant rebate to the customer and \$130 installation incentive for the pool pump contractor.
- (2) Variable Speed Swimming Pool Pumps are proven energy efficient replacements to existing single speed and two-speed pool pumps. The program will leverage SDG&E's existing pool pump rebate offering to increase the market penetration of this technology. Contractor will offer a total incentive of \$330 per pool pump, to be considered as a \$200 instant rebate to the customer and \$130 installation incentive for the pool pump contractor.
- (3) Variable Speed Pump Calibration provides data-driven programming of variable speed pumps tailored to the individual customer's pool, ensuring that the pump operates at maximum efficiency while still delivering the necessary filtration for a clean swimming pool. Contractor will offer an incentive of \$30 to be paid to the pool pump contractor for proper calibration, which will be required for all measures in the SPLASH program.

Rebates will be structured to encourage a greater level of customer investment by providing an extra \$50 for customers who choose to purchase and install both a pump and robotic cleaner. This additional incentive will further reduce the costs of installing the bundled set of measures. In addition to reducing the overall cost, the program will provide a path to

financing installed equipment through contractor's partnership with Electric and Gas Industries Association ("EGIA"), whose services include a choice of financing solutions designed specifically for swimming pool owners.

#### **5. IDEEA 365 (3P)**

SDG&E will continue its commitment to identify and contract with third-party contractors who can provide innovative, cost-effective programs. SDG&E expects to continue some or all of the third-party programs selected during the IDEEA 365 Rounds 1, 2, and 3. Additionally, SDG&E may offer future opportunities for third-party contractors through future Innovative or Targeted solicitations.

### **B. PROPOSITION 39 MODIFICATIONS**

SDG&E will continue its stakeholder coordination and collaboration to support the CPUC and CEC in development of Prop 39 implementation strategy and workshop development. SDG&E will continue technical support for K-12 and Community Colleges to assist in effectively using the funds provided by this initiative. To support wider adoption of SDG&E's EE programs by schools, SDG&E will remove the demand eligibility limit completely for schools participating in the Direct Install program. A more detailed response to Prop 39 is provided in Chapter III above.

### **C. ENERGY UPGRADE CALIFORNIA**

SDG&E is committed to the success of Energy Upgrade California™ Home Upgrade (Home Upgrade) and appreciate the Commission's acknowledgment of its importance in driving efficiency in existing buildings. Since the program's inception in late 2010, the IOUs have been closely coordinating with Commission staff, the CEC, the Regional Energy Networks (RENs), contractors and other stakeholders to incorporate lessons learned and new ideas to make improvements in multiple areas of the program.

While much progress has been made to address some of the most burdensome program issues through completion of many efforts directed in D.12-11-015, SDG&E recognizes the need

for continued emphasis on improving the program and reducing the barriers to participation for both contractors and customers.

Since inception, SDG&E has continued to identify opportunities for improvement, coordinating closely with stakeholders throughout the process, as has been the practice since the development of the initial program.

Many of these improvements are already underway including, but not limited to, those outlined in the Assigned Commissioner's Ruling and Scoping Memorandum Regarding 2015 Portfolios (Phase I Scoping Memorandum).

**1. New strategies for savings from plug loads, appliances, and lighting:**

Since 2013, SDG&E has been offering pool pumps and appliances in both Home Upgrade and Advanced Home Upgrade. Additionally, customers who get an assessment or participate also receive an Energy Savings Kit with their Home Energy Assessment Report.

SDG&E offers customers an energy savings kit valued at \$300 when they hire a participating contractor to do the standard comprehensive home energy assessment. The kit addresses plug load by including smart strips, as well as LED lighting. It also includes a therm kit and a thermostatic shutoff valve ("TCV"). SDG&E will soon be enhancing this kit by adding wi-fi enabled Programmable Communicating Thermostats ("PCT") and in-home displays that both pair to our smart meters and enable customers to participate in Demand Response Programs. These devices will be funded through SDG&E's DR programs but will be seamless to the customer.

Also in 2014, SDG&E will be providing Home Upgrade Participants in home lighting directly from its upstream buy-down partners that can be directly purchased by Home Upgrade participating contractors. In 2015, we will be looking to integrate HVAC QM/ QI as a seamless singular facing offering with the Home Upgrade options.

Lastly, SDG&E has been and is partnering with local government programs and contractors to engage customers about whole house concepts and the benefits of comprehensive retrofits through neighborhood demonstration homes. These are homes that have participated in

Home Upgrade and opened their homes for events. Local governments provide additional incentives and SDG&E Home Upgrade provides signage and collateral, marketing support and also provides the owner of the demonstration home cutting edge emerging technologies such as advanced lighting controls, advanced whole house fans, advanced thermostats and advanced pool devices as a way to showcase emerging technologies and the whole house concepts.

## **2. Opening the software market to improve contractor and customer usability and predictive accuracy:**

The joint IOU effort led by PG&E to expand the allowable software modeling tools for Advanced Home Upgrade is expected to be complete in mid - 2014. This effort will not only allow additional software tools in the market to help reduce administrative burden on contractors and improve the customer sales and engagement process, but is also expected to improve energy savings prediction accuracy. Successful implementation of expanded software tools also opens the door for future program design enhancements, including the possibility of a pay for performance model incentive and improved real-time evaluation.

The IOUs proposed a modified Advanced Home Upgrade incentive structure that will leverage this new functionality, encourage deeper retrofits, target high energy users and reduce participation costs for these large projects. This proposal has received positive feedback from Efficiency First California, program participating contractors, and other participants at a recent public stakeholder workshop<sup>15</sup>. The IOUs are currently engaging additional participants and stakeholders in design details.

## **3. Streamlining of reporting requirements:**

Building on improvements completed in 2013, SDG&E continues to work closely with participating contractors and raters to identify and resolve application and process challenges. These efforts include:

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<sup>15</sup> Energy Upgrade California™ Home Upgrade Public Stakeholder Workshop held in San Diego, California on December 5, 2013

- Elimination of the tiered pre-QC inspection requirements on Advanced Home Upgrade and replaced it with across the board, 10% random inspection program wide. This will greatly reduce the number of project pre-inspections.
- Current beta testing an online application for Home Upgrade developed for high volume contractors. We worked specifically with Costco and Home Depot contractors to develop this enrollment tool that will enable them to enroll customers in minutes and eliminate paper applications or duplicative data base entries.
- Currently implementing an administrative reduction plan. SDG&E and its implementers went through the project data requirements and eliminated a great number of data fields deemed not essential. Also, SDG&E's implementers will perform all data entry and enrollment processing on behalf of contractors if they choose. Contractors simply log into their secure portal and upload their Home Upgrade Applications (unless they used the online versions) and if Advanced Home Upgrade, they would also upload their EnergyPro models and combustion safety data. The implementer would then take care of putting all the data in the QA/QC database, uploading all required documentation and double checking for errors on behalf of contractors.
- Implemented a joint inspection/ test out policy in 2013 whereas contractors can self-schedule an inspector for up to 4 hours. A joint test out will be performed to save time by eliminating a separate inspector's trip to the home and to give the contractor time to make corrections on the spot to avoid additional inspections. Contractors can self-schedule this to be on the last day of work concurrent with building inspections. With no pre-inspections for Home Upgrade and the near elimination of all Advanced Home Upgrade pre-inspections, high performing contractors will only have 5% of their projects inspected on the post work and it can be jointly scheduled the last day of work with time to make corrections on the spot.
- Integrated the customer website and online contractor portals into a singular website that is integrated with a lead generation management system, contractor listings, events and

training calendars and registrations, customer program enrollments, and contractor certification management. The integrated site allows for streamlined back-end coordination and reporting and greatly reduces contractor administrative burdens to stay an active contractor, sign up for training, access resources, receive leads, manage leads from their own campaigns, integrate with local government partner activities, their own marketing and co-marketing campaigns and enroll customers. The site is branded Energy Upgrade California, and not SDG&E to allow a seamless transition for customers from the statewide portal being developed.

#### **4. Targeting and Outreach to Specialty Contractors**

The IOUs have been targeting and making other program modifications to better involve specialty contractors in Home Upgrade. Changes made by the IOUs and RENs for the new Home Upgrade offering were made with this as a key objective. SDG&E is also considering taking steps to better integrate Home Upgrade with Residential HVAC programs to be more singular facing for customers. Deeper integration of these programs and greater cross-participation of contractors is expected in 2014 and 2015.

Also in 2014 SDGE will be creating a participating contractor resource directory of certified subcontractors. Specialty subcontractors would become participating Home Upgrade subcontractors by having all requirements of a participating contractor, but without a BPI certification.

All participating Home Upgrade contractors and raters in SDG&E territory are assigned an account executive who works with each contractor to identify individual needs and solutions. This can range from in-field mentoring in the areas of testing, sales or installation or a business solution such as the on-line application developed for high volume contractors or the data entry and project administrative assistance. SDG&E also has a co-operative marketing program with contractors that is a 50-50 cost sharing of contractor developed marketing plans up to \$10,000, enabling contractors to market the program in a way that best suits their individual business models.

## **5. Reconfiguration of the Point/Rebate Structure**

SDG&E is working with the other IOUs in regards to implementing a revised incentive structure for Advanced Home Upgrade proposed at the December 2013 stakeholder workshop. The design would keep the existing tiered incentive structure but apply the EnergyPro disposition adjustments. After such adjustments, customers would also receive a per kWh and therm kicker based upon predicted energy savings. SDG&E presented the concept and proposed amounts to local participating contractors for feedback on March 10, 2014 and received favorable feedback. SDG&E intends to follow this contractor feedback soon with the implementation of business processes and program changes necessary to facilitate this change as soon as additional disposition and the completion of Staff Work Order 49.

For the Home Upgrade incentive structure, SDG&E has considered the change to the points/ rebate structure made by SoCalREN that moves away from the jointly filed advice letter which approved a tiered system where the rebate goes up \$500 for every increase of points by 50 to a system where the rebate goes up \$100 for every increase in points by 10.

SDG&E feels that this is an area that deserves further discussion, research and analysis towards the purpose and use of financial incentives towards clearly defined program objectives before incurring the cost necessary to implement. The purpose of the tiered incentive structures approved by the Commission was to encourage customers towards doing deeper comprehensive retrofits in order to get to the next tier of rebates.

This type of structure may be more appropriate on a pay for performance basis. Indeed, it is similar to that which is being proposed for Advanced Home Upgrade whereas a customer will receive a rebate on a per kWh and per therm basis on top of the tiered rebate. However, for Home Upgrade the point structure was already revised in 2013 to de-couple the points from energy savings and instead tie them to measure costs. Thus, eliminating the tiers further removes the incentive for customers to perform deeper retrofits and, if combined with policies of relaxing base measure requirements, further removes and dis-incentivizes customers to perform



comprehensive retrofits in support of the loading order. If however, incentives were tied to savings then there may be more merit towards considering this.

In the spirit of collaboration and statewide consistency, SDG&E is willing to consider this but strongly recommends that it should only be done after a broad discussion among implementers and stakeholders on the basis of the merits and analysis of the idea and program theory of the purpose of the design.

#### **6. Update Methodology for Estimating Measure Cost**

SDG&E recommends working with Commission Staff and stakeholders to determine a more practical methodology for refining the estimated measure costs used in this program. Currently, most measure costs reflect the cost of the entire home remodeling which may not be all eligible for participation in the program. However, it is difficult to isolate costs related only to the eligible measures. Several stakeholders have expressed an interest in working together to streamline the process of estimating measure costs. With improved reporting of measure costs, the program cost effectiveness will improve significantly.

### **D. PROGRAMS NOT BEING CONTINUED IN 2015**

#### **1. Financing ARRA Originated Financing**

SDG&E was unable to launch ARRA loan program in the service territory and believes it is more prudent to focus resources on the Commission-approved financing pilots.

#### **2. SW-CALS-Plug Load and Appliances-BCE**

This subprogram has been integrated into Plug Load and Appliance.

#### **3. WE&T-Connections K-12**

SDG&E currently has a general WE&T Connections program and a 3<sup>rd</sup> Party WE&T Connections K-12 program. These programs are being combined to streamline SDG&E's EE student education programs.

### **E. CONTINUED PROGRAMS WITH DESIGN CHANGES IN 2015**

#### **1. Residential HVAC Quality Installation and Maintenance (3P)**

*Change for 2015:*

- Will charge customers \$50 for overall assessment package, leading to adoption of more advanced measures

*Rationale for Change:*

- Charging customers for service facilitates ability to engage them more fully and leverage opportunities for contractors to install more advanced measures

**2. Commercial New Construction (Savings by Design)**

*Change for 2015:*

- Enhanced design incentives for Zero Net Energy status projects

*Rationale for Change:*

- Recognizes that projects that achieve ZNE status require additional resources in terms of planning and capital.

**3. Commercial HVAC (Premium Efficiency Cooling – 3P)**

*Changes for 2015:*

- Offer IDSM measures to leverage technologies that provide both EE and DR opportunities
- The program will offer IDSM measures to include: PCT, advanced digital economizer controls, compressor and fan cycling controls, VRF, demand controlled ventilation, and evaporative condenser pre-coolers.

*Rationale for Changes:*

- Incorporating IDSM into HVAC program enables opportunities to leverage additional EE and demand response

**4. Commercial Third-Party Audit Programs (HEEP, LEEP, CIEEP – 3P)**

*Changes for 2015:*

- Adding DR measures to these programs to better align with IDSM focused programs

*Rationale for Changes:*

- Increases IDSM opportunities and spillover from commercial audit programs.

**5. Direct Install (3P)**

*Change for 2015:*

- To more closely align with other utilities, SDG&E is modifying eligibility criterion from 100 kW to 150 kW for small – medium business customers

*Rationale for Change:*

- Program's 100 kW limit hinders participation by many small and medium business customers who could benefit from direct install.

**6. Energy Efficiency Business Incentives (EEBI)**

*Changes for 2015:*

- Statewide Customized Programs planning to increase kW incentives to \$200/kW to increase amounts of peak reduction (kW)

*Rationale for Changes:*

- KWh incentives paid by California IOUs heavily outweigh the incentive payments for kW savings. IOUs are also underperforming in terms of kW goals. In an effort to level the total incentive payments and encourage customers to install measures that permanently reduce demand, the IOUs propose an incentive increase as the most effective way to encourage participation.

**7. Water Infrastructure and System Efficiency (WISE – 3P)**

*Changes for 2015:*

- New Third Party non-resource program coming out of IDEEA 365 that improves overall plant efficiency (OPE) for system operations as well as individual water pumps, using existing pump tests. Additional focus on agricultural sector.

*Rationale for Changes:*

- Although overall program is not new, new third party contractor will focus on different target segments and improve opportunities for realizing water pump energy efficiency.

**8. Codes and Standards**

*Changes for 2015:*

- Increase focus on compliance issues for local governments
- Stronger emphasis on ZNE for new construction
- Develop reach codes for local governments

*Rationale for Changes:*

- Expands depth and breadth of codes and standards efforts to achieve energy savings.

**9. Institutional Partnerships**

*Changes for 2015:*

- Continuing to work with Community College partners to leverage Prop 39 funding for project implementation

*Rationale for Changes:*

- Facilitates opportunity for community colleges to take advantage of limited Prop 39 benefits.

**10. Workforce Education & Training**

*Changes for 2015:*

- Continuing to test new program elements
- Combining WE&T Connections program with WE&T Third Party K-12 Connections program.

*Rationale for Changes:*

- Eliminates redundancies and enhances Third Party offering.

**VI.  
2015 ENERGY EFFICIENCY FUNDING AND COST RECOVERY**

**A. PROPOSED 2015 PORTFOLIO FUNDING**

In order to meet the increased recommended savings and demand reduction goals in the March 2014 ACR, SDG&E proposes the following budgets. These budgets include both the EE and Demand Response Program (“DRP”) to support the various proposed Integrated Demand-side Management efforts. The proposed budgets for EE and DRP are as follows:

**Table VI-1: Proposed 2015 Portfolio Budgets**

	<b>Administration</b>	<b>Marketing</b>	<b>Direct Implementation</b>	<b>Incentives</b>	<b>Total Program Budget</b>
<b>DRP</b>	\$ 923,530	\$ 886,744	\$ 2,829,973	\$ -	\$ 4,640,247
<b>EE</b>	\$ 12,233,516	\$ 7,505,969	\$ 39,210,873	\$ 60,469,234	\$ 119,419,591
<b>Grand Total</b>	<b>\$ 13,157,045</b>	<b>\$ 8,392,713</b>	<b>\$ 42,040,846</b>	<b>\$ 60,469,234</b>	

The following sections describe the cost recovery ratemaking treatments for the EE gas and electric budgets, and the DRP electric budget.

**B. ENERGY EFFICIENCY COST RECOVERY**

The EE budgets are further divided into the electric and natural gas budget requirements for each year. The electric and gas budgets were determined based on the EE program designs and the targeted measures. For electric measures, the incentive program budgets for these measures determine for the most part the electric incentive budget. For gas measures, the incentive program budgets for these gas measures determine for the most part the gas incentive budget. There are measures, however, that have both gas and electric benefits. For these measures the incentives are allocated between the electric and gas budget by using the electric and gas percentage allocations of the program benefits (using the total avoided cost benefits in dollars). With the exception of lighting programs, the program administration costs were also allocated between gas and electric budgets using the same avoided costs percentages. The following section presents the electric and natural gas funding proposals.

**1. Electric EE Cost Recovery**

SDG&E is proposing a 2015 total electric budget of \$107,477,632, which will be funded

through electric Procurement funds, originally authorized in D.03-12-062 for 2004 through 2005 only.<sup>16</sup> D.05-09-043 Ordering Paragraph (“OP”) 4 and D.09-09-047 (at page 319) authorized the continuation and increase in Procurement funds for 2006-2008 and 2010-2012, respectively. With the sunset of the electric Public Goods Charge (“PGC”) funds in January 1, 2012, the Commission, in D.11-20-038, authorized electric EE funds to be funded 100% by electric Procurement funds. SDG&E proposes to fund the electric EE budget requirements first through the identification of unspent and uncommitted 2013-2014 program dollars (including applicable interest), and the current authorized Procurement funds electric revenue requirements approved for 2014 in D.12-11-015 OPs 38 and 42. The electric procurement funds are recorded in SDG&E’s Electric Procurement Energy Efficiency Balancing Account (“EPEEBA”).

SDG&E’s proposes to fund the increase in 2015 electric budget through the forecasted over collections for 2013-2014. This forecast is based primarily on the expected unspent and uncommitted 2013-2014 electric monies. However, should SDG&E’s forecast be overestimated, SDG&E proposes recover the shortfall in its annual PPP update advice letter filing filed by October 1 to be effective January 1 of the following year.

## **2. Gas EE Cost Recovery**

SDG&E seeks authorization of its projected total 2015 gas EE budget requirements of \$11,941,959. For its natural gas budget, SDG&E is proposing to use the Public Purpose Program (“PPP”) Gas surcharge funds authorized through AB 1002 and D.04-08-010. SDG&E proposes to fund the gas EE budget requirements first through the identification of unspent and uncommitted 2013-2014 program dollars (including applicable interest), and the current authorized gas revenue requirements approved for 2014 in D.12-11-015 OPs 38 and 42.

SDG&E’s proposes to fund the increase in 2015 gas budget through the forecasted over collections for 2013-2014. This forecast is based primarily on the expected unspent and uncommitted 2013-2014 gas monies. However, should SDG&E’s forecast be overestimated,

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<sup>16</sup> D.03-12-062 at page 67.

SDG&E proposes to recover the shortfall in its annual PPP update advice letter filing filed by October 1 to be effective January 1 of the following year.

The following table shows SDG&E’s proposed funding:

**Table VI-2: Proposed Portfolio—Available Funds 2015 EE Programs**

	Electric	Gas	Total
<b>2013-2014 Unspent Uncommitted Forecast</b>	\$ 12,042,949	\$ 1,338,105	\$ 13,381,054
<b>2014 Authorized Revenue Requirements</b>	\$ 95,434,683	\$ 10,603,854	\$ 106,038,537
<b>Total 2015 Budget</b>	<b>\$ 107,477,632</b>	<b>\$ 11,941,959</b>	<b>\$ 119,419,591</b>
	90%	10%	

### C. ON-BILL FINANCING BALANCING ACCOUNT

The On-Bill Financing Balancing Account (“OBFBA”) is an interest bearing balancing account recorded on SDG&E’s financial statements. The purpose of this account is to record the difference between ratepayer funding and actual loans provided to customers participating in SDG&E’s On-Bill Financing (“OBF”) program authorized by D. 09-09-047. The current authorized cumulative balancing account amount is \$9 million from D. 09-09-047, and an additional \$17,002,565 authorized in Decision 12-11-015., for a total of \$26,003,565 plus any interest. Other “program” costs such as program administration associated with the OBF program will be tracked in SDG&E’s EE balancing accounts discussed above.

## VII.

### 2015 IDSM– DEMAND RESPONSE FUNDING AND COST RECOVERY

Consistent with D.12-04-045, SDG&E currently records all program costs associated with its existing demand response programs and its current and future DRP bilateral contracts<sup>17</sup> in its Advanced Metering and Demand Response Memorandum Account (“AMDRMA”). SDG&E will continue the existing disposition of the AMDRA balances being transferred to SDG&E’s Rewards and Penalties Balancing Account (“RPBA”) on an annual basis for amortization in SDG&E’s electric distribution rates over 12 months, effective on January 1<sup>st</sup> of each year, consistent with SDG&E’s adopted tariffs.

<sup>17</sup> SDG&E’s existing bilateral contracts are its Summer Saver and Demand Smart programs.

SDG&E is requesting that authorized demand response program costs related to DR program costs not to exceed the proposed budget of \$4,640,247 associated with the IDSM program activities in the 2015 EE portfolio, be recorded in AMDRMA.

**VIII.  
CONCLUSION**

For the reasons set forth above and in the attachments submitted in support of this filing, SDG&E respectfully requests that the Commission:

- (1) Approve SDG&E’s 2015 EE targets as recommended in the March 2014 ACR and clarify that the street lighting goal pertains to non-IOU street lighting as described in footnote 2 of the March 2014 ACR:

	GWH	MW	MMT
IOU Program Savings Goals	172.7	29.2	2.3
IOU Codes and Standards Goals	66.1	10.3	0.1
Non-IOU Owned Street Lighting Savings Goals	0.9		
Total	239.7	39.6	2.5

- (2) Approve SDG&E’s 2015 EE portfolio budget of \$119,419,591, with \$107,477,632 and \$11,941,959 for its electric and gas budgets, respectively;
- (3) Approve SDG&E’s proposed use of forecasted unspent and uncommitted 2013-2014 EE budgets and interest to offset the 2015 revenue requirements;
- (4) Approve SDG&E’s proposed adjustment mechanism, i.e., include adjustment in the annual PPP update advice letter filing, in the event that there is an under collection in 2013-2014 revenues that would have covered the increased revenue requirements for 2015;
- (5) Approve SDG&E’s DR budget of \$4,640, 247 to fund the DR component of its 2015 IDSM programs;
- (6) Approve the DR cost recovery mechanism as described herein;
- (7) Approve SDG&E’s recommendation to update the Resource Balance year for 2015 and the 2015 WACC discount rate;



- (8) Approve the use of the ex ante net-to-gross values assigned to the programs in which these projects will participate: (e.g., use the current ex ante program/measure NTG values in Appendix B Table B-2). Another approach would be to designate Prop 39 participants as “Hard-To-Reach” given the CEC’s finding that 70% of schools have not retrofitted in the last 25 years and that the utilities are providing additional technical and financial support to incent deeper savings. The default Hard-To-Reach NTG value is 0.85. Furthermore, SDG&E recommends that these ex ante NTG values not be subjected to further ex post review;
- (9) Approve the use of existing equipment as the baseline for estimating Prop 39 project savings;
- (10) Should the Commission approve the use of existing equipment, approve SDG&E’s increased incentive offer for Prop 39 energy efficient projects;
- (11) Approve the recalibration of the ESPI mechanism be done through a Tier 2 Advice Letter within forty-five days following the final approval of the 2015 EE portfolio;
- (12) Approve the following new programs: Energy Marketplace Pilot, IDSM CVR Pilot, and Small Commercial Customer on Dynamic Rate Behavior Pilot;
- (13) Approve all other program changes for identified 2013-2014 EE programs.

Dated at Los Angeles, California, on this 26<sup>th</sup> day of March, 2014.

Respectfully submitted

By           /s/ Steven D. Patrick          

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