

Application of San Diego Gas & Electric  
Company (U-902-M) for Approval of  
Electric and Natural Gas Energy Efficiency  
Programs and Budgets for Years 2009  
through 2011

Application 08-07- 023

Exhibit No.: \_\_\_\_\_  
Witness: Mark Gaines

**SUPPLEMENTAL TESTIMONY**  
**OF**  
**SAN DIEGO GAS & ELECTRIC COMPANY**

**CHAPTER I**

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

**July 2, 2009**

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- 1                   ○ SDG&E proposes a 25% reduction in electric savings goals to achieve
- 2                   parity with SCE and PG&E
- 3                   ○ SDG&E supports an additional 20% reduction in electric savings goals
- 4                   proposed by Energy Division for all IOUs to reflect the impacts of DEER
- 5                   updates
- 6                   ○ SDG&E supports a 22% reduction in natural gas savings goals proposed
- 7                   by Energy Division to reflect the impacts of interactive effects
- 8           • On-Bill-Financing Loan Pool: Witness Besa, Chapter II, Section X. A. 6.
- 9                   ○ SDG&E proposes to establish the On-Bill Financing Balancing Account to
- 10                  provide a stable, long-term source of funding for this valuable program
- 11           • Green Energy Systems Program: Witness Besa, Chapter II, Section X. C. 4.
- 12                   ○ SDG&E requests authority to enter contractual negotiations with
- 13                  commercial building owners for SDG&E to own and operate a high
- 14                  efficiency HVAC central plant on their property
- 15                   ○ SDG&E would file advice letters seeking approval for each project
- 16           • Waste Heat Recovery and Steam Backpressure Turbines: Witness Besa, Chapter II,
- 17                  Section XI. B. 2.
- 18                   ○ SDG&E requests authority to include these measures in our portfolio to
- 19                  capture integrated EE opportunities currently not eligible for participation
- 20           • Management of SDG&E's EE Balancing Accounts: Witness Besa, Chapter II, Section
- 21                  4, III
- 22                   ○ SDG&E requests authority to transfer funds from the Electric Procurement
- 23                  Energy Efficiency Balancing Account to the Post-1997 Electric Energy

1 Efficiency Balancing Account as necessary to efficiently manage program  
2 expenditures

- 3 • Funding Flexibility For Electric and Gas Program Budgets: Witness Besa, Chapter II,  
4 Section 4, IV
  - 5 ○ SDG&E requests authority for fund shifting between gas and electric PPP  
6 balancing accounts as necessary to accommodate successful programs
- 7 • Encumbering Funds for Long-Term Projects: Witness Gaines, Chapter I, Section 3,  
8 III, C
  - 9 ○ SDG&E requests authority to encumber incentive funds for up to 5 years  
10 to provide financial certainty for long-term customer projects

11 **II. SDG&E’s Commitment to Energy Efficiency**

12 Over the last 15 years, SDG&E has successfully proven its commitment to Energy  
13 Efficiency by helping customers save over 3.1 million MWh, (equal to the electricity required to  
14 supply over 500,000 homes for one year), save over 629 MW (avoiding the need to construct the  
15 equivalent of 1.25 large power plants), and save over 39.7 million therms, (equal to natural gas  
16 required to serve over 79,000 homes for one year).

17 SDG&E’s energy vision is clear and consistent with the plans and policies of the State of  
18 California. The number 1 energy resource is *‘Energy Efficiency’*. We are committed to this, and  
19 to supporting our customers’ ongoing challenge of managing their energy costs through energy  
20 efficiency, energy conservation and demand reduction (“DR”). Energy Efficiency has, and will  
21 continue to be the most important part of SDG&E’s integrated and balanced energy resource  
22 plan.

23 We are all facing a very challenging energy future. However, the programs described in

1 this testimony are developed to help solve some of these challenges. We know we will need to  
2 get closer to our customers to succeed. We know we will need to develop more partnerships,  
3 and we will need to continue our integration efforts with our DR and Low Income Energy  
4 Efficiency (“LIEE”) programs. We know we will need to continually learn from our experiences  
5 and continually strive for in our innovation programs. SDG&E’s 2009-2011 Energy Efficiency  
6 Portfolio offers all of these actions.

7 With that said, successful programs start with stretch but realistic goals. SDG&E has  
8 been saddled with stretch but unrealistic goals since 2006 as SDG&E’s Commission-adopted  
9 electric goals have been approximately 25% higher, on a relative basis, as compared to those  
10 adopted for SCE and PG&E. The Commission recognized this inequity in D. 07-10-032 and  
11 authorized SDG&E to propose alternative goals as a remedy. In Section 2 of this testimony we  
12 propose new annual electric goals for SDG&E that are initially reduced by 25% to make them  
13 comparable, on a relative basis, to those adopted for SCE and PG&E and then reduced again by  
14 an additional 20% consistent with the methodology presented in Slide 5 of the Presentation  
15 “Applying 2008 DEER Presentation – ED Staff,”<sup>2</sup> SDG&E’s annual therm goal was reduced by  
16 22% in D.09-05-037 OP 3 to account for interactive effects.

### 17 **III. DESIGN OF SDG&E’s PROGRAM PORTFOLIO**

18 This testimony presents SDG&E’s EE Portfolio developed utilizing the market centric  
19 approach outlined by the Commission in the Assigned Commission’s and Administrative Law  
20 Judge’s Ruling Requiring Supplemental Filings (“ACR”) dated October 30, 2008 with:

- 21 • Statewide programs addressing the following Major Strategic Planning Areas:  
22 Commercial, Industrial, Agricultural, Residential, New Construction, Upstream Lighting,

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<sup>2</sup> [http://www.cpuc.ca.gov/PUC/energy/Energy+Efficiency/EE+Workshops/090514\\_May18EE+Goals+Workshop.htm](http://www.cpuc.ca.gov/PUC/energy/Energy+Efficiency/EE+Workshops/090514_May18EE+Goals+Workshop.htm).

1 HVAC and Partnership segments along with the Emerging Technology, Workforce  
2 Education and Training, Codes and Standards and Marketing Education and Outreach  
3 programs; and

- 4 • Local Programs addressing market opportunities not adequately captured in the statewide  
5 programs.

6 These program designs are described in greater detail in Witness Besa’s testimony,  
7 Chapter II, Section 2 and Appendix B.

8 The EE Portfolio was developed following the directives of the D. 09-05-037 using  
9 cumulative goals from 2006, updated to incorporate the 2006-2007 Verification report and 2008  
10 DEER values. The net effect of this combination of aggressive goals and lowered savings  
11 assumptions result in portfolio design criteria that require SDG&E to pursue the maximum  
12 energy savings possible in its service territory. The kWh goal is 143% of the Base Potential  
13 identified in the 2008 Itron study and 88% of the Full Incremental Potential<sup>3</sup>. The therm goal is  
14 270% of the Base Potential and 77% of the Full Incremental Potential identified in the 2008 Itron  
15 study. As a result, we must abandon the previously agreed upon state-wide incentive levels and  
16 increase incentives to the full incremental measure costs to generate maximum participation in  
17 our programs. Cost effectiveness is negatively impacted by this approach but was maintained at  
18 a satisfactory level of 1.24 (TRC) due to diligent cost control on non-incentive items.

19 SDG&E used the following guiding principles in designing its portfolio:

20 **Innovation:**

- 21 • Programs should be innovative in design and implementation, even as we build on the  
22 foundation of the “tried and true” effective measures.

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<sup>3</sup> Full Incremental Potential is defined as “Includes all measures analyzed with incentives set to full incremental costs.” Full incremental potential was adjusted upward to include agricultural and government potential not included in the Itron study.

- Programs should be “customer-centric” – that is, designed with the customers in mind.

**Integration:**

- Programs and activities should support the Commission’s Big Bold Energy Efficiency Strategies (“BBEES”) and the draft California Energy Efficiency Strategic Plan (“CEESP”) (Application (“A”). 08-06-004) submitted on June 2, 2008 by the IOUs.
- Programs should be designed to capture synergies from integration with other state priorities, including DR, LIEE, renewable generation, and Assembly Bill (“AB”) 32 Greenhouse Gas (“GHG”) reduction.

**Comprehensive:**

- The EE Portfolio should be comprehensive in pursuing all cost effective energy efficiency opportunities.
- Programs should tap the talent and resources in the market place by seeking opportunities for partnerships with customers, local agencies, and service providers.

Finally, this testimony will demonstrate that SDG&E’s Portfolio was developed in compliance with Commission direction contained in the following:

D.07-10-032, Interim Opinion on Issues Relating to Future Savings Goals and Program Planning for 2009-2011 Energy Efficiency and Beyond;

Assigned Commissioner’s and Administrative Law Judge’s Ruling Regarding 2009 to 2011 Energy Efficiency program Applications, February 29, 2008;

Assigned Commissioner’s Ruling on Revision 4.0 of the Energy Policy Manual, March 28, 2009;

Assigned Commissioner’s and Administrative Law Judge’s Ruling Regarding Cost-Effectiveness Metrics and Energy Efficiency Policy Manual, March 14, 2008;

1 Joint Assigned Commissioners' Ruling Providing Guidance on Integrated Demand-Side  
2 Management in 2009-2011 Portfolio Applications, April 11, 2008;

3 Assigned Commissioner's and Administrative Law Judge's Ruling Regarding May 15,  
4 2008 Energy Efficiency Portfolio Plans for 2009-2011, April 21, 2008;

5 Assigned Commissioner's and Administrative Law Judge's Ruling Regarding Due Dates  
6 for 2009-2011 Energy Efficiency Portfolio Plans and Energy Efficiency Strategic Plan  
7 Applications, May 5, 2008;

8 D.08-07-047, Decision Adopting Interim Energy Efficiency Savings Goals for 2012  
9 through 2020 and Defining Energy Efficiency Savings Goals for 2009 through 2011;

10 Assigned Commissioner's and Administrative Law Judge's Ruling Resetting Date for  
11 2009-2011 Energy Efficiency Program Applications, June 2, 2008;

12 Assigned Commissioner and Administrative Law Judge's Ruling Requiring  
13 Supplemental Filings, October 30, 2008;

14 Assigned Commissioner and Administrative Law Judge's Ruling Modifying Schedule  
15 and Requiring Additional Information for 2009-2011 Supplemental Filings, December 12, 2008;

16 Energy Efficiency 2006-2007 Verification Report, February 5, 2009;

17 Administrative Law Judge's Ruling Revising Proceeding Schedule, February 10, 2009.

18 Interim Decision Determining Policy and Counting Issues For 2009 to 2011 Energy  
19 Efficiency Programs dated May 21, 2009

#### 20 **IV. Features of the Portfolio**

21 SDG&E's EE Portfolio is composed of 12 state-wide programs, 9 local programs and 17  
22 third party programs which were selected and/or designed to demonstrate the guiding principles  
23 of innovation, integration and comprehensiveness.

1 Specifically, innovation is demonstrated in the Portfolio in many areas. The residential  
2 portfolio is being expanded to have a greater emphasis on light-emitting diode (“LED”)  
3 technology and other emerging specialty lighting as it comes to the marketplace. Incentives for  
4 high efficiency plug loads (TVs, receivers, computers, etc.) are being added to address their  
5 growing impact on home energy use. SDG&E is proposing a pilot project that will evaluate the  
6 latest developments in in-home automated control/monitoring technology that leverages our  
7 Smart Meter infrastructure and optimizes residential energy use. As part of this Smart Meter  
8 leveraging effort, we are proposing funding, through the Home Energy Efficiency Survey  
9 program, for a Customer Energy Network that will allow customers to release their energy usage  
10 data to a 3<sup>rd</sup> party of their choice for display on-line on their computer’s homepage to better track  
11 and manage their energy use,<sup>4</sup>

12 Finally, we are also proposing a pilot to evaluate the operation of a micro-grid that  
13 utilizes DR, EE and distributed generation to support an off-the-grid community similar to that  
14 which might be common in a zero net energy community of the future.

15 The nonresidential portfolio will include mobile workshops that provide customer  
16 specific training at energy intensive customer sites. Our successful On-Bill Financing program is  
17 being updated to make it even more attractive to small commercial and institutional customers by  
18 increasing the cap on loan value and lengthening the minimum pay-back period. Potential  
19 partnerships with financial institutions that focus on hard to reach businesses are also being  
20 investigated to maximize financing opportunities for energy efficiency projects at businesses  
21 located in lower income neighborhoods. SDG&E is also proposing a pilot program to determine  
22 the value of utility ownership of new and/or refurbished large heating, ventilation, air-

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<sup>4</sup> An example of this service is Google’s PowerMeter discussed at <http://www.google.org/powermeter/>

1 conditioning (“HVAC”) systems on customer facilities. This Green Energy Systems pilot is  
2 intended to maximize energy efficiency in new/refurbished long-life central plants when the  
3 customer does not have the capital to upgrade their system.

4 With respect to local government partnerships, SDG&E is expanding its activity to  
5 include an incubator process with SANDAG that assists interested cities in developing long-term  
6 energy action plans and provides a roadmap on how they can become a full partner with SDG&E  
7 over time. SDG&E will also be working with its existing local government partners to include  
8 greater emphasis on code enhancement and code enforcement efforts in this cycle’s activities.

9 From an integration perspective, SDG&E has had significant success in its efforts to  
10 integrate EE and DR program marketing and implementation and include renewable program  
11 information where appropriate. This activity is most evident in our continuing collaboration with  
12 the California Center for Sustainable Energy (“CCSE”) to operate the San Diego Energy  
13 Resource Center which is a facility dedicated to providing information and training on EE, DR  
14 and solar programs to a wide range of customers.

15 In the residential market, we have jointly marketed our Summer Saver DR program (AC  
16 cycling) with our AC tune-up program and as Advanced Metering Infrastructure (“AMI”) is  
17 rolled out during this program cycle, we have plans to utilize the detailed customer usage data to  
18 better target high energy users and provide customers with customized feedback on their homes’  
19 EE and DR opportunities.

20 In the non-residential market, our Energy Saver Bonus program provides incremental  
21 incentives to customers/contractors that implement an EE and DR program at a customer site.  
22 This program has proven effective at convincing DR Aggregators to expand their business model  
23 to include EE products and likewise with EE contractors to also offer DR products to customers

1 and will be leveraged even further in the future. From an audit perspective, we have updated our  
2 protocols to deliver combined EE and DR audits and will be adding green house gas emission  
3 inventory calculators to the audit process in 2009. We have also joined the Climate Registry's  
4 Cool Planet program where SDG&E's Account Executives jointly visit customers with Climate  
5 Registry personnel to educate them on AB32 requirements and demonstrate how energy  
6 efficiency is their best GHG reduction option. Finally, SDG&E was recently awarded the New  
7 Solar Homes program administration in San Diego by the California Energy Commission  
8 ("CEC") and we are integrating that program into our existing New Construction EE program  
9 and DR programs to provide a complete energy management solution to this customer segment.

10 Lastly, comprehensiveness has been and continues to be an important aspect of  
11 SDG&E's EE Portfolio. With the aggressive goals set by the Commission, it is imperative to be  
12 comprehensive in approach if SDG&E is to meet or exceed its energy saving and demand  
13 reduction goals. SDG&E is enhancing its comprehensiveness by restructuring how it designs  
14 and manages its programs going forward. In the past its programs were managed across the  
15 residential and non-residential markets uniformly. Beginning with this program cycle, the  
16 Program Managers will be responsible for segments rather than specific programs. The goal is to  
17 be even more knowledgeable about the needs of customer segments (residential owners and  
18 renters; non-residential manufacturing, agricultural, hospitality, foodservice, institutional, etc)  
19 and increase market penetration through segment specific program design, marketing and  
20 outreach. This segment-based approach is consistent with the state-wide program designs but is  
21 also being utilized for our local program design and implementation

22 However, the biggest challenge SDG&E faces on comprehensiveness is the reliance, on  
23 screw-in compact fluorescent lamps ("CFLs"). SDG&E's position has been and continues to be

1 that it seeks out all cost effective energy efficiency opportunities with equal passion. For  
2 example, the residential and small commercial AC tune-up and replacement programs are both  
3 run by 3<sup>rd</sup> party contractors who are individually motivated to maximize the HVAC activity in  
4 SDG&E's service territory. SDG&E has proactively worked to help them improve their program  
5 performance and actually renegotiated one of the contracts to allow for increased incentives to  
6 flow to customers. In other cases, SDG&E has worked with LED manufactures to try and bring  
7 ENERGY STAR-compliant and UL-approved LED bulbs to the service territory as alternatives  
8 to CFLs. Although that effort has not been as successful to date as we would like due to product  
9 limitations, SDG&E plans to continue its efforts in 2009-2011. Finally, SDG&E is proposing  
10 pilots in both the residential and non-residential markets to evaluate the benefits of utility  
11 ownership of HVAC equipment to facilitate the installation of super high-efficiency systems. In  
12 summary, SDG&E is fully motivated to capture all energy efficiency opportunities in our service  
13 territory, including non-lighting opportunities.

14 To demonstrate that commitment to comprehensiveness in SDG&E's 2009-2011  
15 portfolio, SDG&E used Itron's draft 2008 California Energy Efficiency Potential Study<sup>5</sup> results  
16 as a guideline for which measure mix was most appropriate to build our EE Portfolio and reach  
17 our goal. Overall, SDG&E's portfolio mix is 52% lighting, of which 23% is screw-in CFLs.  
18 Although these values are significant, they represent real opportunity that would be lost without  
19 appropriate support from EE programs. It is also important to note that the lighting portfolio  
20 includes an increasing focus on specialty lighting and emerging technology which continues our  
21 transition to advanced lighting technologies such as LED's and dimmable CFLs.

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<sup>5</sup> California Energy Efficiency Potential Study, Itron and KEMA, draft issued on May 12, 2008.  
Available on [http://www.calmac.org/publications/PG&E\\_EE\\_FestModelReport\\_DraftFinal.pdf](http://www.calmac.org/publications/PG&E_EE_FestModelReport_DraftFinal.pdf).

1 In summary, SDG&E believes its proposed 2009-2011 Energy Efficiency Portfolio is  
2 innovative in its efforts to bring new technologies and programs to market, fully integrated in its  
3 efforts to promote its EE/DR/LIEE and renewable programs and comprehensive in its attempt to  
4 identify and maximize all cost effective energy efficiency opportunities. The following sections  
5 of this testimony provide greater detail on how these objectives are achieved with our EE  
6 Portfolio.

7 **V. Summary Tables and Graphs of Portfolio**

8 The following sections provide summary information of SDG&E's 2009-2011 proposed  
9 energy savings, budgets and cost effectiveness. Please refer to Appendices F for more details.

10 **A. Summary of Portfolio Energy Savings and Demand Reductions**

11 D.08-07-047 Ordering Paragraph ("OP") 4 adopts gross goals, not net of free riders.  
12 Additionally, the July 1, 2008 *Proposed Decision Adopting Interim Energy Efficiency Savings*  
13 *Goals for 2012 Through 2020 and Defining Energy Efficiency Savings Goals for 2009 Through*  
14 *2011* (at page 30) identifies the 2009-2011 EE Application proceeding as the proper forum in  
15 which to adopt changes to SDG&E's electric goals. Based thereon, SDG&E is proposing  
16 revisions to its electric goals via this Application. Table 1-1 below shows the forecasted savings  
17 for SDG&E's 2009-2011 energy efficiency portfolio and the proposed, adjusted CPUC goal.

Table 1-1: Projected Annual Savings Impacts for 2009-2011

| <b>KWH</b>                     | <b>2009</b>        | <b>2010</b>        | <b>2011</b>        | <b>TOTAL</b>       |
|--------------------------------|--------------------|--------------------|--------------------|--------------------|
| Annual Goal                    | 160,911,000        | 155,952,000        | 149,625,000        | 466,488,000        |
| 2006-2008 Verification Impacts | 76,725,580         | 76,725,580         | 76,725,580         | 230,176,740        |
| EUL Decay Impacts              | 21,530,764         | 28,047,255         | 12,642,105         | 62,220,125         |
| <b>TOTAL</b>                   | <b>259,167,344</b> | <b>260,724,835</b> | <b>238,992,685</b> | <b>758,884,864</b> |
|                                |                    |                    |                    |                    |
| <b>KW</b>                      | <b>2009</b>        | <b>2010</b>        | <b>2011</b>        | <b>TOTAL</b>       |
| Annual Goal                    | 30,577             | 29,661             | 28,427             | 88,666             |
| 2006-2008 Verification Impacts | 8,695              | 8,695              | 8,695              | 26,086             |
| EUL Decay Impacts              | 10,148             | 10,738             | 7,226              | 28,112             |
| <b>TOTAL</b>                   | <b>49,421</b>      | <b>49,095</b>      | <b>44,348</b>      | <b>142,863</b>     |
|                                |                    |                    |                    |                    |
| <b>THERMS</b>                  | <b>2009</b>        | <b>2010</b>        | <b>2011</b>        | <b>TOTAL</b>       |
| Annual Goal                    | 3,276,000          | 3,510,000          | 3,822,000          | 10,608,000         |
| 2006-2008 Verification Impacts | 932,876            | 928,136            | 920,283            | 2,781,295          |
| EUL Decay Impacts              | 3,853              | 6,856              | 87,512             | 98,221             |
| <b>TOTAL</b>                   | <b>4,212,729</b>   | <b>4,444,993</b>   | <b>4,829,795</b>   | <b>13,487,517</b>  |

**B. Summary of Portfolio End Use Savings**

Appendix F Table 1-2 shows the forecasted 2009-2011 energy savings by sector and end use for SDG&E’s Portfolio.

**C. Summary of Sector Savings**

Appendix F Tables 1-3, 1-4, 1-5, and 1-6 show SDG&E’s 2009-2011 forecasted energy savings by market sectors 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.

**D. Summary of Portfolio Budget**

The following table shows SDG&E’s requested 2009-2011 budget to support meeting its aggressive energy savings goals and support activities associated with the CEESP. The budgets for each year are shown below.

Table 1-2: SDG&E 2009-2011 Proposed Budget

|                             | 2009           | 2010           | 2011           | Total          |
|-----------------------------|----------------|----------------|----------------|----------------|
| <b>SDG&amp;E- Total</b>     | \$ 165,962,033 | \$ 168,468,647 | \$ 164,160,913 | \$ 498,591,593 |
| <b>SDG&amp;E- Gas</b>       | \$ 20,549,038  | \$ 20,859,401  | \$ 20,326,027  | \$ 61,734,466  |
| <b>SDG&amp;E - Electric</b> | \$ 145,412,995 | \$ 147,609,246 | \$ 143,834,886 | \$ 436,857,127 |

**VI. Elements of the 2009—2011 Portfolio Designed to Meet Energy Efficiency Strategic Plan**

The details of each programs’ strategic plan activities is described in Section 5e of each Program Implementation Plan (see Appendix B). Some of specific program activities include net zero building pilots for both residential and commercial developments and enhancements to our existing new construction programs to incent participants to approach net zero energy construction by incorporating even more energy efficiency measures and solar. For the HVAC BBEES we will be investing Emerging Technology resources to develop California oriented AC technology development with an associated high efficiency furnace.

In addition, we have specific programs addressing strategies in each of the market segments including participation in the “Project Apollo” zero net energy program for the residential segment, an expanded On-Bill Financing program for the commercial and agricultural segments, and our Cool Planet program with the Climate Registry will assist industrial customers comply with developing AB32 requirements.

Program expansions have also been proposed for our Emerging Technology, Codes and Standards and Local Government Partnerships programs to address the identified needs for greater technology development and local code compliance.

**VII. Summary of Initiatives and Activities Designed to Accomplish the Big Bold Energy Efficiency Strategies**

The portfolio is designed to contribute to the success of achieving the BBEES. More

1 detail on this activity is discussed in Witness Besa Testimony, Chapter II, Section 1.II.B below  
2 and Appendix B.

3 **VIII. Estimated Budgets and Energy Savings Supporting the Energy Efficiency Strategic**  
4 **Plan**

5 Table 1-3 present the budgets proposed for the activities and programs SDG&E has  
6 included in its portfolio towards supporting the CEESP. Some of these programs are expected to  
7 provide some level of savings (see Appendix F for savings estimates associated with these  
8 activities.).

9 Table 1-3: SDG&E Programs and Budgets That Support Strategic Plan Activities  
10  
11  
12

| Category     | Program Name                                      | 2009                | 2010                | 2011                | 2009-2011           |
|--------------|---|---------------------|---------------------|---------------------|---------------------|
| Partnerships | LGovP01 - City of Chula Vista Partnership         | \$1,884,770         | \$1,884,770         | \$1,884,769         | \$5,654,309         |
| Partnerships | LGovP02 - City of San Diego Partnership           | \$2,006,262         | \$2,006,262         | \$2,006,265         | \$6,018,788         |
| Partnerships | LGovP03 - County of San Diego Partnership         | \$1,172,285         | \$1,172,285         | \$1,172,284         | \$3,516,853         |
| Partnerships | LGovP04 - City of San Juan Capistrano Partnership | \$190,006           | \$190,006           | \$190,006           | \$570,018           |
| Partnerships | LGovP05 - Port of San Diego Partnership           | \$779,369           | \$779,369           | \$779,371           | \$2,338,110         |
| Partnerships | LGovP06 - SANDAG Partnership                      | \$796,319           | \$796,319           | \$796,318           | \$2,388,955         |
| Partnerships | LGovP07 - ICLEI Partnership                       | \$156,873           | \$156,873           | \$156,874           | \$470,619           |
| Partnerships | LGovP08 - New Cities Partnership                  | \$778,987           | \$778,988           | \$778,988           | \$2,336,963         |
| Local Core   | Local02 - Local Island Program                    | \$2,003,523         | \$2,038,420         | \$1,897,537         | \$5,939,480         |
| Local Core   | Local04 - Local Sustainable Communities (RMV)     | \$321,360           | \$321,360           | \$321,360           | \$964,081           |
| Local Core   | Local05 - OBF                                     | \$875,000           | \$875,000           | \$875,000           | \$2,624,999         |
| Local Core   | Local06 - Local Strategic Development & Integrat  | \$698,796           | \$698,796           | \$698,796           | \$2,096,387         |
| SW-CORE      | SW-C&SA - Building Standards Advocacy             | \$456,227           | \$456,227           | \$456,227           | \$1,368,681         |
| SW-CORE      | SW-C&SB - Appliance Standards Advocacy            | \$156,425           | \$156,426           | \$156,426           | \$469,276           |
| SW-CORE      | SW-C&SC - Compliance Training                     | \$356,341           | \$356,341           | \$356,341           | \$1,069,024         |
| SW-CORE      | SW-C&SD Reach Codes                               | \$456,247           | \$456,247           | \$456,247           | \$1,368,740         |
| SW-CORE      | SW-ETA - Assessments                              | \$2,136,640         | \$2,136,640         | \$2,136,640         | \$6,409,919         |
| SW-CORE      | SW-ETB - Scaled Field Placement                   | \$0                 | \$0                 | \$0                 | \$0                 |
| SW-CORE      | SW-ETC - Demonstration / Showcasing               | \$0                 | \$0                 | \$0                 | \$0                 |
| SW-CORE      | SW-ETD - Market and Behavioral Studies            | \$0                 | \$0                 | \$0                 | \$0                 |
| SW-CORE      | SW-ETE - Technology supply-side efforts           | \$0                 | \$0                 | \$0                 | \$0                 |
| SW-CORE      | SW-ETF - Technology Incubation                    | \$0                 | \$0                 | \$0                 | \$0                 |
| SW-CORE      | SW-ETG - Technology Test Centers (TTC)            | \$0                 | \$0                 | \$0                 | \$0                 |
| SW-CORE      | SW-ETH - ZNE lab (PG&E)                           | \$0                 | \$0                 | \$0                 | \$0                 |
| SW-CORE      | SW-HVACA - Residential Energy Star Quality Instal | \$38,175            | \$38,175            | \$38,175            | \$114,526           |
| SW-CORE      | SW-HVACB - Commercial Quality Installation        | \$35,769            | \$35,769            | \$35,769            | \$107,306           |
| SW-CORE      | SW-HVACC - Commercial Upstream Equipment          | \$22,320            | \$22,320            | \$22,320            | \$66,961            |
| SW-CORE      | SW-HVACD - Quality Maintenance Program            | \$68,151            | \$68,151            | \$68,151            | \$204,452           |
| SW-CORE      | SW-HVACE - Technology & Systems Diagnostics       | \$300,500           | \$300,500           | \$300,500           | \$901,499           |
| SW-CORE      | SW-HVACF - HVAC WE&T                              | \$45,727            | \$45,727            | \$45,727            | \$137,181           |
| SW-CORE      | SW-HVACG - HVAC Core                              | \$26,287            | \$26,287            | \$26,287            | \$78,862            |
| SW-CORE      | SW-IDSM - SW Integrated DSM                       | \$200,041           | \$200,041           | \$200,041           | \$600,122           |
| SW-CORE      | SW-ME&OA - Marketing, Education & Outreach (Core) | \$2,973,233         | \$2,973,233         | \$2,973,233         | \$8,919,698         |
| SW-CORE      | SW-ME&OB - SW Marketing, E&O FYP                  | \$0                 | \$0                 | \$0                 | \$0                 |
| SW-CORE      | SW-ME&OC - ME&O Strategic Plan                    | \$0                 | \$0                 | \$0                 | \$0                 |
| SW-CORE      | SW-NCResA - RNC                                   | \$2,686,148         | \$2,701,136         | \$2,681,306         | \$8,068,590         |
| SW-CORE      | SW-WE&TA - Strategic Planning & Implementation    | \$378,263           | \$270,323           | \$160,073           | \$808,658           |
| SW-CORE      | SW-WE&TB - WE&T Centers – SDERC, Food Service Cen | \$4,126,233         | \$4,126,233         | \$4,126,233         | \$12,378,699        |
| SW-CORE      | SW-WE&TC - WE&T Connections – PEAK Program        | \$635,550           | \$635,550           | \$635,550           | \$1,906,650         |
|              | <b>Total--Strategic Plan Programs</b>             | <b>\$26,761,823</b> | <b>\$26,703,770</b> | <b>\$26,432,810</b> | <b>\$79,898,403</b> |

1

2



1 cumulative 10 year goal of 104% of its cumulative maximum potential used in D.04-09-060.  
2 This is due to the fact that SDG&E's 2006-2008 goals already exceeded 88% of maximum  
3 achievable so when combined with 88% for years 2009-2013 results in an overall average of  
4 104%. Therefore, SDG&E's proposal is still consistent with the Commission's objective to  
5 promote an aggressive energy efficiency strategy<sup>6</sup> as the cumulative stream still exceeds 100% of  
6 maximum achievable. Without these proposed adjustments to its goals, SDG&E will continue to  
7 face unreasonable and unfair risk of not meeting its goals.

8 In addition, the Energy Division has recognized that the adoption of 2008 DEER values  
9 and cumulative goals beginning in 2006 warrants additional electric goal decrements of 20% as  
10 noted in their presentation at the May 18, 2009 Goals Workshop. SDG&E believes this  
11 additional goal decrement is justified because the original EE goals did not consider cumulative  
12 savings and utilized DEER assumptions that were far more generous than the 2008 DEER  
13 values.

14 Finally, SDG&E's natural gas goal was reduced by 22% in D.09-05-037 OP3 in response  
15 to updated DEER assumptions on interactive affects that were not included in the original goal  
16 calculations.

17 The following table presents SDG&E's proposed goals.

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<sup>6</sup> D.07-10-32 at page 117.

1  
2

Table 2-1: SDG&E 2009-20011 Proposed Goals

| <b>Year</b> | <b>Proposed Annual GWH Goal</b> | <b>Proposed Annual MW</b> | <b>Current Annual GWH Goal</b> | <b>Current Annual MW</b> |
|-------------|---------------------------------|---------------------------|--------------------------------|--------------------------|
| 2009        | 168                             | 30.6                      | 282                            | 53.6                     |
| 2010        | 163                             | 29.7                      | 274                            | 52.0                     |
| 2011        | 134                             | 28.4                      | 225                            | 49.9                     |

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7

SDG&E's 2009-2011 Portfolio presented here for the Commission's consideration is

8

based on these proposed goals. In the succeeding chapters, SDG&E will present a portfolio of

9

programs and associated budgets designed to meet these proposed goals.

1 **SECTION 3.**  
2 **SDG&E’S PORTFOLIO REFLECTS STATE ENERGY POLICIES AND STRATEGIC**  
3 **PLAN**

4 **IX. EE Portfolio Supports the State’s Energy Action Plan and Other Energy Policies**

5 **A. Energy Efficiency is the Resource of First Choice**

6 The 2008 update of the Energy Action Plan (“EAP”) listed Special Action Areas and  
7 specific next steps for energy efficiency. SDG&E fully embraces those recommendations and  
8 has incorporated a wide range of actions in its EE Portfolio to help achieve the objectives of the  
9 EAP. A summary of SDG&E’s proposed activities in each of the Special Action Areas are as  
10 follows:

- 11 • Need for coordination and integration:

12 SDG&E has undertaken numerous actions to improve the integration of its EE and DR  
13 programs and enhance our coordination with other supporting organizations such as water  
14 agencies and local governments. Specifically, our EE and DR programs are marketed as a  
15 portfolio of energy solutions to our customers and we also offer incentives to contractors/vendors  
16 to develop combined EE and DR projects with their customers. In addition, for residential  
17 customers we promote AC tune-ups jointly with our Summer Saver AC cycling program.  
18 Finally, in 2008 SDG&E was awarded administration of the New Solar Homes Partnership in  
19 our service territory and we have integrated that program with our new construction EE and DR  
20 programs to create a comprehensive, whole house program. Our most ambitious effort at  
21 integration is the Micro-Grid Pilot where we will focus on cross-cutting and comprehensive  
22 energy options for the Low-Income, Residential and Non-residential sectors to maximize the  
23 saturation of EE, DR and renewables within a community to test operating issues related to a  
24 “net-zero” utility of the future. Included in this pilot is a joint marketing effort with the CCSE to  
25 utilize the California Solar Initiative program to maximize PV installation.

- Broadening perspectives and the focus of action:

SDG&E has long recognized the value of early intervention into project design to achieve maximum energy savings. Our New Construction organization is charged with maintaining close relationships with developers, architects and designers to promote our Sustainable Communities program which incorporates EE, DR, Leadership in Energy Environmental Design (“LEED”) certification and clean on-site generation which can be owned and operated by SDG&E. This latter aspect, utility ownership, is proposed to be expanded in our EE Program Portfolio to include major HVAC systems on commercial buildings under our Green Energy Systems program. The Green Energy Systems program broadens our approach to ensuring energy savings from major energy systems that, once installed, last for up to 30 years and present a significant lost opportunity if not captured up front. A similar pilot program of utility ownership is proposed for super-high efficiency residential AC systems under our Emerging Technology program. Other examples of broadened perspectives and focus in SDG&E’s 2009-2011 portfolio are our Cool Planet programs with the Climate Registry which targets high level executives to leverage their long-term GHG reduction goals as a compelling stimulus for allocating additional corporate resources to EE projects.

- Leverage through partnerships

SDG&E’s successful partnerships with water agencies and local governments are proposed to grow in this portfolio to take further advantage of synergies in program outreach and implementation and ultimately increase participation in EE and DR programs at city facilities and with the general public. We also have formed a partnership with the Port of San Diego involving a broad range of port tenants with a shared goal to “green” the port. Lastly, we have proposed a partnership with SANDAG to assist cities in developing and implementing energy

1 action plans with the goal of eventually becoming full partner cities with SDG&E. In each of  
2 these partnerships we will leverage our relationship with the city’s code enforcement agency to  
3 improve outreach, tools training and enforcement of building codes.

4 The 2008 Energy Action Plan Update lists six “next steps” recommended for utility  
5 energy efficiency programs. SDG&E has considered each of these recommendations in the  
6 design of its portfolio and has included new programs or program modifications to achieve each  
7 one.

- 8 • Statewide strategic plan roadmap:

9 SDG&E, Pacific Gas and Electric Company (“PG&E”), Southern California Edison  
10 Company (“SCE”) and Southern California Gas Company (“SoCalGas”) were responsible for  
11 preparing the draft California Energy Efficiency Strategic Plan and have included discussions on  
12 Advancing Strategic Plan Goals and Objectives in each of our program implementation plans.

- 13 • Strategies to achieve “big bold” initiative goals:

14 SDG&E’s Program Implementation Plans (see Appendix B) discuss their various  
15 strategies to support the “big bold” initiative goals, particularly the Statewide New Construction  
16 Programs and Statewide Upstream HVAC Program.

- 17 • New strategies to address existing buildings

18 For residential customers, SDG&E has proposed a pilot “whole house” program to  
19 encourage home owners to implement a comprehensive upgrade. This program will be marketed  
20 with the assistance of realtors and contractors to capture new home buyers and home renovators  
21 and convince them to consider EE, DR and renewables in their projects. For commercial  
22 customers, SDG&E has existing programs that provide elevated incentives to customers and  
23 contractors who implement comprehensive EE and DR projects. In addition, our Green Energy

1 Systems program mentioned above is also intended to encourage comprehensive upgrades of  
2 existing buildings. Finally, our Micro-Grid pilot will focus on upgrading existing residential and  
3 commercial buildings in EE, DR and renewables to test operating issues related to a “net-zero”  
4 utility of the future.

- 5 • Partnerships with local governments

6 SDG&E has existing partnerships with the City of San Diego, City of Chula Vista and the  
7 County of San Diego. SDG&E is proposing a new partnership with the City of San Juan  
8 Capistrano and has proposed a program with SANDAG to develop new city partnerships over  
9 time. We are confident that successful partnerships with local governments can deliver energy  
10 savings through city owned buildings, enhanced code compliance and enhanced public outreach.  
11 In addition, we will be working with each of these local governments to take full advantage of  
12 the EE financing opportunities available under AB811.

- 13 • Additional low-income energy efficiency (“LIEE”) initiatives

14 SDG&E’s 2009-2011 LIEE program approved by the CPUC reflects greater emphasis on  
15 integration with the other EE and DR programs.

## 16 **B. Portfolio Supports Assembly Bill 32 Goals**

17 The regulatory requirements implementing AB32 are still being debated but it is certain  
18 that it will have a profound impact on California, its citizens and businesses and on governments  
19 around the world. As the requirements are finalized, SDG&E is prepared to adjust its portfolio  
20 as necessary to support its implementation. In the interim, SDG&E has proposed a partnership  
21 with the Climate Registry to jointly implement a program called Cool Planet to educate Chief  
22 Executive Officers and Chief Financial Officer of larger customers on the value of early action to  
23 reduce GHG emissions, provide incentives to calculate their GHG inventory and reinforce the

1 value of energy efficiency as the lowest cost GHG reduction measure. The objective is to  
2 convince senior executives to “push” the GHG message down through their organization and  
3 raise the priority for capital allocation to EE projects.

4 Another activity that directly supports AB32 objectives is the statewide outreach activity  
5 that SDG&E jointly funds with PG&E, SCE and SoCalGas which carries the message on climate  
6 change to all Californians.

7 Table 3-1 show the estimated environmental benefits (tons of CO<sub>2</sub> and other pollutants  
8 avoided) that would result from achieving SDG&E’s proposed portfolio savings as calculated  
9 using the E3 calculator.

10 Table 3-1: Environmental Benefits Resulting from SDG&E’s  
11 2009-2011 Proposed Programs  
12

|             | <b>2009</b> | <b>2010</b> | <b>2011</b> | <b>Total</b> |
|-------------|-------------|-------------|-------------|--------------|
| CO2 (tons)  | 151,452     | 153,703     | 152,129     | 457,285      |
| NOx (lbs.)  | 40,713      | 41,316      | 40,934      | 122,963      |
| PM10 (lbs.) | 19,484      | 19,774      | 19,566      | 58,824       |

13  
14  
15 **C. Portfolio Supports Governor’s Green Building Initiative**

16 The Governor’s Green Building Initiative set a goal of achieving 20% reduction in  
17 energy use in state buildings by 2015. SDG&E has been actively working with state agencies to  
18 achieve this goal but the progress has been slow due to financing and project planning hurdles.  
19 To address these hurdles in its proposed portfolio, SDG&E has greatly expanded its funding of  
20 the statewide partnership with the UC/CSU system to take advantage of the numerous projects  
21 that have been in the planning stage in the 2006-2008 program cycle. SDG&E has also  
22 expanded its On-Bill Financing program to offer up to \$250,000 financing over 10 years to  
23 institutional customers to help address the financing hurdle and it has proposed the Green Energy  
24 Systems utility ownership option for major HVAC systems that are typical for many state

buildings.

Table 3-2 shows the expected savings by building type from SDG&E’s 2009-2011 proposed programs addressing the Governor’s Green Building Initiative.

Table 3-2: Green Building Initiative Contributions

| Programs Contributing to the GBI                      | Budget(1)             | Program Impacts            |                             |                            | Emissions Reduction |                  |                |
|---|-----------------------|----------------------------|-----------------------------|----------------------------|---------------------|------------------|----------------|
|   |                       | Energy Savings (Gross kWh) | Demand Reduction (Gross kW) | Gas Savings (Gross Therms) | CO2 (tons)          | Nox (lbs.)       | PM10 (lbs.)    |
| Core Programs (Commercial Sector Only)                | \$ 124,956,109        | 318,909,187                | 111,392                     | 11,008,149                 | 4,975,389           | 3,659,109        | 494,211        |
| California State Government Buildings                 | \$ 41,235,516         | 105,240,032                | 36,759                      | 3,632,689                  | 1,641,879           | 1,207,506        | 163,090        |
| Federal & Local Government Buildings                  | \$ 41,235,516         | 105,240,032                | 36,759                      | 3,632,689                  | 1,641,879           | 1,207,506        | 163,090        |
| Commercial Buildings                                  | \$ 42,485,077         | 108,429,124                | 37,873                      | 3,742,771                  | 1,691,632           | 1,244,097        | 168,032        |
| Government Partnerships                               | \$ -                  | -                          | -                           | -                          | -                   | -                | -              |
| California State Government Buildings                 |                       |                            |                             |                            |                     |                  |                |
| Federal & Local Government Buildings                  |                       |                            |                             |                            |                     |                  |                |
| Commercial Buildings                                  |                       |                            |                             |                            |                     |                  |                |
| Third Parties   | \$ 31,239,027         | 79,727,297                 | 27,848                      | 2,752,037                  | 1,243,847           | 914,777          | 123,553        |
| California State Government Buildings                 | \$ 10,308,879         | 26,310,008                 | 9,190                       | 908,172                    | 410,470             | 301,877          | 40,772         |
| Federal & Local Government Buildings                  | \$ 10,308,879         | 26,310,008                 | 9,190                       | 908,172                    | 410,470             | 301,877          | 40,772         |
| Commercial Buildings                                  | \$ 10,621,269         | 27,107,281                 | 9,468                       | 935,693                    | 422,908             | 311,024          | 42,008         |
| <b>Grand Total</b>                                    | <b>\$ 156,195,136</b> | <b>398,636,484</b>         | <b>139,240</b>              | <b>13,760,186</b>          | <b>6,219,237</b>    | <b>4,573,887</b> | <b>617,764</b> |
| <b>California State Government Buildings Total</b>    | <b>\$ 51,544,395</b>  | <b>131,550,040</b>         | <b>45,949</b>               | <b>4,540,861</b>           | <b>2,052,348</b>    | <b>1,509,383</b> | <b>203,862</b> |
| <b>Federal &amp; Local Government Buildings Total</b> | <b>\$ 51,544,395</b>  | <b>131,550,040</b>         | <b>45,949</b>               | <b>4,540,861</b>           | <b>2,052,348</b>    | <b>1,509,383</b> | <b>203,862</b> |
| <b>Commercial Buildings Total</b>                     | <b>\$ 53,106,346</b>  | <b>135,536,405</b>         | <b>47,342</b>               | <b>4,678,463</b>           | <b>2,114,541</b>    | <b>1,555,121</b> | <b>210,040</b> |

(1) Budget contains incentives to participants only.

(2) Program Impacts are first year for the 2009-2011 cycle and Emissions Reductions are lifecycle

## II. Portfolio Supports the Statewide Energy Efficiency Strategic Plan

### A. Portfolios Reflect Regional and Local Variations Complementing the Strategic Plan

The most significant “local variations” applicable to SDG&E include our mild climate and our lack of a significant industrial customer base. As a result, on average HVAC measures produce significantly less savings in San Diego than in other parts of California and our program portfolio is more heavily weighted toward residential and commercial customers which have a higher lighting component to their energy use. SDG&E’s response to these realities is a greater focus on a whole building approach to new construction and retrofits in the residential and commercial markets. Programs designed to address these issues include our Whole House

1 residential retrofit program, our Net Zero Home new construction pilot and our Savings by  
2 Design and Green Energy Systems programs for the commercial segment. Our most extreme  
3 example is our Sustainable Communities case study at Rancho Mission Viejo which involves a  
4 large master planned community that will be planned from the earliest development stages to be  
5 “green”.

6 **B. Portfolios Contain Appropriate Strategies and Program Designs for the**  
7 **Three Big Bold Energy Efficiency Strategies**

8 **1. Residential New Construction**

9 SDG&E’s portfolio supports the BBEES in a number of ways starting with the  
10 Residential New Construction program that will be focusing on pushing builders to achieve 35%  
11 better than Title 24 and will be marketed with our New Solar Homes Partnership program. The  
12 next tier in program aggressiveness is our Sustainable Communities Case Study which is  
13 designed to impact a large master planned community and push the development toward Net  
14 Zero construction over its 15 year build-out life. The last program tier is our planned pilots for  
15 Net Zero Home designs within this program cycle which will test the availability, cost and  
16 acceptability of net zero building options.

17 **2. Commercial New Construction**

18 SDG&E’s portfolio supports the Commercial New Construction BBEES in similar ways  
19 to the residential BBEES. Our Savings By Design program encourages builders to maximize  
20 energy efficiency with the ultimate goal of moving them into our Sustainable Communities  
21 program and approaching zero net energy. Our proposed Green Energy Systems pilot will  
22 facilitate program participation by more builders with the capital burden of their HVAC plant  
23 transferred to utility ownership. Finally, we propose to have pilot demonstrations of Zero Net  
24 Energy building designs during this program cycle to demonstrate ultimate sustainability options

1 available today.

### 2 **3. Heating, Ventilation, and Air Conditioning Industry**

3 The most important step to reach this BBES is the development of California –oriented  
4 HVAC systems and SDG&E’s Emerging Technology program will contribute to that effort  
5 through co-funding of technology demonstration and performance verification. Complimenting  
6 that effort will be our proposed pilot to have utility ownership of high efficiency residential  
7 HVAC systems. This pilot is intended to drive demand for super efficient AC systems and also  
8 overcome the long pay-back issues unique to San Diego’s mild climate.

9 The state-wide HVAC Program developed cooperatively by the IOUs and the Energy  
10 Division is a comprehensive program designed to transform the HVAC market through measures  
11 focused on quality installation, customer education, upstream incentives, maintenance and early  
12 diagnostics.

13 Finally, SDG&E has two 3rd Party programs focused on AC maintenance and efficiency  
14 upgrades that will maximize the HVAC savings over the short term while we wait for California-  
15 oriented AC systems to enter the market.

### 16 **C. Portfolios Support Strategic Plan Vision for All Sectors**

17 SDG&E’s overall roadmap between CEESP strategies and EE Program design is located  
18 in Appendix C. Details of the specific strategies and associated program activities are  
19 summarized there. In addition, specific details on the program activities supporting each  
20 segment can be found in their respective Program Implementation Plans in Appendix B.

#### 21 **1. Existing Residential**

22 SDG&E’s residential programs fully support the Strategic Plan Vision and its four key  
23 strategies by our participation in “Project Apollo” zero net energy effort in new construction, the

1 incorporation of a whole-house approach in our Residential Energy Efficiency Program, our  
2 participation in the proposed statewide comprehensive “plug load” incentive program and our  
3 enhanced Codes and Standards program to promote high efficiency local building codes through  
4 our Local Government Partnerships.

## 5 **2. Existing Commercial**

6 SDG&E’s commercial programs fully support the Strategic Plan Vision and its four key  
7 strategies with our enhanced Codes and Standards program focused on code compliance and  
8 promotion of high efficiency local building codes through our Local Government Partnerships.  
9 We integrated our billing system with Energy Star Portfolio Manager on January 1, 2009, to  
10 facilitate benchmarking and will be actively promoting building benchmarking. We have  
11 increased the funding cap and repayment period for our On-Bill Financing Program to make it  
12 more attractive to a larger population of customers. In addition our proposed Green Energy  
13 Systems pilot provides an alternative “financing” option for large commercial customers to  
14 dramatically improve HVAC system efficiencies in large buildings and campuses. Finally, we  
15 propose zero net energy pilots to demonstrate today’s technologies to prospective commercial  
16 builders.

## 17 **3. Industrial**

18 SDG&E does not have a large industrial customer segment but our programs  
19 appropriately support the Strategic Plan Vision and its four key strategies for this segment  
20 through implementation of the Statewide Industrial EE program. We plan to fully participate in  
21 the development of California’s energy efficiency brand through our Statewide Marketing and  
22 Outreach program. Our Mobile Workshops are intended to take training and analysis tools  
23 directly to customer facilities to address process improvement opportunities. Our integrated  
24 audits provide EE and DR recommendations in a coordinated package to increase their value to

1 customers and our On-Bill Financing program can assist in the funding of the recommended  
2 projects. Lastly, our Cool Planet program with the Climate Registry will help industrial  
3 customers understand and address their GHG emissions.

#### 4 **4. Agricultural**

5 SDG&E does not have a large agricultural customer segment but our programs  
6 appropriately support the Strategic Plan Vision for this segment. Our On-Bill Financing program  
7 has been expanded and will better match the financing needs of this segment. Our Workforce  
8 Education and Training programs provide both on-site and centralized events at our Energy  
9 Resource Center. In support of that effort, our state-wide Marketing, Education and Outreach  
10 will provide consistent information across the state delivered locally to this segment. Finally, the  
11 statewide Agricultural Program provides a broad range of integrated energy management  
12 solutions for this unique segment.

#### 13 **5. Emerging Technologies**

14 SDG&E's Emerging Technology programs are designed to work cooperatively to support  
15 the Strategic Plan through a variety of strategies outlined in the statewide Program  
16 Implementation Plan including technology assessments, field tests, demonstration showcases,  
17 market studies, business incubation and ultimately, transfer of technology to EE programs.  
18 Specific project areas identified for funding include advanced lighting, consumer electronics,  
19 California oriented HVAC, and utility ownership of super-efficient package AC units.

#### 20 **6. Codes and Standards**

21 SDG&E's Codes and Standards program is broadening its role significantly to support  
22 the Strategic Plan's vision for this sector. As outlined in the statewide Program Implementation  
23 Plan, the Codes and Standards group will focus on advocacy to improve state building and  
24 appliance regulations, case studies, compliance enhancement and the advocacy for "reach codes"

1 by local jurisdictions.

## 2 **7. Local Government**

3 SDG&E's Local Government Partnerships are expanding in number as well as scope to  
4 support the Strategic Plan. The Partnerships will focus on promoting enhanced local building  
5 codes, education and training of city employees and retrofitting city facilities to demonstrate  
6 leadership to the community. In addition, we have enhanced our On-Bill Financing program to  
7 allow for larger projects (up to \$250,000) and longer terms (up to 10 years).

## 8 **8. Integrated Demand-Side Management**

9 SDG&E's current and proposed integration activities across various program portfolios  
10 are outlined in different Commission proceedings, EE, LIEE, DR, AMI, Distributed Generation  
11 ("DG"), and California Solar Initiatives ("CSI"). SDG&E received approval of its 2009-2011  
12 LIEE application (A.08-05-024). The 2009-2011 DR application (A.08-06-002) was submitted  
13 on June 2, 2008. The Commission issued D.07-04-043 on its AMI ("Smart Meter") proceeding.  
14 SDG&E notes that it is not the current program administrator of the DG and CSI program  
15 portfolios and they are currently assigned to the CCSE. Although, these various proceedings are  
16 currently independent of each other, the CEESP provides vision and strategy to leverage these  
17 various program efforts to ensure the realization of the aggressive BBEES laid out by the  
18 Commission in D.07-10-032. SDG&E has incorporated in this Application a detailed discussion  
19 (see Witness Besa's Testimony, Chapter II, Section 1) of its plan to integrate these various  
20 Demand-Side Management ("DSM") activities in this program cycle. Building on these  
21 activities, the Statewide Integrated DSM Program (Appendix B) provides clear direction and a  
22 process for the IOUs to coordinate stakeholder activity (CEESP Strategy 1.3) and promote new  
23 technologies (CEESP Strategy 1.4) through a Statewide Integration Task Force.

1                   **9.     Marketing, Education, and Outreach**

2                   SDG&E is participating in the coordinated statewide Marketing, Education and Outreach  
3 program designed to support the Strategic Plan vision by facilitating a transition to a California  
4 energy efficiency brand. The program utilizes extensive market research and behavior research  
5 to develop impactful messages that are released in multiple languages. The program is intended  
6 to deliver messages designed to influence general behavior and complement local utility  
7 messages that promote specific program participation.

8                   **10.    Training and Workforce Development**

9                   One of the keys to success for future implementation of energy efficiency technologies is  
10 the need to train the next generational workforce in energy-related positions. The Statewide  
11 Workforce Education and Training Program (WE&T) program will lay the foundations for  
12 improving the knowledge and skills of the current generation—from local code officials, energy  
13 managers, and HVAC technicians to school teachers in order to develop the human resources  
14 needed to achieve market transformation.

15                  Achieving success in creating a well educated workforce in energy efficiency matters will  
16 require large-scale, ongoing, collaborative education and training efforts to match evolving  
17 demands for both the type of jobs and number of workers needed to fully implement the  
18 Strategic Plan.

19                  Addressing human capital resource requirements will require collaborative efforts of  
20 federal, state and local governments; financial institutions; community-based and non-profit  
21 organizations; industry and labor organizations and utilities. These entities also present potential  
22 funding sources and opportunities for partnerships.

23                  In support of the CEESP’s vision that “by 2020 California’s workforce is trained and  
24 engaged to provide the human capital necessary to achieve California’s economic energy

1 efficiency and demand-side management potential,” IOUs plan to implement a variety of  
2 workforce development strategies that encourage and nurture the development of “green collar”  
3 jobs through their strategic planning initiatives, and education and training programs. These  
4 strategies are contained in its WE&T program implementation plan (see Appendix B).

5         SDG&E’s Education and Training program will also contribute to developing a “green”  
6 workforce as it provides various opportunities through its various energy efficiency training  
7 programs and seminars.

### 8                 **11. Low-Income Energy Efficiency Program**

9         SDG&E’s Energy Efficiency programs support the Strategic Plan’s vision of integration  
10 with LIEE programs in several ways. First, our Residential New Construction program proposes  
11 a pilot to work with developers of affordable housing to develop best practice design techniques  
12 for this segment, provide design assistance incentives and financial incentives and encourage  
13 participation in a sustainable building program. Our Multifamily program will be integrated with  
14 LIEE to cover common areas in low income developments that are not covered by the LIEE  
15 program. For low income customers with existing AC units, the LIEE program will provide  
16 information about our Third Party AC tune-up and Summer Saver AC cycling programs that are  
17 no cost services. We will also work with Low Income Home Assistance Program (“LIHEAP”)  
18 agencies to provide information about appliance rebates and plug load rebates when they become  
19 available.

20         SDG&E provides a reference guide that matches specific details in its various program  
21 implementation plans that are designed to support the CEESP. Refer to Appendix B.

## 22 **III. Portfolios Provide Continued Strategic Planning in 2009-2011 and Beyond**

### 23 **A. Strategic Development and Integration**

24         SDG&E is committed to the vision and goals outlined in the CEESP which includes

1 customer segmentation and targeted program development, the integration of EE and DSM and  
2 emerging high efficiency technologies coupled with innovative and comprehensive program  
3 design and theory, to create market transformation in California. A focused team of qualified  
4 resources has been identified to support these activities and drive the direction of the programs  
5 through innovation and the inclusion of best practices. This team will be dedicated to this  
6 activity, collaborating with regulatory, program, technology and other staff, as a coordinating  
7 entity.

8           The team will be specifically responsible for overseeing activities associated with  
9 achieving strategic plan goals and ensuring that the strategic plan itself is updated, maintaining  
10 relevance and providing guidance and direction on a continuous basis. In addition, the team will  
11 be engaged in ongoing work to review and update implementation of the CEESP and 2009-2011  
12 programs based upon it.

13           **B.       Application Identifies New 2009-2011 Pilot Project Programs Based on**  
14           **Strategic Plan Goals and Strategies**

15           SDG&E offers a variety of pilots and projects that further the goals and strategies  
16 presented in the CEESP. These pilots are discussed in various sections of the testimony  
17 particularly in Witness Besa's Testimony, Chapter II, Section 1, the IDSM section and more  
18 specifically in the Program Implementation Plans in Appendix B.

1           Some of the pilots in SDG&E’s application include, the Micro-Grid Pilot, Sustainable  
2 Communities Case Studies, Whole House Performance Program, Home Electronics (see Single  
3 Family Energy Efficiency Retrofit Program Implementation Plan); Multifamily Whole Building  
4 Pilot (see Multifamily Energy Efficiency Retrofit Program Implementation Plan), Local  
5 Government Partnerships and Financing options discussed in the On-Bill Financing section of  
6 Witness Besa’s testimony

7           **C.       Encumbering Funds for Long-Term Projects**

8           In previous program years (prior to 2006), the Commission allowed the utilities to  
9 commit incentive monies associated with customer projects with installation periods longer than  
10 the program cycle. Utilities tracked commitments and reported the expenditure when it finally  
11 occurred and at that time recorded the savings. This was a practice as far back as 1994. SDG&E  
12 believes that this is a reasonable process for encumbering funds for long-term projects. It assures  
13 customers of the availability of program funds to finance their project. However, a reasonable  
14 contract term should be determined based on the target market (e.g., new construction projects  
15 should have at least a 4 to 5 year commitment). Projects that fail to install within the 4 to 5 year  
16 period will not be guaranteed incentives beyond that time.

