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

**AMENDED**

**PREPARED DIRECT TESTIMONY**

**OF**

**SAN DIEGO GAS & ELECTRIC COMPANY**

# CHAPTER I

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

**MARCH 2, 2009**

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## SECTION 1.
## EXECUTIVE SUMMARY

### I. Purpose

The purpose of this testimony is to present San Diego Gas & Electric Company's ("SDG&E") proposed 2009-2011 Energy Efficiency ("EE") Program portfolio and provide the technical basis and explanation to support the cost effective energy savings and demand reduction estimates that are presented in the portfolio.

In addition, this testimony will address critical policy issues that need to be resolved to ensure energy efficiency programs are optimally designed and implemented allowing California to maximize its energy efficiency efforts and maintain its world leadership in this increasingly important area. The testimony will show that the Mandated scenario, which follows the strict policy guidance of the California Public Utilities Commission ("Commission" or "CPUC") in preparing our energy efficiency portfolio results in a portfolio that cannot meet goal, is only marginally cost effective and requires a budget increase of nearly $200 million as compared to the alternative Preferred scenario, also presented in this testimony. This translates to an average residential rate increase of 0.53¢/kWh and 0.86¢/therm. The testimony will also show that adopting the joint policy recommendations of the Join Investor-Owned Utilities ("IOUs") Pacific Gas and Electric Company ("PG&E"), Southern California Edison Company ("SCE"), San Diego Gas & Electric Company ("SDG&E") and Southern California Gas Company ("SoCalGas"), in Section 2 results in a credible, predictable and actionable process to develop and implement a cost effective portfolio that meets the CPUC's energy efficiency goals. SDG&E's Preferred scenario was developed using these joint policy recommendations.

## II. SDG&E's Commitment to Energy Efficiency

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

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

We are all facing a very challenging energy future. However, the programs contained in this testimony were developed to help solve some of these challenges. We had to rethink how we develop programs and how we implement them. We know we will need to get closer to our customers to succeed. We know we will need to develop more partnerships, and we will need to continue our integration efforts with our ("DR") and Low Income Energy Efficiency ("LIEE") programs. We know we will need to continually learn from our experiences and continually strive for in our innovation programs. SDG&E's 2009-2011 Energy Efficiency Preferred scenario offers all of these actions.

With that said, successful programs start with stretch but realistic goals. SDG&E

has been saddled with stretch but unrealistic goals since 2006. SDG&E's adopted electric goals have been approximately 25% higher, on a relative basis, as compared to those adopted for SCE and PG&E. The CPUC recognized this inequity in Decision ("D.") 07-10-032 and authorized SDG&E to propose alternative goals. In Section 3 of this testimony we propose new goals for SDG&E that are comparable, on a relative basis to those adopted for SCE and PG&E. Specifically, we propose to reduce the unrealistic existing 10-year goal of 118% of "maximum achievable", and reduce it to the still stretch target of 104% of maximum achievable.

## III. Policy Changes Needed to Maintain California's Leadership In Energy Efficiency

Over the past decades California has established the unquestionable leadership position in advancing energy efficiency. Policy makers have set forth clear directions, and the IOUs have consistently stepped up to the plate and delivered results.

### A. Joint Utility Policy Recommendations

In Section 2 of this testimony, we propose policy changes that are needed to continue this success. These proposed changes address significant uncertainty in the CPUC's existing process related to the planning, implementation, and measurement of program performance. To maximize results from the energy efficiency programs and the collective talent of the technical experts, rules and assumptions need to be clear and consistent throughout a program cycle, and only altered between cycles if evidence is compelling, understood and supported by facts. To be sure, we are absolutely supportive of maintaining the integrity of the evaluation and measurement process. However, constantly changing assumptions have made the management of our programs very

difficult, caused serious distractions from focusing on program execution and resulted in countless hours of valuable resources engaged in marginally productive debates. This is not helpful in advancing the State's energy efficiency objectives, nor is it in the best interest of our customers.

### B. DEER Updates

SDG&E recognizes that the Commission requires the utilities to use updated DEER values in their planning process and reporting requirements. However, SDG&E and SoCalGas have brought to the attention[1] of the Commission its concerns regarding the lack of oversight in DEER updates and official approval prior to implementing updates based on the "latest" DEER.

During the entire 2009-2011 planning process, the Energy Division has updated DEER five times for various reasons causing uncertainty as to the correctness of the values being used for the program planning process.[2] Additionally, on December 16, 2008, Energy Division listed a set of measures that would be added and would be available for the application, measures that are important to SDG&E and SoCalGas. This update never materialized as the Energy Division sent out a notice indicating that no more updates will be made for the application. This is extremely problematic as these

[1] *Comments of San Diego Gas & Electric Company (U 902 M) and Southern California Gas Company (U 904 G) on Energy Efficiency Savings Goals Through 2020 and Related Topics Pursuant to Assigned Commissioner and Administrative Law Judge's Ruling Seeking Comments on Definitions of Energy Savings Goals for 2009 Through 2011*, April 13, 2006

[2] The April 21, 2008 Ruling (at page 2) directed the utilities to use the draft DEER update available before the end of April 2008 with a footnote indicating that DEER would be final by July 2008. The May 5, 2008 Ruling (at page 1) states that a "critical subset of energy efficiency measures representing 80% or more of the anticipated 2009-2011 portfolio savings, will be available approximately May 30, 2008, for planning purposes. DEER has been updated several times since then, A cursory review of DEER website shows several updates; October 10, 2008, December 15, 2008 and February 15, 2009.

new measures are part of the proposed portfolio and any subsequent changes to the DEER values would immediately change the make-up of the portfolio. This is evident in the drastic changes that are now being revealed between the 2005 DEER used for the 2006-2008 EE portfolios and the 2006-2007 Verification Report results. DEER needs to be finalized once and used throughout the entire program cycle.

Every other input into the EE cost effectiveness calculation receives formal approval as a result of record CPUC proceedings e.g. avoided cost is determined in the Avoided Cost proceeding, the discount rate is determined in GRC/Cost of Capital proceedings, the market price reference is determined in the Renewable Portfolio Standard Proceeding, environmental adders are approved in the Avoided Cost proceeding and will be updated in the GHG proceeding. The utilities have participated in various webinars to discuss the DEER updates but most of our concerns have been rejected or remain unaddressed. We submit that, considering the magnitude of potential statewide EE budgets, which are in excess of $1 billion per year, its impact on long term resource planning and achievement of California's GHG goals, DEER updates should receive the same level of on the record review, transparency and Commission consideration and approval.

Therefore, we strongly recommend a DEER update proceeding be established that allows for regular and timely update of DEER assumptions prior to the triennial update of goals and program planning. Specifically, it is recommended that the proceeding be timed such that it is completed by yearend prior to each year when IOU EE applications are required to be filed. This would allow for consistent use of DEER assumptions

throughout the goal setting, program planning and program evaluation process and ensure the predictability and reliability of energy savings.

## IV. DESIGN OF SDG&E's PROGRAM PORTFOLIO

This testimony presents two program cycle scenarios, the Mandated and Preferred scenarios, based on differing cost effectiveness input assumptions and utilizing different measure mixes and incentive levels as necessary to meet, or attempt to meet, SDG&E's energy efficiency goals while maintaining a cost effective portfolio. Each scenario was developed utilizing the same market centric approach outlined by the CPUC in the Assigned Commission's and Administrative Law Judge's Ruling Requiring Supplemental Filings ("ACR") dated October 30, 2008 with:

- Statewide programs addressing the following Major Strategic Planning Areas: Commercial, Industrial, Agricultural, Residential, New Construction, Upstream Lighting, HVAC and Partnership segments along with the Emerging Technology, Workforce Education and Training, Codes and Standards and Marketing Education and Outreach programs; and
- Local Programs addressing market opportunities not adequately captured in the statewide programs.

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

The first scenario, "Mandated Scenario", was developed following the directives of the ACR using cumulative goals from 2004, net basis for Performance earnings basis ("PEB") and ex-ante DEER values. The second scenario, the "Preferred Scenario", was also developed using the directives in the ACR but differs from the Mandated Scenario in that it defines cumulative as "within the program cycle", i.e. 2009-2011, and it utilizes

alternative DEER assumptions jointly developed by PG&E, SCE, SDG&E and SoCalGas that we believe accurately reflect energy savings achieved by our programs. These alternative assumptions and supporting documentation are contained in Appendices C and D.

The contrast between the Mandated and Preferred scenarios is significant and compelling and serves to further highlight the need for quick resolution of the policy issues raised by the IOUs in this proceeding.[3] We establish in testimony that the Preferred scenario more accurately reflects the performance of the energy efficiency programs and more accurately reflects the energy efficiency accomplishments of the businesses and citizens of California. Moreover, SDG&E is not even able to develop a Mandated scenario that meets all the Commission-adopted energy savings goals with reasonable cost effectiveness if the IOU-recommended policies are not adopted. Specifically, the Mandated scenario is below goal on all three metrics kWh and kW (58%, 63% and 42% respectively) has a TRC of only 1.12 and requires a budget increase of $193 million (60%) over the Preferred scenario.

Not only does it fail to meet goal, it is also below the CPUC's guidance[4] of a 1.5 – 1.7 TRC and is uncomfortably close to being not cost effective given the inherent uncertainty in program planning and changes resulting from Evaluation, Measurement and Verification ("EM&V") studies. Finally, our attempt to meet the cumulative goal, updated to incorporate the 2006-2007 Verification Report and 2008 DEER results, under

[3] Assigned Commissioner and Assigned Law Judge's Ruling Regarding Policy Issues issued February 25, 2009.

[4] Assigned Commissioners and Administrative Law Judge's Ruling Modifying Schedule and Requiring Additional Information for 2009-2011 Supplemental Filings, December 12, 2008.

the Mandated scenario required SDG&E to abandon the state-wide incentive levels and increase incentives to the full incremental measure costs to generate maximum participation in its programs. The limiting factor in this scenario being the market potential using full incremental measure cost identified for SDG&E in the 2008 *California Energy Efficiency Potential Study* prepared by Itron.

In light of the dramatic differences between the Mandated and Preferred scenarios caused by ex-post DEER and verification report updates, SDG&E also performed an exercise to estimate the impact these updates would have on the *California Energy Efficiency Potential Study* results. Although the Potential Study did not use the DEER database as a direct input, we approximated the impact the DEER changes would have by matching the significant DEER adjustments to the applicable market potential identified in the Potential Study. The net result was an approximate 40% reduction in the Potential Study results. Once again demonstrating that it is poor policy to use different assumptions to set goals than those used to judge performance against these pre-set goals.

Overall, these results clearly indicate the Mandated scenario is not reasonable from both a societal and policy perspective. Specifically, the Mandated scenario, which increases costs and drives down the cost effectiveness of the portfolio, is inappropriate and unacceptable in these economic times. And, from a policy perspective, the Mandated scenario's obvious disconnect between goal setting and performance review will have far reaching consequences when translated to related proceedings such as Assembly Bill ("AB") 32, Long-Term Resource Plans and the Integrated Energy Policy Report. Each of these proceedings will need to dramatically reduce their expectations for energy

efficiency to be consistent with these DEER updates.

In summary, to ensure that SDG&E is able to implement a portfolio that maximizes energy efficiency and greenhouse gas reductions and supports the Commission's long-term vision for efficiency as presented in the CEESP, we urge the Commission to adopt the Joint IOUs' proposed policy changes and the resultant Preferred Scenario.

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

**Innovation:**

- Programs should be innovative in design and implementation, even as we build on the foundation of the "tried and true" effective measures.
- 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 (Application 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, renewables generation, and AB32 GHG reduction.

**Comprehensive:**

- 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 SDG&E's scenarios were 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;
- Joint Assigned Commissioners' Ruling Providing Guidance on Integrated Demand-Side Management in 2009-2011 Portfolio Applications, April 11, 2008;
- Assigned Commissioner's and Administrative Law Judge's Ruling Regarding May 15, 2008 Energy Efficiency Portfolio Plans for 2009-2011, April 21, 2008;

- Assigned Commissioner's and Administrative Law Judge's Ruling Regarding Due Dates for 2009-2011 Energy Efficiency Portfolio Plans and Energy Efficiency Strategic Plan Applications, May 5, 2008;
- D.08-07-047, Decision Adopting Interim Energy Efficiency Savings Goals for 2012 through 2020 and Defining Energy Efficiency Savings Goals for 2009 through 2011;
- Assigned Commissioner's and Administrative Law Judge's Ruling Resetting Date for 2009-2011 Energy Efficiency Program Applications, June 2, 2008;
- Assigned Commissioner and Administrative Law Judge's Ruling Requiring Supplemental Filings, October 30, 2009;
- Assigned Commissioner and Administrative Law Judge's Ruling Modifying Schedule and Requiring Additional Information for 2009-2011 Supplemental Filings, December 12, 2008;
- Energy Efficiency 2006-2007 Verification Report, February 5, 2009;
- Administrative Law Judge's Ruling Revising Proceeding Schedule, February 10, 2009.

## II. Features of the Portfolio

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

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

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

The nonresidential portfolio will include mobile workshops that provide customer specific training at energy intensive customer sites. Our successful On-Bill financing program is being updated to make it even more attractive to small commercial and institutional customers by increasing the cap on loan value and lengthening the minimum pay-back period. Potential partnerships with financial institutions that focus on hard to reach businesses are also being investigated to maximize financing opportunities for

[5] An example of this service is Google's PowerMeter discussed at http://www.google.org/powermeter/

energy efficiency projects at businesses located in lower income neighborhoods. SDG&E is also proposing a pilot program to determine the value of utility ownership of new and/or refurbished large heating, ventilation, air-conditioning ("HVAC") systems on customer facilities. This Green Energy Systems pilot is intended to maximize energy efficiency in new/refurbished long-life central plants when the customer does not have the capital to upgrade their system.

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

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

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

In the non-residential market, our Energy Saver Bonus program provides incremental incentives to customers/contractors that implement an EE and DR program at a customer site. This program has proven effective at convincing DR Aggregators to expand their business model to include EE products and likewise with EE contractors to also offer DR products to customers and will be leveraged even further in the future. From an audit perspective, we have updated our protocols to deliver combined EE and DR audits and will be adding green house gas emission inventory calculators to the audit process in 2009. We have also joined the Climate Registry's Cool Planet program where SDG&E's Account Executives jointly visit customers with Climate Registry personnel to educate them on AB32 requirements and demonstrate how energy efficiency is their best GHG reduction option. Finally, SDG&E was recently awarded the New Solar Homes program administration in San Diego by the California Energy Commission ("CEC") and we are integrating that program into our existing New Construction EE program and DR programs to provide a complete energy management solution to this customer segment.

Lastly, comprehensiveness has been and continues to be an important aspect of SDG&E's portfolio. With the aggressive goals set by the CPUC, it is imperative to be comprehensive in approach if SDG&E is to meet or exceed its energy saving and demand reduction goals. SDG&E is enhancing its comprehensiveness by restructuring how it designs and manages its programs going forward. In the past its programs were managed across the residential and non-residential markets uniformly. Beginning with this program cycle, the Program Managers will be responsible for segments rather than specific programs. The goal is to be even more knowledgeable about the needs of customer segments (residential owners and renters; non-residential manufacturing,

agricultural, hospitality, foodservice, institutional, etc) and increase market penetration through segment specific marketing and outreach. This segment-based approach is consistent with the state-wide program designs but is also being utilized for our local program design and implementation

However, the biggest challenge SDG&E faces on comprehensiveness is the reliance, or over reliance in other's view, on screw-in Compact fluorescent lamps ("CFLs"). SDG&E's position has been and continues to be that it seeks out all cost effective energy efficiency opportunities with equal passion. For example, the residential and small commercial AC tune-up and replacement programs are both run by 3rd party contractors who are individually motivated to maximize the HVAC activity in SDG&E's service territory. They have received all the budget they have requested in their contracts to meet the demand for their programs. In fact, SDG&E has proactively worked to help them improve their program performance and actually renegotiated one of the contracts to allow for increased incentives to flow to customers. In other cases, SDG&E has worked with LED manufactures to try and bring ENERGY STAR-compliant and UL-approved LED bulbs to the service territory as alternatives to CFLs. Although that effort has not been highly successful to date due to product limitations, SDG&E plans to continue its efforts in 2009-2011. Finally, SDG&E is proposing pilots in both the residential and non-residential markets to evaluate the benefits of utility ownership of HVAC equipment to facilitate the installation of super high-efficiency systems. In summary, SDG&E is fully motivated to capture all energy efficiency opportunities in our service territory, including non-lighting opportunities.

To demonstrate that commitment to comprehensiveness in SDG&E's 2009-2011

portfolio, SDG&E used Itron's draft 2008 California Energy Efficiency Potential Study[6] results as a guideline for which measure mix was most appropriate to build our portfolio and reach our goal. Overall, SDG&E's Preferred scenario portfolio mix is 42% lighting and 36% screw-in CFLs. Although these values are significant, they represent real opportunity that would be lost without appropriate support from EE programs. It is also important to note that the lighting portfolio includes an increasing focus on specialty lighting and emerging technology which continues our transition to advanced lighting technologies such as LED's and dimmable CFLs.

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

## II. Summary Tables and Graphs of Portfolio

The following sections provide summary information of SDG&E's 2009-2011 proposed energy savings, budgets and cost effectiveness. Please refer to Appendices F and F.1 for more details.

### A. Summary of Portfolio Energy Savings and Demand Reductions

D.08-07-047 Ordering Paragraph ("OP") 4 adopts gross goals, not net of free

[6] California Energy Efficiency Potential Study, Itron and KEMA, draft issued on May 12, 2008. Available on http://www.calmac.org/publications/PG&E_EE_FcstModelReport_DraftFinal.pdf.

riders goals. SDG&E's proposed 2009-2011 portfolio is designed to meet or exceed these goals presented in the July1, 2008 PD. Additionally, (at page 32) provides the 2009-2011 Application as the forum to consider changes to SDG&E's electric goals. Therefore SDG&E is proposing revisions to its electric goals in this application. The tables below show the forecasted savings for SDG&E's 2009-2011 energy efficiency portfolio under its Preferred and Mandated scenarios.

Table 1-1: Preferred Scenario—Projected Annual Savings Impacts for 2009-2011

| | **Energy Savings (Gross KWh)** | **Demand Reduction (Gross KW)** | **Gas Savings (Gross Therms)** |
|---|---|---|---|
| Total | 256,456,531 | 43,044 | 4,786,507 |
| CPUC Goal | 210,500,000 | 40,000 | 4,200,000 |
| % of 2009 Goal | 122% | 108% | 114% |
| Total | 244,999,070 | 41,613 | 5,130,937 |
| CPUC Goal | 204,000,000 | 38,800 | 4,500,000 |
| % of 2010 Goal | 120% | 107% | 114% |
| Total | 222,737,377 | 39,316 | 5,290,129 |
| CPUC Goal | 195,800,000 | 37,200 | 4,900,000 |
| % of 2011 Goal | 114% | 106% | 108% |
| Total | 724,192,977 | 123,973 | 1,520,7572 |
| CPUC Goal | 610,300,000 | 116,000 | 13,600,000 |
| % of 2011 Goal | 119% | 107% | 112% |

Table 1-2: Mandated Scenario—Projected Annual Savings Impacts for 2009-2011

| | Energy Savings (Gross KWh) | Demand Reduction (Gross KW) | Gas Savings (Gross Therms) |
|---|---|---|---|
| Total | 302,067,142 | 63,790 | 3,904,749 |
| CPUC Goal | 718,447,645 | 140,801 | 8,818,410 |
| % of 2009 Goal | 42% | 45% | 44% |
| Total | 304,794,623 | 64,225 | 3,911,264 |
| CPUC Goal | 465,887,457 | 84,880 | 9,016,957 |
| % of 2010 Goal | 65% | 76% | 43% |
| Total | 314,219,353 | 65,375 | 3,724,143 |
| CPUC Goal | 407,084,543 | 80,661 | 9,642,966 |
| % of 2011 Goal | 77% | 81% | 39% |
| Total | 921,081,119 | 11,540,156 | 193,389 |
| CPUC Goal | 1,591,419,645 | 27,478,333 | 306,342 |
| % of 2011 Goal | 58% | 42% | 63% |

**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 Preferred scenario. Appendix F.1 Table 1-2 shows the forecasted 2009-2011 energy savings by sector and end use for the Mandated scenario.

**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 for its Preferred scenario. 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. Appendix F.1 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 for its Mandated scenario.

### 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 under its Preferred scenario. The budgets for each year are shown below.

Table 1-3: Preferred Scenario—SDG&E 2009-2011 Proposed Budget

| | 2009 | 2010 | 2011 | 2009-2011 |
|---|---|---|---|---|
| Electric PGC Budget | **50,948,145** | **68,856,119** | **69,602,266** | **189,406,530** |
| Electric Procurement Budget | **56,258,178** | **38,350,204** | **37,604,057** | **132,212,439** |
| **Total Program Budget** | **107,206,323** | **107,206,323** | **107,206,323** | **321,618,969** |

Table 1-4 shows SDG&E's requested 2009-2011 budget to support meeting its aggressive energy savings goals and support activities associated with the CEESP under its Mandated scenario.

Table 1-4: Mandated Scenario—SDG&E 2009-2011 Proposed Budget

| | 2009 | 2010 | 2011 | 2009-2011 |
|---|---|---|---|---|
| PGC Budget | **56,018,112** | **73,926,086** | **74,672,233** | **204,616,431** |
| Electric Procurement Budget | **115,347,626** | **97,439,652** | **96,693,505** | **309,480,783** |
| **Total Program Budget** | **171,365,738** | **171,365,738** | **171,365,738** | **514,097,214** |

## III. Elements of the 2009—2011 Portfolio Designed to Meet Energy Efficiency Strategic Plan

The details of each program's 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, expanding our On-Bill Financing program for the commercial and agricultural segments, our Cool Planet program with the Climate Registry will assist industrial customers comply with 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.

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

## V. Estimated Budgets and Energy Savings Supporting the Energy Efficiency Strategic Plan

Tables 1-5 and 1-6 present the budgets proposed for the activities and programs SDG&E has included in its portfolio towards supporting the CEESP under its Preferred and Mandated scenarios, respectively. Some of the programs are expected to provide some level of savings (see Appendix F and F.1 for savings estimates associated with

these activities.).

Table 1-5: Preferred Scenario—SDG&E Costs to Exclude from 2009-2011 Earnings Mechanism

| Strategic Planning Activities | 2009 | 2010 | 2011 | 2009-2011 |
|---|---|---|---|---|
| SW-ME&O | $ 2,973,233 | $ 2,973,233 | $ 2,973,233 | **$ 8,919,698** |
| SW-ETA - Assessments | $ 2,136,640 | $ 2,136,640 | $ 2,136,640 | **$ 6,409,919** |
| SW-Codes & Standards | $ 1,500,004 | $ 1,500,004 | $ 1,500,004 | **$ 4,500,013** |
| SW-NCResA - RNC | $ 3,768,082 | $ 3,768,627 | $ 3,818,435 | **$ 11,355,143** |
| SW-WE&T | $ 5,123,834 | $ 5,051,208 | $ 4,939,063 | **$ 15,114,105** |
| SW-HVAC | $ 966,484 | $ 966,484 | $ 966,484 | **$ 2,899,453** |
| SW-IDSM - SW Integrated DSM | $ 200,041 | $ 200,041 | $ 200,041 | **$ 600,122** |
| Local02 - Local Island Program | $ 1,545,687 | $ 1,934,187 | $ 1,629,687 | **$ 5,109,562** |
| Local04 - Local Sustainable Communities | $ 293,580 | $ 293,580 | $ 393,318 | **$ 980,478** |
| Local06 - Local Strategic Development & Integration | $ 698,796 | $ 698,796 | $ 698,796 | **$ 2,096,387** |
| Local Govt Partnerships | $ 7,764,869 | $ 7,823,037 | $ 7,823,040 | **$ 23,410,946** |
| **Total** | **$ 26,971,249** | **$ 27,345,837** | **$ 27,078,740** | **$ 81,395,826** |

Table 1-6: Mandated Scenario—SDG&E Costs to Exclude from 2009-2011 Earnings Mechanism

| Strategic Planning Activities | $ 2,009 | $ 2,010 | $ 2,011 | 2009-2011 |
|---|---|---|---|---|
| SW-ME&O | $ 2,973,233 | $ 2,973,233 | $ 2,973,233 | **$ 8,919,698** |
| SW-ETA - Assessments | $ 2,136,640 | $ 2,136,640 | $ 2,136,640 | **$ 6,409,919** |
| SW-Codes & Standards | $ 1,500,004 | $ 1,500,004 | $ 1,500,004 | **$ 4,500,013** |
| SW-NCResA - RNC | $ 4,208,820 | $ 4,208,820 | $ 4,261,320 | **$ 12,678,960** |
| SW- WE&T | $ 5,123,834 | $ 5,051,208 | $ 4,939,063 | **$ 15,114,105** |
| SW-HVAC | $ 1,355,215 | $ 1,355,215 | $ 1,355,215 | **$ 4,065,645** |
| SW-IDSM - SW Integrated DSM | $ 200,041 | $ 200,041 | $ 200,041 | **$ 600,122** |
| Local02 - Local Island Program | $ 1,545,687 | $ 1,934,187 | $ 1,629,687 | **$ 5,109,562** |
| Local04 - Local Sustainable Communities | $ 293,580 | $ 293,580 | $ 393,318 | **$ 980,478** |
| Local06 - Local Strategic Development & Integrat | $ 698,796 | $ 698,796 | $ 698,796 | **$ 2,096,387** |
| Local Govt Partnerships | $ 7,764,869 | $ 7,823,037 | $ 7,823,040 | **$ 23,410,946** |
| **Total** | **$ 27,802,727** | **$ 28,176,771** | **$ 27,912,367** | **$ 83,885,834** |

## SECTION 2
## SUCCESS OF 2009-2011 PROPOSED ENERGY EFFICIENCY PORTFOLIO REQUIRES THE ADOPTION OF NEW POLICIES AND RULES

### I. Introduction

In this chapter, the four California investor-owned utilities ("Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas and Electric Company, and Southern California Gas Company", known as the "Joint IOUs") regulated by the California Public Utilities Commission ("Commission" or "CPUC") propose key policy modifications that are absolutely necessary to enable the success of California's energy efficiency programs in the 2009-2011 period and beyond. This amended proposed policy testimony supersedes the policy testimony submitted by the Joint IOUs in support of Application 08-07-021 et al on July 21, 2008. This testimony is being submitted to the Commission pursuant to Decision 07-10-032, the California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Decision 08-09-040 adopted on September 18, 2008, the Order Instituting Rulemaking 09-01-019 on the Energy Efficiency Risk Reward Incentive Mechanism issued February 4, 2009, and other rulings and orders[7] The Joint IOUs propose policies that are essential to be decided within the context of the 2009-2011 proceeding and fit into two general policy categories. The first category of policy requests is needed in order for the IOUs to each build well-balanced portfolios that meet the sum of the Commission's annual 2009-2011 energy efficiency goals cost-effectively. Changes required for cost-effective energy efficiency portfolios that meet these goals are:

[7] See also Administrative Law Judge (ALJ) Ruling dated October 31, 2008, Scoping Memo dated November 25 2008; Guidance Ruling dated December 12, 2008 and Ruling Revising Proceeding Schedule dated February 10, 2009.

1. **Benefit and measure cost assumptions that are used for planning the adopted 2009-2011 Energy Efficiency Portfolio (ex ante) should also be used for portfolio reporting and evaluation. These assumptions should include limited IOU-proposed revisions to the Database for Energy Efficiency Resources (DEER) update proposed by the Energy Division in December 2008;**
2. **Cumulative savings should be defined as the sum of the annual savings goals for the three-year portfolio period upon which the proposed budgets are based; and**
3. **Residential interactive effects and commercial heating interactive effects should be removed from energy efficiency calculations.**

The second category of policy requests is essential to achieve both near and long-term goals of the State of California and the Commission. These include:

1. **Certain costs in direct support of the Strategic Plan should be exempt from the shareholder risk reward incentive mechanism;**
2. **IOUs should receive credit for energy efficiency actions taken by customers who may be motivated in part by other influences; and**
3. **To encourage long-term measure installations, the maximum effective useful life (EUL) should be extended to 30 years.**

The IOUs also discuss a third set of policy requests that are important to successful energy efficiency programs. The IOUs acknowledge that these will be addressed in a subsequent rulemaking (R.09-01-019) by the CPUC. The Joint IOUs

constructed their respective Proposed Program Plans anticipating that this third set of policy requests will be adopted by the Commission. In the event these policy requests are not granted in a subsequent rulemaking, the IOUs may need to revise their 2009-2011 Proposed Program Plans.

1. **Gross metrics should be used for the calculation of performance toward the minimum performance standard (MPS) and performance earnings basis (PEB) under the RRIM and**
2. **Mid-cycle funding augmentation rules should be revised.**

The Commission has indicated a desire to consider policy revisions to the energy efficiency process.[8] The Joint IOUs recognize that the Commission intends to address energy efficiency policy issues and the risk/reward incentive mechanism in upcoming rulemakings and their instant applications. The Joint IOUs assert it is essential that these policy matters are resolved in order for the Commission to adopt successful utility 2009-2011 energy efficiency portfolios. The Joint IOUs' proposal focuses on cost-effectively maximizing the total energy savings necessary to meet California's aggressive vision for energy efficiency. These requests allow the IOUs to focus on execution of energy efficiency portfolios that support all of the State's energy efficiency goals articulated in the Strategic Plan[9], including the Big, Bold Energy Efficiency Strategies; AB 32 - The California Global Warming Solutions Act of 200610; and the State's Energy Action Plan

[8] R.09-01-019, ADD other related D.08-12-059.
[9] *www.californiaenergyefficiency.com*
[10] *www.leginfo.ca.gov/pub/05-06/bill/asm/ab_0001-0050/ab_32_bill_20060927_chaptered.pdf*

(EAP).[11]

The IOUs' Proposed Program Plans for 2009-2011 are contingent upon Commission adoption of the above-described policy changes. The energy savings and cost effectiveness of the Proposed Program Plans are summarized in each of the IOUs' individual amended testimony and tables. The individual IOU testimony and tables also includes results for a mandated scenario required by the ALJ that employs the full December 2008 DEER updates proposed by the Energy Division and other current policies mandated in Commission Decisions and Rulings. The IOUs are not able to develop and implement reasonable and well-balanced portfolios that meet all the Commission-adopted energy savings goals cost-effectively based on the mandated scenarios (i.e., if the IOU-recommended policies are not adopted). Accordingly, to ensure that IOUs are able to implement portfolios that maximize energy efficiency and greenhouse gas reductions and support the Commission's long-term vision for efficiency as presented in the Strategic Plan and elsewhere, the Joint IOUs urge the Commission to quickly adopt the proposed policy changes upon which such portfolios are built.

### A. Changes Needed for Cost-effective Portfolio that Meets Commission Goals

#### 1. Per-Unit Benefit And Cost Assumptions Should Be Adopted For 2009-2011 Portfolio Planning (Ex Ante) And Also Used For Portfolio Evaluation

The IOUs' 2009-2011 Proposed Program Plans support the Commission's goals for both short-term and long-term resource benefits to the State, focusing on a mix of

[11] www.energy.ca.gov/energy_action_plan/index.html

both existing and emerging technologies and programs. Energy efficiency is the premier resource in California's loading order, and as such deserves and demands a reliable and reasonable planning and implementation environment. Such an environment allows the IOUs, and the energy efficiency industry, to focus on producing savings and not continually be concerned about responding to shifting assumptions. It allows the State, the Commission, and ratepayers to receive the benefits the utilities are proposing.

The benefits and measure costs supporting the IOUs' amended Proposed Program Plans are based on the DEER data, with limited IOU modifications as discussed herein. Failure to adopt the per-unit benefit and cost assumptions (including but not limited to kWh, kW, effective useful life (EUL) and measure costs) for portfolio planning, reporting, and evaluation jeopardizes achievement of the CPUC's and State's energy goals, as currently established. The Commission has acknowledged the inconsistency in the per-unit benefit and cost assumptions underlying goal development and new assumptions being released, such as the 2008 December DEER Update. The following sequence describes the Commission's actions:

a. The goals for the period 2004-2013 set forth in D.04-09-060 were created using a set of facts regarding benefits and measure costs available at that time. The energy savings potential, from which the goals are derived, exists as previously stated only when the underlying inputs (e.g. energy savings, costs, EULs, etc) remain consistent. Variations in the underlying inputs call into question whether the energy savings potential, upon which the goals are based, continues to exist.
b. In D.04-09-060, the Commission stated that the savings modeled in potential studies for programs in 2009 and beyond are gross, with net-to-gross approaching

1.0.[12] The Commission later confirmed that the 2009-2011 goals are gross goals citing D.04-09-060 and new analysis showing "that the currently-adopted numeric goals for 2009-2011 are consistent with, and in most cases higher than, recent analysis of maximum achievable utility gross savings potential during these years."[13]

c. In D.08-07-047, the Commission found that 2009 and beyond goals were "now out of date. Key assumptions embedded in the current goals do not resemble trends visible in the overall energy efficiency market today. For example, the net-to-gross and expected useful life assumptions in the 2009-2011 goals are about ten years old."[14]

d. The Energy Division then updated key assumptions through the 2008 DEER update. The Commission declined to reflect these assumption changes in the goals for 2009-2011 adopted in D.08-07-047, even though the Commission intends to correct the misalignment for future program cycles.[15]

Accordingly, the Commission must either freeze the goals with per-unit benefit and measure cost assumptions needed to achieve those goals (as presented herein) or allow the goals to "float" to address the constantly changing assumptions proposed through DEER and other updates. Continuous changes to the rules of the game will make it vastly more difficult and expensive for utilities and third parties to effectively plan and implement energy efficiency programs to meet the energy savings goals. Furthermore, changes to per-unit measure and cost assumptions between program adoption and evaluation compromise the Joint IOUs' ability to focus on the Strategic Plan since

[12] D.04-09-060, p.33
[13] D.08-07-047, p.29
[14] D.08-07-047, p.28
[15] D.08-07-047, p.33

proven, cost-effective portfolio measures cannot be used to balance new, non-cost-effective efforts for both the cost-effectiveness and energy saving achievement calculations. Thus, the Joint IOUs request that the Commission adopt and maintain the per-unit benefit and cost assumptions, as proposed herein, throughout the program cycle to meet the Commission's energy savings goals as established in D.04-09-060.

***a. New Process Needed for Measures in Proposed Framework***

In light of the proposed framework, the Joint IOUs request that the existing process for adding new measures, as adopted in D.05-09-043, be altered to allow for proper, formal, on-the-record review of benefit and measure costs proposed by the Energy Division. The new measure information will also be provided to the Joint IOUs' various local peer review groups (PRGs) for informal review as required by the EE Policy Manual, Version 4.0, Table 8. Upon receipt of such information, the Energy Division will then be given 15 calendar days to resolve any issue. The Executive Director of the Energy Division should send a letter to the local PRG and the IOU on their recommended benefit and measure cost values. If the Energy Division does not resolve the values that should be used by the 15th calendar day, then the IOU-proposed benefit and measure cost data will be used for portfolio reporting and evaluation. If the IOU does not support the Energy Division's recommendation, the IOU will have the opportunity to file an Advice Letter for full Commission review and resolution. The Joint IOUs believe this proposed process provides the local PRGs ongoing information and the Energy Division ample opportunity to review proposed benefit and measure cost values while facilitating the inclusion of new measures through a timely and transparent process.

***b. Savings Assumptions Should Include Limited IOU-Proposed Revisions To The Database For Energy Efficient Resources (DEER) Update Issued By The Energy Division in December 2008 And Should Be Adopted By The Commission For Portfolio Planning And Evaluation***

The IOUs' Proposed Program Plans include limited modifications to the proposed values from the DEER database, as supported by the work papers in Exhibit SCE-8/PG&E Appendix E/ SDG&E Appendix D/SoCalGas Appendix D. The Proposed Program Plans are based upon updated cost-effectiveness metrics that the IOUs maintain are more appropriate for the portfolio than those currently included in the Energy Division's proposed 2008 DEER Update (December 2008). The values utilized in the Proposed Program Plans represent values which are based upon supportable assumptions and studies of the resource benefits and measure costs of the portfolio. These values are also consistent with the goals of the Commission and the State.

The updated DEER numbers proposed by the Energy Division significantly reduce the amount of energy efficiency savings available from utility programs, but without reducing the energy efficiency savings goals. The Utilities support the use of estimates based on Commission studies that adhere to the Commission's evaluation, measurement, and verification (EM&V) protocols and that have gone through the proper vetting process. The Utilities reject unsupported savings estimates proposed by Energy Division that are developed outside of the protocols and lack transparency. The Joint IOUs maintain, and have submitted evidence to support the conclusion that certain revised DEER estimates (December 2008) are flawed and thus inappropriate for use in this proceeding, as demonstrated in Exhibit SCE-8/PG&E Appendix E.

### 2. Cumulative Savings Should Be Defined As The Sum Of The Annual Savings Goals For The Three-Year Portfolio Period

Cumulative savings goals for the IOUs should be defined as the sum of the annual goals for the three-year portfolio cycle. Defining cumulative savings to include a longer-term period, such as back to 2004, cannot be implemented by the IOUs, as it is inconsistent with Commission goal development and is not technically feasible from a timing perspective. 2006-2008 evaluation results would not be available until December 2010 well after the 2009-2011 portfolio has been budgeted and adopted. Further, there are no reliable studies that can quantify the amount, if any, of savings that do not still persist from installations back to 2004. The Commission's existing policy on cumulative savings makes the unsupported assumption that savings from decayed energy efficient measures have not been replaced with like measures and/or code advances.

Accordingly, the Joint IOUs recommend reconsideration of the current definition of cumulative savings such that cumulative be defined as the sum of the annual savings goals for the three-year portfolio period (2009-2011).

#### ***a. Defining Cumulative Savings To Be Beyond The Three-year Period Is Not Consistent With Commission Goal Development And Policy***

The Commission created goals for the 2004-2013 period in 2004 based on then available potential and energy savings data. To create cumulative goals, the Commission merely added the individual annual goals. No party did an assessment or adjustment for decay, an assessment of the change in energy savings due to ex post measurement, or an assessment of whether the cumulative goals were defined as net or gross. Such an assessment would have resulted in a reduction of the cumulative goals or an increase in

the annual goals to replace such savings that would "fall away."

The potential study may have assumed that customers would replace efficient measures with measures just as efficient. It is unclear whether the potential study assumed these customers would participate in IOU energy efficiency programs for their next efficient measure installation and thus, whether IOUs should be held responsible for re-creating these savings that may already exist in the utility's load forecast.

The potential study underlying the Commission's goals also has not incorporated the increased stringency of appliance and building standards, in addition to manufacturer production of more efficient technologies outside of standards and IOU programs. The Commission acknowledged this by stating "the model for current goals assumed there would be no further improvements in Title 24 or state and federal appliance standards."[16] Change to efficiency baselines produces real energy savings and lowers the amount of potential available for IOU programs. However, there is no way to reasonably track or report such savings through IOU programs, and it would be unreasonable, if not impossible, for IOUs to make up for savings that have been addressed by other sectors in the marketplace. For example, Codes and Standards (C&S) programs produce effective and far-reaching energy savings, but valuing credit for such savings in goal accomplishment has not been consistent at least since 2004. The IOUs were not allowed to count C&S savings in their 2004-2005 accomplishments. The IOUs were then allowed to count 50 percent of the pre-2006 and 100 percent of their post-2006 C&S savings, for which they could show attribution, in their 2006-2008 energy efficiency portfolios.

[16] D.08-07-47, p.28

In addition to the changes in policy as to whether to count some or all of C&S savings, there have also been other changes to policy for counting savings, including the variation from commitments to actual installations and from net goals to gross goals. In the 2004-2005 cycle, the Commission required the IOUs to count savings based on "commitments" from customers. In the 2006-2008 period, the Commission requested that savings from "actual" installations only be counted toward the goals. Unfortunately, this inconsistency creates a problem in implementing cumulative savings for a period longer than any particular three-year program cycle. For instance, the IOUs offer daylighting (also referred to as de-lamping) measures, which have a 15-year effective useful life according to the Commission's protocols. According to the Commission's policy for cumulative, the IOU would need to make up savings after the measure died in the 15th year. The daylighting savings are not lost, but they must be "replaced" when the effective useful life is exceeded. With the Commission's current definition of cumulative goals, the Commission ignores the fact that the savings may no longer be available to be replaced after a measure's useful life and thus, orders the IOU to find savings to replace those that still exist.

The change to gross from net in 2009-2011 creates an additional layer of uncertainty and arbitrariness in assessing cumulative savings. In its Decision on 2009-2011 goals and 2012-2020 goals, the Commission states that "2009-2011 savings will be measured as ex-post gross and layered on top of 2004-2008 savings to measure cumulative savings…."[17]. This means that the Commission will mix ex post net

[17] Decision 08-07-047 July 31, 2008, Page 29

achievements for 2004-2008 (including commitments) with ex post gross achievements for 2009-2011. Layering net and gross achievements further complicates the identification of cumulative savings and any counting of such savings towards cumulative savings goals, as it ignores the cumulative savings that are no longer available for IOU programs (since these savings were not incorporated in the accomplishments during the 2004-2008 period which was defined as "net"). Any cumulative savings goals beyond the three-year period need to reflect whether those energy savings are, in fact, available for IOU programs or have been adequately addressed through other developments in the marketplace (e.g., rising baselines, Codes and Standards, etc.).

As discussed above, defining cumulative savings back to 2004 is inconsistent with Commission goal development and policies on counting savings. Savings reaching the cumulative goals may exist, but the IOUs cannot monitor or report such savings. Accordingly, the Joint IOUs request cumulative savings for which the IOUs are responsible be defined as the sum of the annual goals for the 2009-2011 period.

### 3. Residential interactive effects and Commercial heating-related interactive effects should be removed from energy efficiency calculations.

The Commission goals were adopted under 2002 assumptions of market potential and savings assumptions. Subsequent DEER updates proposed by the Energy Division were not used to modify the potential estimates nor the goals derived from those estimates. Furthermore, the CPUC's potential study never considered interactive effects from electric measures on gas usage in its assessment.

However, current DEER updates proposed by the Energy Division include

assumptions for “interactive effects” which produce substantial increases in gas usage resulting from electric savings. Any interactive electric savings effects would undermine gas savings accomplishments making it impossible for gas and gas/electric utilities to achieve both gas and electric goals under existing rules.

The Joint IOUs have strong concerns about the validity of DEER on residential interactive effects and commercial heating-related interactive effects due to a reflect conclusions from a CFL Energy Impact Study dated January 2009 done by San Diego State University (the study is presented in SDG&E’s Appendix C). San Diego State University examined 2,800 low income homes in San Diego which had interior CFLs installed and for which SDG&E had 12 months of pre-and post installation energy usage and hourly weather data. The study then used various regression models to test whether electricity and gas effects could be correlated to the CFL installations. The study found that there is strong statistical evidence that CFLs save electricity in residences as one would expect. Furthermore the magnitude of the electrical savings corresponds with the electricity savings estimated by the DEER model (actually the study result is slightly higher). The study goes on to determine residential heating-related interactive effects are insignificant, and therefore that there is no statistical evidence to support a negative therm heating interactive effect due to the installation of CFLs in residences regardless of the regression model used. The Joint IOUs agree with the analysis performed and the conclusion that negative heating interactive effects in residences are overstated in DEER. Therefore, the 2008 DEER update for this situation cannot be supported and, residential interactive effects and commercial heating-related interactive effects should be removed.

## B. Other Policy Requests Essential in Supporting the Commission's Guidance (support for Strategic Plan, Collaboration, Long-Life Measures)

### 1. Activity Costs In Direct Support Of The California Long-Term Energy Efficiency Strategic Plan Should Be Exempt From The Shareholder Risk/Reward Incentive Mechanism

In D.07-10-032, the Commission stated that "all parties will agree that California (and likely other regions as well) will achieve far greater savings if the IOUs and Commission actively engage in coordinated, long-term planning." On June 2, 2008, the Joint IOUs jointly filed a Strategic Plan.[18] On September 18, 2008 the Commission adopted and issued the California Long-Term Energy Efficiency Strategic Plan (Strategic Plan).[19] The Strategic Plan contains various goals for California, both near and long-term. To realize the achievement of the Strategic Plan goals, California will need support from a vast number of market actors. To a large extent, the IOUs' energy efficiency activities will play a significant part in supporting California's energy efficiency goal achievement.

However, many of the Strategic Plan oriented items may not produce identifiable or measurable energy savings, and/or may produce only minimally or even non-cost-effective energy savings in the near-term. The Strategic Plan oriented items include market characterization reports, research, convening of stakeholders to discuss visionary energy efficiency, support of the California Energy Commission or local government activities, pilots, and workforce development, among other things. While the IOUs look

[18] California Energy Efficiency Strategic Plan And Appendices And Joint Application Of Pacific Gas And Electric Company (U 39 M), Southern California Edison Company, San Diego Gas & Electric Company And Southern California Gas Company Submitting The California Energy Efficiency Strategic Plan, June 2, 2008, Docket No. R06 04 010

[19] "California Long-Term Energy Efficiency Strategic Plan", dated September 2008.

forward to helping implement the Strategic Plan for California consumers, the Strategic Plan may not receive adequate financial support in light of existing policy rules.

Given this policy challenge, the Joint IOUs support specialized treatment of these costs for these discrete Strategic Plan activities. The Joint IOUs believe that activities should be exempt from the risk/reward incentive mechanism[20] if:

a) The activity explicitly supports a Strategic Plan Strategy; and

b) The activity will produce minimal or no cost-effective, measurable savings in 2009-2011.

The Commission's concurrence with this exemption will ensure there is a policy framework that would support the long-term, innovative activities necessary to achieve the vision in the Strategic Plan. The current risk/reward mechanism bases performance on the portfolio net benefit that is a comparison of savings achieved to costs incurred, thereby placing a premium on delivery of measurable savings within the energy efficiency program cycle and within a specific budget. Strategic Plan activities should be treated similarly to Emerging Technologies costs, which were exempted from risk/reward mechanism calculations, pursuant to D.07-09-043.

To ensure that costs for the Strategic Plan do not remove the more wide-scale energy efficiency benefit from utility customers, each of the IOUs will include all the savings and costs, including those from exempted programs, in its cost-effectiveness

[20] This reference is to the existing RRIM. IOUs recognize that the Commission has instituted R.09-01-019 to evaluate and modify the existing RRIM. Although the design of any new or modified RRIM is not known at this time, the IOUs underlying premise would also apply to any modification of the RRIM (i.e. any RRIM should facilitate and not hamper IOUs support for the long-term goals in the Strategic Plan.)

calculation for their 2009-2011 portfolios. Each of the IOUs will ensure that their respective portfolios, including exempted programs, also remain cost effective to ensure that utility customers continue to receive a positive benefit from energy efficiency programs. The cost effectiveness showing for this portfolio is discussed in Chapter II, Section 1.

There are a number of areas in which the Strategic Plan calls for studies, market characterization, research, local government initiatives, and development of training materials, among other things, that will not result in cost-effective energy savings in 2009-2011. The IOUs cannot predict whether and how cost-effective energy savings will materialize in the future from these activities. The IOUs propose that costs with a significant commitment to Strategic Plan-related activities not producing measurable and/or cost-effective savings in the 2009-2011 period be removed from the shareholder earnings mechanism (i.e., performance earnings basis) in order to avoid a perverse disincentive for the utilities engaging in such activities. However, the Joint IOUs propose to include the costs within the portfolio cost-effectiveness calculation to ensure that the portfolio as a whole delivers positive benefit to customers.

The IOUs look forward to furthering the Strategic Plan and working with stakeholders to achieve the long-term vision, but want to ensure that the Strategic Plan receives the appropriate, discrete resources and funding on a going-forward basis to ensure the success that the Commission envisions. Table 2-1 and Table 2-2 below showcase the programs and corresponding costs for the Preferred and Mandated scenarios, respectively, that each IOU requests be outside of the shareholder earnings

mechanism (i.e., performance earnings basis). The Joint IOUs recognize that the Commission has instituted R.09-01-019 to evaluate and modify the existing RRIM. Accordingly, the Joint IOUs recommend that that evaluation and modification of the RRIM consider the above issue so that it facilitates, and not hampers, IOU activities that advance the long-term goals of the Strategic Plan.

### 2. IOUs Should Receive Energy Efficiency Savings Credit for Energy Efficiency Actions Taken by Customers Who May Be Motivated in Part by Federal and State Policies or Legislation, Local Codes and Ordinances, or Multiple Sources of "Green" Messaging Supported by IOUs

In D.07-10-032, the Commission made visionary statements about the future direction of energy efficiency. The Commission acknowledged that programs need to be leveraged and integrated to ensure maximum energy savings for the State. D.07-10-032 states: "In the past, we have emphasized utility programs, utility funding and utility customers." This is logical given the limits of our legal jurisdiction, but this approach has resulted in fractured energy efficiency program development and delivery. Cost-effective use of resources for maximum reductions in energy demand will require the commitment of the most influential decision-makers who can affect comprehensive change. In order to reach a goal of making energy efficiency an integral part of "business as usual," we need a pronounced commitment from business and government leaders and a more collaborative approach that involves all key stakeholders. We emphasize the need for enhanced cooperation and collaboration and commit to a leadership role in reaching out

to key leaders to engage participation in this effort and direct the IOUs to do likewise.[21]

Unfortunately, the traditional regulatory framework, in which savings can only be applied to the Commission's goals if they are both attributable to the IOU's energy efficiency program and specifically identified by the customer as the reason for engaging in the activity, does not motivate increased cooperation and collaboration. In fact, the current framework does the opposite as the utilities "compete" with other entities to have energy savings attributable to their programs. To maximize energy savings in support of the State's aggressive GHG goals, the Commission should explicitly recognize energy efficiency savings credit for energy efficiency actions taken by customers who are supported by IOU programs and who may be motivated by federal and state policies or legislation (including that from the recent federal Economic Stimulus package), federal funding or loans, local codes and ordinances, or multiple sources of "green" messaging. These energy efficiency savings credits should be recognized as part of the Commission's goal achievement. For example, local code enhancements (including reach codes) and compliance improvement programs, as described in the Codes and Standards Program Implementation Plan, done in partnership between an IOU and a local government should be recognized as part of energy efficiency accomplishments towards the Commission's goals.

Incorporation of energy savings from customers who may be motivated in part by federal and state policies or legislation, local codes and ordinances, etc. is consistent with

[21] At the same time, we have supported the important role of third parties – *e.g.*, by requiring at least 20% of portfolio funding be competitively bid to third parties, by directing the utilities to assist in the development of the state's energy efficiency codes and standards, by use of advisory groups, etc. (D.05-01-055). Our directives today build upon this past policy emphasis.

the Commission's goals for 2009-2011, as adopted in D.04-09-060. The potential study upon which the goals are based did not envision other state initiatives and exclude those customers' potential savings. Thus, the potential savings from those customers are included in the Commission's goals. Removing the IOUs' ability to count savings from these customers hampers the IOUs' ability to design and implement a portfolio that meets Commission's adopted 2009-2011 goals, and does not promote the Commission's important vision of increased collaboration in the State. The Joint IOUs request the same treatment the Commission provided for the Governor's Green Building Initiative in D.05-09-043 in which the Commission found that utility support for this state initiative would not be reduced by free ridership reductions.[22] An extension of such treatment for other state initiatives, including GHG reduction, allows for increased and essential collaboration in making energy efficiency a way of life in California.

### 3. To encourage long-term measure installations, the maximum effective useful life (EUL) should be extended to 30 years.

Maximum Effective Useful Lives (EUL) should be extended to 30 years to better reflect the true lifetime of certain measures. Currently the EULs of all energy efficiency measures are subject to an arbitrary 20-year ceiling, regardless of the true lifetime of measures. This practice biases the portfolio toward shorter-term measures whose savings are accumulated within that 20-year term span of time. However, the Commission and the IOUs are looking to expand energy efficiency portfolios to implement more long-term efforts such as comprehensive residential retrofits and new construction. Eliminating years of savings for these measures reduces their ostensible cost-effectiveness and thus

[22] D.05-09-043, page 137.

limits the IOUs' ability to pursue them. Moreover, the 20-year limit contradicts the effort to put energy efficiency on a level playing field with traditional supply-side options, which have longer lives. The Joint IOUs thus believe that the arbitrary ceiling of 20 years for measures should be extended to accurately reflect savings achievements and promote longer-term measures.

### C. Policies that Need to Be Adopted in the CPUC's Subsequent Proceeding to Ensure the Success of Energy Efficiency

#### 1. Gross Metrics Should Be Used For The Calculation Of Performance Toward The Performance Earnings Basis (PEB) Under The RRIM.

The Joint IOUs support the consistent use of gross metrics to calculate the achievement of goals, the Minimum Performance Standard (MPS), and the Performance Earnings Basis (PEB). In addition, Joint IOUs support the development of goals which are based upon the best available information on the potential for energy efficiency and which align with the Commission's key policies – including the use of energy efficiency as a reliable energy resource, as an important factor in reducing greenhouse gases from electricity generation, and in support of the Commission's long-term, "big, bold" strategies for energy efficiency.

The use of gross goals for 2009-11, as ordered by the Commission in its July 31, 2008 Decision,[23] appropriately promotes three key Commission objectives: (1) maximizing energy efficiency in California, (2) underscoring Commission-set targets for the IOUs to aim for in the development of portfolios in this proceeding and in the

[23] Decision Adopting Interim Energy Efficiency Savings Goals For 2012 Through 2020, And Defining Energy Efficiency Savings Goals for 2009 Through 2011, OP#4, p. 39.

implementation of these portfolios in 2009-2011, and (3) enhancing collaboration among all stakeholders, including the IOUs, to meet these and other important goals. The utilization of goals at the gross level better reflects the "big, bold" policies being promoted by the Commission. The use of gross goals properly aligns the estimates of energy efficiency program results with the real impacts of reduced load from these programs on the utility systems. This alignment of focus should include the performance basis used to calculate performance incentives for the administrators. It is unnecessary and inappropriate to de-link the use of gross goals from the performance basis, which is utilized to calculate shareholder earnings for meeting these goals. The Commission should continue to align the objectives of the programs – delivery of energy savings to customers – with the performance incentive mechanism. In fact, neither procurement planners nor greenhouse gas reduction calculations need consider net-to-gross ratios. This concept should be extended to the performance metrics for energy efficiency.

Utilizing both gross goals and a gross performance earnings basis calculation for the 2009-2011 period can open up the opportunity for more program options that support the long-term goals for energy efficiency than the use of net goals. The use of gross goals should allow for parties to focus less on the attribution of savings and more on cost-effectively maximizing the energy savings potential of energy efficiency programs in California. This focus on customer savings will encourage collaboration among all stakeholders to develop and deliver the most effective and efficient energy savings to California customers.

The continued use of a net performance basis does not embody the "big, bold"

concepts being promoted in this proceeding. Currently, successful energy efficiency programs that increase customer awareness are penalized with after-the-fact changes to attribution. This penalizes the utilities for success in increasing customer awareness of energy efficiency and energy efficient measures, which should not be the object of goal-setting and performance basis calculations. In order to focus on the overarching policies for energy efficiency, including "big, bold" ideas, it is appropriate to remove this inherent penalty included in the use of net-to-gross ratios. The utilities support the adoption of a gross performance basis calculation for 2009-2011 which supports the development and delivery of expanded program options and support the long-term policy goals for energy efficiency in California. To do otherwise could adversely affect the Commission's effort to promote and implement maximum levels of energy efficiency in the state.

Ultimately, it is gross savings impacts delivered to customers that affect future resource needs and GHG emissions levels. The use of gross savings and benefits as a metric will align the utility program results with the system impacts and reduced GHG emissions. Consequently, the use of gross savings and benefits is also appropriate to align with resource planning and GHG reduction perspectives. The Joint IOUs acknowledge that the adoption of gross goals may warrant changes to the RRIM, including the shared-savings rates, and look forward to addressing this issue in the new incentive mechanism Rulemaking R.09-01-019.

**2. Mid-Cycle Funding Augmentation Rules Should be Revised**

The Joint IOUs propose to modify the 2006-2008 mid-cycle funding policy rule for 2009-2011 to allow each of the IOUs to count all installed energy efficiency results

towards the Commission's aggressive energy savings and demand reduction goals. In D.07-10-032, the Commission set a policy rule (Rule 12, Section IV) that did not allow IOUs to claim energy savings and demand reductions results towards the achievement of the Commission energy efficiency goals on the premise that mid-cycle funding augmentation provides a "bonus" to utilities without any undue risk bestowed upon them.[24] D.07-10-032 also indicates that "in effect, mid-cycle funding augmentations provide the utilities with additional funding to accomplish a goal that was set with a lower budget."[25] As a result of this rule, the IOUs are now discouraged from pursuing all cost-effective energy efficiency even though there may be energy efficiency funds available from prior years. The utilities propose the elimination of the 2006-2008 mid-cycle funding augmentation rule for 2009-2011 as it: (1) creates a disincentive to propose new programs with augmented funding; (2) punishes, unnecessarily, IOUs when market conditions change that may require additional funds to incent customers in order to achieve the Commission energy efficiency goals (as is currently the case due to the recession and credit crunch); and (3) works against the California's Energy Action Plan[26] and Commission policy to pursue all cost-effective energy efficiency.

An IOU's inability to record results from mid-cycle funding may stifle program innovation and ignore the creation of promising programs. This is contrary to the Commission's desire to promote innovation and test new program designs. Another key fault of the 2006-2008 mid-cycle funding augmentation rule is it assumes that during the

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[24] D.07-10-032, dated October 18, 2007, OP# 7, p. 143.
[25] Section 6.7.3. Mid-Cycle Program Funding Augmentations, p. 100.
[26] California Energy Action Plan, adopted by D.08-09-080.

program implementation cycle the marketplace remains static and acts just as assumed during the planning process. The marketplace is dynamic with many actors and unforeseen influences which can foreclose expected opportunities as well as create new opportunities.

Table 2-1: Preferred Scenario—Proposed SDG&E Program Costs to Exclude from the 2009-2011 Earnings Mechanism

| Strategic Planning Activities | 2009 | 2010 | 2011 | 2009-2011 |
|---|---|---|---|---|
| SW-ME&O | $ 2,973,233 | $ 2,973,233 | $ 2,973,233 | **$ 8,919,698** |
| SW-ETA - Assessments | $ 2,136,640 | $ 2,136,640 | $ 2,136,640 | **$ 6,409,919** |
| SW-Codes & Standards | $ 1,500,004 | $ 1,500,004 | $ 1,500,004 | **$ 4,500,013** |
| SW-NCResA - RNC | $ 3,768,082 | $ 3,768,627 | $ 3,818,435 | **$ 11,355,143** |
| SW-WE&T | $ 5,123,834 | $ 5,051,208 | $ 4,939,063 | **$ 15,114,105** |
| SW-HVAC | $ 966,484 | $ 966,484 | $ 966,484 | **$ 2,899,453** |
| SW-IDSM - SW Integrated DSM | $ 200,041 | $ 200,041 | $ 200,041 | **$ 600,122** |
| Local02 - Local Island Program | $ 1,545,687 | $ 1,934,187 | $ 1,629,687 | **$ 5,109,562** |
| Local04 - Local Sustainable Communities | $ 293,580 | $ 293,580 | $ 393,318 | **$ 980,478** |
| Local06 - Local Strategic Development & Integration | $ 698,796 | $ 698,796 | $ 698,796 | **$ 2,096,387** |
| Local Govt Partnerships | $ 7,764,869 | $ 7,823,037 | $ 7,823,040 | **$ 23,410,946** |
| **Total** | **$ 26,971,249** | **$ 27,345,837** | **$ 27,078,740** | **$ 81,395,826** |

Table 2-2: Mandated Scenario—Proposed SDG&E Program Costs to Exclude from the 2009-2011 Earnings Mechanism

| Strategic Planning Activities | 2009 | 2010 | 2011 | 2009-2011 |
|---|---|---|---|---|
| SW-ME&O | $ 2,973,233 | $ 2,973,233 | $ 2,973,233 | **$ 8,919,698** |
| SW-ETA - Assessments | $ 2,136,640 | $ 2,136,640 | $ 2,136,640 | **$ 6,409,919** |
| SW-Codes & Standards | $ 1,500,004 | $ 1,500,004 | $ 1,500,004 | **$ 4,500,013** |
| SW-NCResA - RNC | $ 3,768,082 | $ 3,768,627 | $ 3,818,435 | **$ 11,355,143** |
| SW-WE&T | $ 5,123,834 | $ 5,051,208 | $ 4,939,063 | **$ 15,114,105** |
| SW-HVAC | $ 966,484 | $ 966,484 | $ 966,484 | **$ 2,899,453** |
| SW-IDSM - SW Integrated DSM | $ 200,041 | $ 200,041 | $ 200,041 | **$ 600,122** |
| Local02 - Local Island Program | $ 1,545,687 | $ 1,934,187 | $ 1,629,687 | **$ 5,109,562** |
| Local04 - Local Sustainable Communities | $ 293,580 | $ 293,580 | $ 393,318 | **$ 980,478** |
| Local06 - Local Strategic Development & Integration | $ 698,796 | $ 698,796 | $ 698,796 | **$ 2,096,387** |
| Local Govt Partnerships | $ 7,764,869 | $ 7,823,037 | $ 7,823,040 | **$ 23,410,946** |
| **Total** | **$ 26,971,249** | **$ 27,345,837** | **$ 27,078,740** | **$ 81,395,826** |

## SECTION 3
## SDG&E PROPOSES REVISED 2009—2011 PROGRAM GOALS THAT ALIGNS ITS GOALS WITH THE 2004-2013 CUMULATIVE MAXIMUM ACHIEVABLE ENERGY SAVINGS

D.07-10-032 (at page 116) once again acknowledges that SDG&E's electric goals adopted in D.04-09-060 are substantially higher, on a relative basis, than those adopted for SCE and PG&E. SDG&E's goals are equal to 118 percent of the cumulative maximum energy savings achievable over the ten year period (2004-2013) as compared to all other utilities whose goals are closer to 88 percent. The Commission committed to revisiting SDG&E's energy savings stating that the assigned Commissioner may determine the forum and schedule for this inquiry.

SDG&E submitted its proposal for its revised goals in response to the Commission's direction to provide comments on the Energy Division's proposed goal changes for 2009-2011 as stated in the June 2, 2008 *Assigned Commissioner and Administrative Law Judge's Ruling Seeking Comment on Definition of Energy Savings Goals for 2009-2011*. SDG&E believed that it was the appropriate forum to consider SDG&E's proposed modifications to its goals. In response to SDG&E's proposal, the July 1, 2008 *Proposed Decision Adopting Interim Energy Efficiency Savings Goals for 2012 Through 2020 and Defining Energy Efficiency Savings Goals for 2009 Through 2011* (at page 30) states that the Commission "will consider this issue in SDG&E's budget process, which is the 2009-2011 portfolio application." The following table presents SDG&E's proposed goals.

Table 3-1: SDG&E 2009-20011 Proposed Goals

| | Current Goals (GWH) | Proposed Goals (GWH) | Current Goals (MW) | Proposed Goals (MW) |
|---|---|---|---|---|
| 2009 | 282.3 | **210.5** | 53.6 | **40** |
| 2010 | 273.5 | **204** | 52 | **38.8** |
| 2011 | 262.5 | **195.8** | 49.9 | **37.2** |
| *2012 | 221.7 | **165.4** | 42.1 | **31.4** |
| *2013 | 214.9 | **160.3** | 40.8 | **30.4** |
| Total | 1254.9 | **936.0** | 238.4 | **177.8** |

SDG&E is proposing to adjust **only** the 2009-2013 annual goal stream by adjusting the current goals using the ratio of the other utilities' average 88% to SDG&E's 118% maximum achievable potential. SDG&E is not requesting the adoption of goals for 2012-2013, rather it is presented here to complete the 10-year cumulative stream consistent with the current adopted goals stream. This adjustment to the annual goals would result in SDG&E having a cumulative 10 year goal of 104% of its cumulative maximum potential used in D.04-09-060. This is due to the fact that SDG&E's 2006-2008 goals already exceeded 88% of maximum achievable so when combined with 88% for years 2009-2013 results in an overall average of 104%. Therefore, SDG&E's proposal is still consistent with the Commission's objective to promote an aggressive energy efficiency strategy[27] as the cumulative stream still exceeds 100% of maximum achievable. Without these proposed adjustments to its goals, SDG&E will continue to face unreasonable and unfair risk of not meeting its goals.

SDG&E's 2009-2011 portfolio presented here for the Commission's consideration is based on these proposed goals. In the succeeding chapters, SDG&E will

[27] D.07-10-32 at page 117.

be presenting a portfolio of programs and budget proposal designed to meet these proposed goals.

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## SECTION 4.
## SDG&E'S PORTFOLIO REFLECTS STATE ENERGY POLICIES AND STRATEGIC PLAN

### I. Portfolio Supports the State's Energy Action Plan and Other Energy Policies

#### A. Energy Efficiency is the Resource of First Choice

The 2008 update of the EAP listed Special Action Areas and specific next steps for energy efficiency. SDG&E fully embraces those recommendations and has incorporated a wide range of actions in its EE portfolio to help achieve the objectives of the EAP. A summary of SDG&E's proposed activities in each of the Special Action Areas are as follows:

- Need for coordination and integration:

SDG&E has undertaken numerous actions to improve the integration of its EE and DR programs and enhance our coordination with other supporting organizations such as water agencies and local governments. Specifically, our EE and DR programs are marketed as a portfolio of energy solutions to our customers and we also offer incentives to contractors/vendors to develop combined EE and DR projects with their customers. In addition, for residential customers we promote AC tune-ups jointly with our Summer Saver AC cycling program. Finally, SDG&E was recently awarded administration of the New Solar Homes Partnership in our service territory and we have integrated that program with our new construction EE and DR programs to create a comprehensive, whole house program. Our most ambitious effort at integration is the Micro-Grid Pilot where we will focus on cross-cutting and comprehensive energy options for the Low-Income, Residential and Non-residential sectors to maximize the saturation of EE, DR and renewables within a community to test operating issues related to a "net-zero" utility

of the future. Included in this pilot is a joint marketing effort with the CCSE to 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 service, utility ownership, is proposed to be expanded in our 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 on 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 action plans with the goal of eventually becoming full partner cities with SDG&E. In each of these partnerships we will leverage our relationship with the city's code enforcement agency to improve outreach, tools training and enforcement of building codes.

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

- Statewide strategic plan roadmap:

SDG&E, PG&E, SCE and SoCalGas were responsible for preparing the draft California Energy Efficiency Strategic Plan and have included discussions on Advancing Strategic Plan Goals and Objectives in each of our program implementation plans.

- Strategies to achieve "big bold" initiative goals:

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

- New strategies to address existing buildings

For residential customers, SDG&E has proposed a pilot "whole house" program to encourage home owners to implement a comprehensive upgrade. This program will be marketed with the assistance of realtors and contractors to capture the new home buyer and home renovator and convince them to consider EE, DR and renewables in their project. For commercial customers, SDG&E has existing programs that provide elevated incentives to customers and contractors who implement comprehensive EE and DR projects. In addition, our Green Energy Systems program mentioned above is also intended to encourage comprehensive upgrades of existing buildings. Finally, our Micro-Grid pilot will focus on upgrading existing residential and commercial buildings in EE, DR and renewables to test operating issues related to a "net-zero" utility of the future.

- Partnerships with local governments

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

- Additional low-income energy efficiency ("LIEE") initiatives

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

### B. Portfolio Supports Assembly Bill 32 Goals

The regulatory requirements under AB32 are still being debated but it is certain that it will have a profound impact on California, its citizens and businesses and on governments around the world. As the requirements are finalized, SDG&E is prepared to adjust its portfolio as necessary to support its implementation. In the interim, SDG&E has proposed a partnership with the Climate Registry to jointly implement a program called Cool Planet to educate Chief Executive Officers and Chief Financial Officer of larger customers on the value of early action to reduce GHG emissions, provide incentives to calculate their GHG inventory and reinforce the value of energy efficiency as the lowest cost GHG reduction measure. The objective is to convince senior executives to "push" the GHG message down through their organization and raise the priority for capital allocation to EE projects.

Another activity that directly supports AB32 objectives is the statewide outreach activity that SDG&E jointly funds with PG&E, SCE and SoCalGas which carries the message on climate change to all Californians. Finally, SDG&E's overall EE portfolio is designed to meet the CPUC's aggressive EE goals and, at goal, is calculated to save over 3 million tons of $CO_2$ emissions over the life of the portfolio.

A policy directive that SDG&E suggests would be very valuable in avoiding conflicting objectives between the EE goals and AB32 is as follows:

"IOUs should receive energy efficiency savings credit for energy efficiency actions taken by customers who participate in our EE programs but may also be motivated to take action by state policies or legislation, local codes and ordinances, or multiple sources of "green" messaging."

The following tables show the estimated environmental benefits (tons of CO2 and other pollutants avoided) that would result from achieving SDG&E's proposed portfolio savings as calculated using the E3 calculator.

Table 4-1: Preferred Scenario—Environmental Benefits Resulting from SDG&E 2009-2011 Proposed Programs

| | Electric Reductions | | | Gas Reductions | |
|---|---|---|---|---|---|
| **Annual Reductions** | CO2 (tons) | NOX (lbs) | PM-10 (lbs) | CO2 (tons) | NOX (lbs) |
| 2009 | 132,718 | 35,516 | 17,094 | 28,001 | 58,685 |
| 2010 | 124,551 | 33,336 | 16,042 | 30,016 | 63,391 |
| 2011 | 106,718 | 28,589 | 13,741 | 30,947 | 67,303 |
| *Total Annual* | 363,986 | 97,441 | 46,877 | 88,964 | 189,379 |
| | | | | | |
| **Lifecycle Reductions** | | | | | |
| 2009 | 1,337,913 | 359,758 | 172,107 | 370,786 | 789,079 |
| 2010 | 1,267,022 | 340,759 | 162,980 | 396,742 | 850,376 |
| 2011 | 1,124,680 | 302,796 | 144,630 | 416,101 | 917,511 |
| *Total Lifecycle* | 3,729,616 | 1,003,313 | 479,717 | 1,183,629 | 2,556,966 |

* Annual Reductions are the units implemented in the year, multiplied by the annual emmissin reduction for the measures.

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Table 4-2: Mandated Scenario—Environmental Benefits Resulting from SDG&E 2009-2011 Proposed Programs

| | Electric Reductions | | | Gas Reductions | |
|---|---|---|---|---|---|
| **Annual Reductions** | CO2 (tons) | NOX (lbs) | PM-10 (lbs) | CO2 (tons) | NOX (lbs) |
| 2009 | 107,074 | 28,769 | 13,777 | 17,332 | 40,286 |
| 2010 | 107,074 | 28,769 | 13,777 | 17,370 | 40,453 |
| 2011 | 107,075 | 28,769 | 13,777 | 16,271 | 37,146 |
| *Total Annual* | 321,223 | 86,306 | 41,330 | 50,973 | 117,885 |
| | | | | | |
| **Lifecycle Reductions** | | | | | |
| 2009 | 1,141,050 | 308,340 | 146,592 | 307,062 | 674,412 |
| 2010 | 1,141,050 | 308,340 | 146,592 | 307,301 | 675,858 |
| 2011 | 1,141,064 | 308,344 | 146,594 | 295,717 | 641,849 |
| *Total Lifecycle* | 3,423,165 | 925,025 | 439,777 | 910,080 | 1,992,119 |

* Annual Reductions are the units implemented in the year, multiplied by the annual emmissin reduction for the measures.

### C. Portfolio Supports Governor's Green Building Initiative

The Governor's Green Building Initiative set a goal of achieving 20% reduction in energy use in state buildings by 2015. SDG&E has been actively working with state agencies to achieve this goal but the progress has been slow due to financing and project planning hurdles. To address these hurdles in its proposed portfolio, SDG&E has greatly expanding its funding of the statewide partnership with the UC/CSU system to take advantage of the numerous projects that have been in the planning stage in the '06-'08 program cycle. SDG&E has also expanded its On-Bill Financing program to offer up to $250,000 financing over 10 years to institutional customers to help address the financing hurdle and it has proposed the Green Energy Systems utility ownership option for major HVAC systems that are typical for many state buildings.

The tables below show the expected savings by building type from SDG&E's 2009-2011 proposed programs addressing the Governor's Green Building Initiative.

## Table 4-3: Preferred Scenario—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) | $ 69,702,250 | 266,503,016 | 71,408 | 7,786,277 | 1,808,074 | 2,050,721 | 245,615 |
| California State Government Buildings | $ 23,001,742 | 87,945,995 | 23,565 | 2,569,471 | 596,665 | 676,738 | 81,053 |
| Federal & Local Government Buildings | $ 23,001,742 | 87,945,995 | 23,565 | 2,569,471 | 596,665 | 676,738 | 81,053 |
| Commercial Buildings | $ 23,698,765 | 90,611,025 | 24,279 | 2,647,334 | 614,745 | 697,245 | 83,509 |
| | | | | | | | |
| Government Partnerships | $ - | - | - | - | - | - | - |
| California State Government Buildings | | | | | | | |
| Federal & Local Government Buildings | | | | | | | |
| Commercial Buildings | | | | | | | |
| | | | | | | | |
| Third Parties | $ 17,425,562 | 66,625,754 | 17,852 | 1,946,569 | 452,019 | 512,680 | 61,404 |
| California State Government Buildings | $ 5,750,436 | 21,986,499 | 5,891 | 642,368 | 149,166 | 169,184 | 20,263 |
| Federal & Local Government Buildings | $ 5,750,436 | 21,986,499 | 5,891 | 642,368 | 149,166 | 169,184 | 20,263 |
| Commercial Buildings | $ 5,924,691 | 22,652,756 | 6,070 | 661,834 | 153,686 | 174,311 | 20,877 |
| | | | | | | | |
| | | | | | | | |
| **Grand Total** | **$ 87,127,812** | **333,128,770** | **89,260** | **9,732,846** | **2,260,093** | **2,563,401** | **307,019** |
| **California State Government Buildings Total** | **$ 28,752,178** | **109,932,494** | **29,456** | **3,211,839** | **745,831** | **845,922** | **101,316** |
| **Federal & Local Government Buildings Total** | **$ 28,752,178** | **109,932,494** | **29,456** | **3,211,839** | **745,831** | **845,922** | **101,316** |
| **Commercial Buildings Total** | **$ 29,623,456** | **113,263,782** | **30,348** | **3,309,168** | **768,432** | **871,556** | **104,386** |

(1) Budget contains incentives to participants only.
(2) Program Impacts are first year for the 2009-2011 cycle and Emmissions Reductions are lifecycle

## Table 4-4: Mandated Scenario—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) | $ 174,621,494 | 338,957,852 | 111,392 | 9,232,125 | 3,451,194 | 2,980,571 | 509,693 |
| California State Government Buildings | $ 57,625,093 | 111,856,091 | 36,759 | 3,046,601 | 1,138,894 | 983,588 | 168,199 |
| Federal & Local Government Buildings | $ 57,625,093 | 111,856,091 | 36,759 | 3,046,601 | 1,138,894 | 983,588 | 168,199 |
| Commercial Buildings | $ 59,371,308 | 115,245,670 | 37,873 | 3,138,922 | 1,173,406 | 1,013,394 | 173,295 |
| | | | | | | | |
| Government Partnerships | $ - | - | - | - | - | - | - |
| California State Government Buildings | | | | | | | |
| Federal & Local Government Buildings | | | | | | | |
| Commercial Buildings | | | | | | | |
| | | | | | | | |
| Third Parties | $ 43,655,374 | 84,739,463 | 27,848 | 2,308,031 | 862,799 | 745,143 | 127,423 |
| California State Government Buildings | $ 14,406,273 | 27,964,023 | 9,190 | 761,650 | 284,724 | 245,897 | 42,050 |
| Federal & Local Government Buildings | $ 14,406,273 | 27,964,023 | 9,190 | 761,650 | 284,724 | 245,897 | 42,050 |
| Commercial Buildings | $ 14,842,827 | 28,811,417 | 9,468 | 784,731 | 293,352 | 253,349 | 43,324 |
| | | | | | | | |
| | | | | | | | |
| **Grand Total** | **$ 218,276,868** | **423,697,315** | **139,240** | **11,540,156** | **4,313,993** | **3,725,714** | **637,116** |
| **California State Government Buildings Total** | **$ 72,031,366** | **139,820,114** | **45,949** | **3,808,251** | **1,423,618** | **1,229,486** | **210,248** |
| **Federal & Local Government Buildings Total** | **$ 72,031,366** | **139,820,114** | **45,949** | **3,808,251** | **1,423,618** | **1,229,486** | **210,248** |
| **Commercial Buildings Total** | **$ 74,214,135** | **144,057,087** | **47,342** | **3,923,653** | **1,466,758** | **1,266,743** | **216,619** |

(1) Budget contains incentives to participants only.
(2) Program Impacts are first year for the 2009-2011 cycle and Emmissions 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 whole building approach to new construction and retrofits in the residential and commercial markets. Programs designed to address these issues include our Whole House residential retrofit program, our Net Zero Home new construction pilot and our Savings by Design and Green Energy Systems programs for the commercial segment. Our most extreme example is our Sustainable Communities case study at Rancho Mission Viejo which involves a large master planned community that will be planned from the earliest development stages to be "green".

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

#### 1. Residential New Construction

SDG&E's portfolio supports the BBEES in a number of ways starting with the Residential New Construction program that will be focusing on pushing builders to achieve 35% better than Title 24 and will be marketed with our New Solar Homes Partnership program. The next tier in program aggressiveness is our Sustainable Communities Case Study which is designed to impact a large master planned community

and push the development toward Net Zero construction over its 15 year build-out life. The last program tier is our planned pilots for Net Zero Home designs within this program cycle which will test the availability, cost and acceptability of net zero building options.

### 2. Commercial New Construction

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

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

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

The state-wide HVAC Program developed cooperatively by the IOUs and the

Energy Division is a comprehensive program designed to transform the HVAC market through measures focused on quality installation, customer education, upstream incentives, maintenance and early diagnostics.

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

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

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

#### 1. Existing Residential

SDG&E's residential programs fully support the Strategic Plan Vision and its four key strategies by our participation in "Project Apollo" zero net energy effort in new construction, the incorporation of a whole-house approach in our Residential Energy Efficiency Program, our participation in the proposed statewide comprehensive "plug load" incentive program and our enhanced Codes and Standards program to promote high efficiency local building codes through our Local Government Partnerships.

#### 2. Existing Commercial

SDG&E's commercial programs fully support the Strategic Plan Vision and its four key strategies with our enhanced Codes and Standards program focused on code

compliance and promotion of high efficiency local building codes through our Local Government Partnerships. We integrated our billing system with Energy Star Portfolio Manager on January 1, 2009, to facilitate benchmarking and will be actively promoting building benchmarking. We have increased the funding cap and repayment period for our On-Bill Financing Program to make it more attractive to a larger population of customers. In addition our proposed Green Energy Systems pilot provides an alternative "financing" option for large commercial customers to dramatically improve HVAC system efficiencies in large buildings and campuses. Finally, we propose zero net energy pilots to demonstrate today's technologies to prospective commercial builders.

### 3. Industrial

SDG&E does not have a large industrial customer segment but our programs appropriately support the Strategic Plan Vision and its four key strategies for this segment through implementation of the Statewide Industrial EE program. We plan to fully participate in the development of California's energy efficiency brand through our Statewide Marketing and Outreach program. Our Mobile Workshops are intended to take training and analysis tools directly to customer facilities to address process improvement opportunities. Our integrated audits provide EE and DR recommendations in a coordinated package to increase their value to customers and our On-Bill Financing program can assist in the funding of the recommended projects. Lastly, our Cool Planet program with the Climate Registry will help industrial customers understand and address their GHG emissions.

### 4. Agricultural

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

### 5. Emerging Technologies

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

### 6. Codes and Standards

SDG&E's Codes and Standards program is broadening its role significantly to support the Strategic Plan's vision for this sector. As outlined in the statewide Program Implementation Plan, the Codes and Standards group will focus on advocacy to improve

state building and appliance regulations, case studies, compliance enhancement and the advocacy for "reach codes" by local jurisdictions.

### 7. Local Government

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

### 8. Integrated Demand-Side Management

SDG&E's current and proposed integration activities across various program portfolios are outlined in different Commission proceedings, Energy Efficiency ("EE"), Low Income Energy Efficiency ("LIEE"), Demand Response ("DR"), Advanced Metering Infrastructure ("AMI") Distributed Generation ("DG"), and California Solar Initiatives ("CSI"). SDG&E received approval of its 2009-2011 LIEE application (A.08-05-024). The 2009-2011 DR application (A.08-06-002) was submitted on June 2, 2008. The Commission issued D.07-04-043 on its AMI ("Smart Meter") proceeding. SDG&E notes that it is not the current program administrator of the DG and CSI program portfolios and they are currently assigned to the CCSE. Although, these various proceedings are currently independent of each other, the CEESP provides vision and strategy to leverage these various program efforts to ensure the realization of the aggressive BBEES laid out by the Commission in D.07-10-032. SDG&E has

incorporated in this application a detailed discussion (see Witness Besa's Testimony, Chapter II, Section 1) of its plan to integrate these various Demand-Side Management ("DSM") activities in this program cycle. Building on these activities, the Statewide Integrated DSM Program (Appendix B) provides clear direction and a process for the IOUs to coordinate stakeholder activity (CEESP Strategy 1.3) and promote new technologies (CEESP Strategy 1.4) through a Statewide Integration Task Force.

### 9. Marketing, Education, and Outreach

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

### 10. Training and Workforce Development

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

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

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

In support of the CEESP's vision that "by 2020 California's workforce is trained and engaged to provide the human capital necessary to achieve California's economic energy efficiency and demand-side management potential," IOUs plan to implement a variety of workforce development strategies that encourage and nurture the development of "green collar" jobs through their strategic planning initiatives, and education and training programs. These strategies are contained in its WE&T program implementation plan (see Appendix B).

SDG&E's Education and Training program will also contribute to developing a "green" workforce as it provides various opportunities through its various energy efficiency training programs and seminars.

### 11. Low-Income Energy Efficiency Program

SDG&E's Energy Efficiency programs support the Strategic Plan's vision of integration with LIEE programs in several ways. First, our Residential New Construction program proposes a pilot to work with developers of affordable housing to develop best

practice design techniques for this segment, provide design assistance incentives and financial incentives and encourage participation in a sustainable building program. Our Multifamily program will be integrated with LIEE to cover common areas in low income developments that are not covered by the LIEE program. For low income customers with existing AC units, the LIEE program will provide information about our Third Party AC tune-up and Summer Saver AC cycling programs that are no cost services. We will also work with LIHEAP agencies to provide information about appliance rebates and plug load rebates when they become available

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

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

### A. Strategic Development and Integration

SDG&E is committed to the vision and goals outlined in the CEESP which includes customer segmentation and targeted program development, the integration of EE and DSM and emerging high efficiency technologies coupled with innovative and comprehensive program design and theory, to create market transformation in California. A focused team of qualified resources has been identified to support these activities and drive the direction of the programs through innovation and the inclusion of best practices. This team will be dedicated to this activity, collaborating with regulatory, program, technology and other staff, as a coordinating entity.

The team will be specifically responsible for overseeing activities associated with achieving strategic plan goals and ensuring that the strategic plan itself is updated,

maintaining relevance and providing guidance and direction on a continuous basis. In addition, the team will be engaged in ongoing work to review and update implementation of the CEESP and 2009-2011 programs based upon it.

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

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

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

### C. Encumbering Funds for Long-Term Projects

In previous program years (prior to 2006), the Commission allowed the utilities to commit incentive monies associated with customer projects with installation periods longer than the program cycle. Utilities tracked commitments and reported the expenditure when it finally occurred and at that time recorded the savings. This was a practice as far back as 1994. SDG&E believes that this is a reasonable process for encumbering funds for long-term projects. It assures customers of the availability of program funds to finance their project. However, a reasonable contract term should be

determined based on the target market (e.g., new construction projects should have at least a 4 to 5 year commitment). Projects that fail to install within the 4 to 5 year period will not be guaranteed incentives beyond that time.

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## SECTION 5
## WITNESS QUALIFICATIONS

My name is Mark F. Gaines. My business address is 555 West Fifth Street, Los Angeles, CA 90013. I am employed by Southern California Gas Company as Director of Customer Programs. My responsibilities include Energy Efficiency and Demand Response program development and implementation for SDG&E and SoCalGas. I have been employed by SoCalGas since 1983.

I have a Bachelor of Science in Civil and Environmental Engineering, a Masters in Business Administration and am a registered professional engineer in Mechanical Engineering in California. I have previously testified before this Commission.

The purpose of my testimony is to sponsor Chapter I of this Application.