Application of Southern California Gas Company (U-904-G) for Approval of Natural Gas Energy Efficiency Programs and Budgets for Years 2009 through 2011

Exhibit No.: ______ Witness: Mark Gaines Application 08-07-022

AMENDED

PREPARED DIRECT TESTIMONY

OF

SOUTHERN CALIFORNIA GAS COMPANY

CHAPTER I

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

MARCH 2, 2009

1		TABLE OF CONTENTS
2	SECTION	1 EXECUTIVE SUMMARY
3	I.	Purpose
4	II.	SoCalGas' Commitment to Energy Efficiency Goals4
5	III.	Policy Changes Needed to Maintain California's Leadership In Energy
6		Efficiency
7	A.	Joint Utility Policy Recommendations
8	B.	
9	IV.	Design of Program Portfolio
10	II.	Features of the Portfolio
11	II.	Summary Tables and Graphs of Portfolio17
12	A.	Summary of Portfolio Energy Savings
13	B.	Summary of Portfolio End Use Savings
14	C.	Summary of Sector Savings
15	D.	Summary of Portfolio Budget
16	III.	Elements of the 2009—2011 Portfolio Designed to Meet Energy Efficiency
17		Strategic Plan
18	IV.	Summary of Initiatives and Activities Designed to Accomplish the Big Bold
19		Energy Efficiency Strategies
20	v.	Estimated Budgets and Energy Savings Supporting the Energy Efficiency
21		Strategic Plan
22	SECTION	2 SUCCESS OF 2009-2011 PROPOSED ENERGY EFFICIENCY
23		RTFOLIO REQUIRES THE ADOPTION OF NEW POLICIES AND
24	RU	LES
25	I.	Introduction
26	A.	Changes Needed for Cost-effective Portfolio that Meets Commission Goals26
27 28	B.	Other Policy Requests Essential in Supporting the Commission's Guidance (support for Strategic Plan, Collaboration, Long-Life Measures)
29 30	C.	Policies that Need to Be Adopted in the CPUC's Subsequent Proceeding to Ensure the Success of Energy Efficiency41
31 32		3 SOCALGAS' PORTFOLIO REFLECTS STATE ENERGY LICIES 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
B.	Portfolio Supports Assembly Bill ("AB") 32 Goals50
C.	Portfolio Supports Governor's Green Building Initiative51
II.	Portfolio Supports the Statewide Energy Efficiency Strategic Plan53
A	Portfolios Reflect Regional and Local Variations Complementing the Strategic Plan
B.	Portfolios Contain Appropriate Strategies and Program Designs for the Three Big Bold Energy Efficiency Strategies
C.	Portfolios Support Strategic Plan Vision for All Sectors
III.	Portfolios Provide Continued Strategic Planning in 2009-2011 and Beyond60
A	Strategic Development and Integration
B.	Application Identifies New 2009-2011 Pilot Project Programs Based on Strategic Plan Goals and Strategies
C.	Encumbering Funds for Long-Term Projects61
SECTION	4 WITNESS QUALIFICATIONS

SECTION 1 EXECUTIVE SUMMARY

I. Purpose

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The purpose of this testimony is to present Southern California Gas Company's
("SoCalGas") 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.

8 In addition, this testimony will address critical policy issues that need to be 9 resolved to ensure energy efficiency programs are optimally designed and implemented 10 allowing California to maximize its energy efficiency efforts and maintain its world 11 leadership in this increasingly important area. The testimony will show that the 12 Mandated scenario, which follows the strict policy guidance of the California Public 13 Utilities Commission ("Commission" or "CPUC") in preparing our energy efficiency 14 portfolio, results in a portfolio that cannot meet goal, is only marginally cost effective and 15 requires a budget increase of over \$250 million as compared to the alternative Preferred 16 scenario, also presented in this testimony. This translates to an average residential rate 17 increase of 2.5ϕ /therm. The testimony will also show that implementing the joint policy 18 recommendations of the Joint Investor-Owned Utilities ("IOUs") Pacific Gas and 19 Electric ("PG&E"), Southern California Edison ("SCE"), San Diego Gas & Electric 20 Company ("SDG&E") and Southern California Gas Company ("SoCalGas") in Section 21 2results in a credible, predictable and actionable process to develop and implement a cost 22 effective portfolio that meets the CPUC's energy efficiency goals. SoCalGas' Preferred 23 scenario was developed using these joint policy recommendations.

II. SoCalGas' Commitment to Energy Efficiency Goals

Over the last 15-years, SoCalGas has successfully proven its commitment to
energy efficiency by helping customers save over 230 million therms, (equal to natural
gas required to serve over 460,000 homes for one year).

SoCalGas' 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 and energy conservation. Energy efficiency has,
and will continue to be the most important part of SoCalGas' integrated and balanced
energy resource plan.

11 We are all facing a very challenging energy future. However, the programs 12 contained in this testimony were developed to help solve some of these challenges. We 13 had to rethink how we develop programs and how we implement them. We know we 14 will need to get closer to our customers to succeed. We know we will need to develop 15 more partnerships, and we will need to continue our integration efforts with our Low 16 Income Energy Efficiency ("LIEE") programs. We know we will need to continually 17 learn from our experience and continually strive for innovation in our programs. 18 SoCalGas' 2009-2011 Energy Efficiency Portfolio offers all of these actions. 19 III. Policy Changes Needed to Maintain California's Leadership In Energy 20 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

2 In Section 2 of this testimony, we propose policy changes that are needed to 3 continue this success. These proposed changes address significant uncertainty in the 4 Commissions' existing process related to the planning, implementation, and measurement of program performance. To maximize results from the energy efficiency programs and 5 6 the collective talent of the technical experts, rules and assumptions need to be clear and 7 consistent throughout a program cycle, and only altered between cycles if evidence is 8 compelling, understood and supported by facts. To be sure, we are absolutely supportive 9 of maintaining the integrity of the evaluation and measurement process. However, 10 constantly changing assumptions have made the management of our programs very 11 difficult, caused serious distractions from focusing on program execution and resulted in 12 countless hours of valuable resources engaged in marginally productive debates. This is 13 not helpful in advancing the State's energy efficiency objectives, nor is it in the best 14 interest of our customers.

15

B. DEER Updates

SoCalGas 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 attention¹ 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.

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

1	During the entire 2009-2011 planning process, the Energy Division has updated
2	DEER five times for various reasons causing uncertainty as to the correctness of the
3	values being used for the program planning process. ² Additionally, on December 16,
4	2008, Energy Division listed a set of measures that would be added and would be
5	available for the application, measures that are important to SDG&E and SoCalGas. This
6	update never materialized as the Energy Division sent out a notice indicating that no
7	more updates will be made for the application. This is extremely problematic as these
8	new measures are part of the proposed portfolio and any subsequent changes to the
9	DEER values would immediately change the make-up of the portfolio. This is evident in
10	the drastic changes that are now being revealed between the 2005 DEER used for the
11	2006-2008 EE portfolios and the 2006-2007 Verification Report results. DEER needs to
12	be finalized once and used throughout the entire program cycle.
13	Every other input into the EE cost effectiveness calculation receives formal
14	approval as a result of record CPUC proceedings e.g. avoided cost is determined in the
15	Avoided Cost proceeding, the discount rate is determined in GRC/Cost of Capital
16	proceedings, the market price reference is determined in the Renewable Portfolio
17	Standard Proceeding, environmental adders are approved in the Avoided Cost proceeding
18	and will be updated in the GHG proceeding. The utilities have participated in various
19	webinars to discuss the DEER updates but most of our concerns have been rejected or
20	remain unaddressed. We submit that, considering the magnitude of potential statewide

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.

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.

5 Therefore, we strongly recommend a DEER update proceeding be established that 6 allows for regular and timely update of DEER assumptions prior to the triennial update of 7 goals and program planning. Specifically, it is recommended that the proceeding be timed 8 such that it is completed by yearend prior to each year when IOU EE applications are 9 required to be filed. This would allow for consistent use of DEER assumptions 10 throughout the goal setting, program planning and program evaluation process and ensure 11 the predictability and reliability of energy savings.

12

IV. Design of Program Portfolio

Also contained in this testimony are two program cycle scenarios based on
differing savings assumptions and utilizing different measure mixes and incentive levels
as necessary to meet, or attempt to meet, SoCalGas' 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, 2009 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

1	• Local Programs addressing market opportunities not adequately captured in the
2	statewide programs.
3	These program designs are described in greater detail in Witness Besa's
4	testimony, Chapter II, Section 2 and Appendix B.
5	. The first scenario, "Mandated scenario", was developed following the directives
6	of the ACR using cumulative goals from 2004, net basis for Performance earnings basis
7	("PEB") and ex-ante DEER values. The second scenario, "Preferred scenario", was also
8	developed using the directives in the ACR but differs from the Mandated scenario in that
9	it defines cumulative as "within the program cycle" and it utilizes alternative DEER
10	assumptions jointly developed by PG&E, SCE, SDG&E and SoCalGas that we believe
11	accurately reflect energy savings achieved by our programs. These alternative
12	assumptions and supporting documentation are contained in Appendices C and D.
13	The contrast between the Mandated and Preferred scenarios is significant and
14	compelling and serves to further highlight the need for quick resolution of the policy
15	issues raised by the IOUs in this proceeding. We establish in testimony that the Preferred
16	scenario more accurately reflects the performance of the energy efficiency programs and
17	more accurately reflects the energy efficiency accomplishments of the businesses and
18	citizens of California. Moreover, SoCalGas is not even able to develop a Mandated
19	scenario portfolio that meets all the Commission adopted energy savings goals with
20	reasonable cost effectiveness if the IOU recommended policies are not adopted.
21	Specifically, the Mandated scenario is only predicted to achieve 67% of goal and has a
22	TRC of only 1.21 and requires a budget increase of \$269 million (98%) over the
23	Preferred scenario

1	Not only does it fail to meet goal, it below the CPUC's guidance ³ of a $1.5 - 1.7$
2	TRC and is uncomfortably close to not being cost effective given the inherent uncertainty
3	in program planning and the fact that most of the verification studies and DEER updates
4	for gas measures have not been finalized which may reduce the assumed savings
5	significantly. Finally, our attempt to meet the ex-post DEER cumulative goal under the
6	Mandated scenario required SoCalGas to abandon the statewide incentive levels and
7	increase incentives to the full incremental measure costs to generate maximum
8	participation in its programs with the limiting factor in the scenario being 175% of the
9	Market Full potential identified for SoCalGas in the 2008 California Energy Efficiency
10	Potential Study prepared by Itron. We increased the potential study opportunity to reflect
11	our belief that, for SoCalGas, the savings potential is underestimated.
12	In light of the dramatic differences between the Mandated and Preferred scenarios
13	caused by the ex-post DEER updates, SoCalGas also performed an exercise to estimate
14	the impact the DEER updates would have on the California Energy Efficiency Potential
15	Study results. Although the Potential Study did not use the DEER database as a direct
16	input, we approximated the impact the DEER changes would have by matching the
17	significant DEER adjustments to the applicable market potential identified in the
18	Potential Study. The net result was an approximate 40% reduction in the Potential Study
19	results. Once again demonstrating that it is poor policy to use different metrics to set
20	goals than those used to judge performance against those goals.
21	Overall, these results clearly indicate the Mandated scenario is not reasonable

Overall, these results clearly indicate the Mandated scenario is not reasonable

³ Assigned Commissioners and Administrative Law Judge's Ruling Modifying Schedule and Requiring Additional Information for 2009-2011 Supplemental Filings, December 12, 2008. At page 5.

1	from both a societal and policy perspective. Specifically, the Mandated scenario, which	
2	dramatically increases costs and drives down the cost effectiveness of the portfolio, is	
3	inappropriate and unacceptable in these economic times. And, from a policy perspective,	
4	the Mandated scenario's obvious disconnect between goal setting and performance	
5	review will have far reaching consequences when translated to interrelated proceedings	
6	such as Assembly Bill ("AB") 32, Long-Term Resource Plans and the Integrated Energy	
7	Policy Report. Each of these proceedings will need to dramatically reduce their	
8	expectations for energy efficiency to be consistent with these DEER updates.	
9	In summary, to ensure that SoCalGas is able to implement a portfolio that	
10	maximizes energy efficiency and greenhouse gas reductions and supports the	
11	Commission's long-term vision for efficiency as presented in the CEESP, we urge the	
12	Commission to adopt the IOUs proposed policy changes and SoCalGas' resultant	
13	Preferred scenario.	
14	SoCalGas used the following guiding principles in designing its portfolio:	
15	Innovation:	
16 17	• Programs should be innovative in design and implementation, even as we build on the foundation of the "tried and true" effective measures.	
18	• Programs should be "customer-centric" – that is, designed with the customers in	
19	mind.	
20	Integration:	
21 22 23	 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. 	

1	• Programs should be designed to capture synergies from integration with other
2	state priorities, including demand response, low income energy efficiency,
3	renewables generation, and AB32 GHG reduction.
4	Comprehensive:
5	• Portfolio should be comprehensive in pursuing all cost effective energy efficiency
6	opportunities.
7	• Programs should tap the talent and resources in the market place by seeking
8	opportunities for partnerships with customers, local agencies, and service
9	providers.
10	Finally, this testimony will demonstrate SoCalGas' scenarios were developed in
11	compliance with Commission direction contained in the following:
12	D. 07-10-032, Interim Opinion on Issues Relating to Future Savings
13	Goals and program Planning for 2009-2011 Energy Efficiency and
14	Beyond;
15	 Assigned Commissioner's and Administrative Law Judge's Ruling
16	Regarding 2009 to 2011 Energy Efficiency program Applications,
17	February 29, 2008;
18	Assigned Commissioner's Ruling on Revision 4.0 of the Energy
19	Policy Manual, March 28, 2009;
20	Assigned Commissioner's and Administrative Law Judge's Ruling
21	Regarding Cost-Effectiveness Metrics and Energy Efficiency Policy
22	Manual, March 14, 2008;

I

1	Joint Assigned Commissioners' Ruling Providing Guidance on
2	Integrated Demand-Side Management in 2009-2011 Portfolio
3	Applications, April 11, 2008;
4	Assigned Commissioner's and Administrative Law Judge's Ruling
5	Regarding May 15, 2008 Energy Efficiency Portfolio Plans for 2009-
6	2011, April 21, 2008;
7	Assigned Commissioner's and Administrative Law Judge's Ruling
8	Regarding Due Dates for 2009-2011 Energy Efficiency Portfolio Plans
9	and Energy Efficiency Strategic Plan Applications, May 5, 2008;
10	Assigned Commissioner's and Administrative Law Judge's Ruling
11	Resetting Date for 2009-2011 Energy Efficiency Program
12	Applications, June 2, 2008;
13	D.08-07-047, Decision Adopting Interim Energy Efficiency Savings
14	Goals for 2012 through 2020 and Defining Energy Efficiency Savings
15	Goals for 2009 through 2011;
16	Assigned Commissioner and Administrative Law Judge's Ruling
17	Requiring Supplemental Filings, October 30, 2009;
18	Assigned Commissioner and Administrative Law Judge's Ruling
19	Modifying Schedule and Requiring Additional Information for 2009-
20	2011 Supplemental Filings, December 12, 2008;
21	 Energy Efficiency 2006-2007 Verification Report,, February 5, 2009;

1 2	 Administrative Law Judge's Ruling Revising Proceeding Schedule, February 10, 2009.
3	II. Features of the Portfolio
4	SoCalGas' portfolio is composed of twelve state-wide programs, 8 local programs
5	and 18 third party programs which were selected and/or designed to demonstrate our
6	guiding principles of innovation, integration and comprehensiveness.
7	Specifically, innovation is demonstrated in all aspects of the portfolio, from the
8	promotion of innovative new energy saving devices that offer customers new ways to
9	save energy, to innovative program design and outreach methods that attract the interest
10	of hard to reach customer segments, to innovative financing techniques that provide
11	customers affordable solutions to increase participation in the programs.
12	The residential portfolio explores early retirement programs for water heaters,
13	furnaces and pool heaters to capture savings earlier in the equipment life cycle.
14	Incentives for new high efficiency gas technologies, such as Shower Start, a new, hot
15	water saving technology, have been added to the portfolio and other technologies are
16	continually identified and evaluated for addition to our programs. The Residential New
17	Construction program is transitioning to a "performance based" incentive model from a
18	tiered incentive to provide motivation to builders to capture every increment of savings
19	available. The Local Government Partnerships are expanding to include new cities and
20	will be more focused on local code development and compliance activities to ensure
21	expected savings are being achieved. In addition, we will be promoting Green Building
22	ratings to add credibility and visibility to energy efficient homes and better inform
23	customers about the value of energy savings at the time of purchase. Finally, we are

proposing Net Zero Energy home demonstration projects to educate builders and home
 buyers about technology that is available today and move the industry toward a more
 sustainable future.

4 Our nonresidential portfolio will also include Net Zero Energy demonstration 5 projects that will bring visibility to innovative developers and promote the mainstreaming 6 of sustainable design techniques. Our successful food service equipment replacement 7 program is being expanded to include used equipment to address the large and hard to 8 reach segment of this industry that only purchases used equipment. We are also 9 expanding our successful On-Bill Financing program to make it even more attractive to 10 small commercial and institutional customers by increasing the cap on loan value and 11 lengthening the minimum pay-back period. We are also exploring the use of "point of 12 sale" rebates for commercial equipment similar to the program already available for 13 residential customers to make it easier for commercial customers to see the value of 14 purchasing energy efficient equipment and to receive incentives to reinforce their 15 purchasing decision. Potential partnerships with financial institutions that focus on hard 16 to reach businesses are also being investigated to maximize financing opportunities for 17 energy efficiency projects at businesses located in lower income neighborhoods. Finally, 18 SoCalGas will be piloting a program to determine the value of utility ownership of large 19 new and/or refurbished heating, ventilation, air-conditioning ("HVAC") systems on 20 customer facilities. The Green Energy Systems pilot is intended to maximize energy 21 efficiency in new/refurbished long-life central plants when the customer does not have 22 the capital to upgrade their system thus avoiding 20 to 30 years of lost energy savings 23 opportunity.

1	Another innovative program change is that we are greatly expanding our local
2	government partnership activity to include an incubator process that assist interested
3	cities to develop long-term energy action plans and provides a roadmap on how they can
4	become a full partner with SoCalGas over time and are working with these same
5	Partnerships to include code enhancement and code enforcement efforts.
6	From an integration perspective, SoCalGas is continuing its close partnerships
7	with Southern California Edison and with various water agencies to jointly market and
8	implement EE, DR, water conservation and renewable programs across our service
9	territory. That same integration effort is being pursued with our Low Income Energy
10	Efficiency programs through cross promotion where the audience is mixed low income
11	and moderate income residences. SoCalGas is also working with South Coast Air
12	Quality Management District to explore program opportunities to jointly incent and
13	promote early replacement of gas appliances to save energy and reduce air pollutant
14	emissions.
15	In the non-residential market, we have joined the Climate Registry's Cool Planet
16	program where SoCalGas' Account Executives jointly visit customers with Climate
17	Registry personnel to educate them on AB32 requirements and demonstrate how energy
18	efficiency is their best GHG reduction option. A pilot program is proposed for the food
19	processing industry where we will implement a comprehensive joint effort between
20	SoCalGas, SCE and water agencies to develop integrated facility improvement projects
21	and, if successful, will expand the cooperative effort to other industries as well. Finally,
22	we will be working with our local government partnerships to create expedited permitting
23	programs for energy efficient projects.

I

1	Lastly, comprehensiveness has been and continues to be an important aspect of
2	our portfolio. With the aggressive goals set by the CPUC, we have to be comprehensive
3	in our approach if we want to have any chance of meeting or exceeding our goals. We
4	are moving to enhance our comprehensiveness by restructuring how we design and
5	manage our programs going forward. In the past our programs were managed across the
6	residential and non-residential markets uniformly. Beginning with this program cycle,
7	our Program Managers will be responsible for segments rather than specific programs.
8	Our goal is to be even more knowledgeable about the needs of customer segments
9	(residential owners and renters; non-residential manufacturing, agricultural, hospitality,
10	foodservice, institutional, etc) and increase our market penetration through segment
11	specific marketing and outreach. This segment based approach is consistent with the
12	state-wide program designs but is also being utilized for our local program design and
13	implementation
14	Other examples of comprehensiveness include our whole house program pilot and
15	the Home Performance Program that is a cooperative effort with SCE and water agencies
16	for residential customers and the introduction of Sustainable Communities program for
17	non-residential customers that promote LEED certification through comprehensive
18	project evaluation and reduction of overall project environmental impacts.
19	The biggest challenge we face at SoCalGas in achieving each of these program
20	objectives is the cost effectiveness of our portfolio. Many of the innovative, integrated
21	and comprehensive programs outlined in our filing are experimental efforts that have
22	higher costs and typically lower savings versus our traditional incentive programs. As a
23	result, they usually are either not cost effective or only marginally cost effective as stand
	1 · · · ·

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1	alone programs during their start-up stage. Typically, our highly cost effective traditional
2	programs more than compensate for the newer and lower cost effective innovative
3	programs. However, with more focus being placed on innovation and long-term Strategic
4	Planning activities, the program balance is shifting our portfolio cost effectiveness lower.
5	Moreover, many of the Energy Division's EM&V reports and DEER updates on gas
6	programs have not been released and if they result in lower savings assumptions, the
7	Preferred and Mandated scenario's cost effectiveness could easily slip below 1.0.
8	The primary cause of this cost effectiveness challenge is SoCalGas' unique
9	position among California's utilities. As a gas only utility, we do not enjoy the benefits
10	of having high value electric efficiency savings to compensate for the lower value gas
11	efficiency savings. Given this challenge, all of our energy efficiency partners must have
12	reasonable expectations on the level of support that is affordable through a gas utility
13	versus what is affordable through an electric utility. We commit to working with all of
14	our energy efficiency partners to be as aggressive and effective in achieving energy
15	savings as possible within the limits of our portfolio's economics.
16	In conclusion, SoCalGas believes its proposed 2009-2011 energy efficiency
17	portfolio is innovative in its efforts to bring new technologies and programs to market,
18	fully integrated in its efforts to promote EE/DR/LIEE programs, water savings and
19	renewable programs and comprehensive in its attempt to identify and maximize all cost
20	effective energy efficiency opportunities. The following sections of this testimony
21	provide greater detail on how these objectives are achieved in our portfolio.

22 II. Summary Tables and Graphs of Portfolio

23

The following sections provide summary information of SoCalGas' 2009-2011

proposed energy savings, budgets and cost effectiveness. Please refer to Appendix F for
 the graphical representations of these data.

- A. Summary of Portfolio Energy Savings
 D.08-07-047 Ordering Paragraph ("OP") 4 adopts gross goals, not net of free
 riders goals. SoCalGas' proposed 2009-2011 portfolio is designed to meet or exceed
 these goals presented in the July1, 2008 PD. The tables below show the forecasted
 savings for the 2009-2011 energy efficiency portfolio under its Preferred and Mandated
 scenarios.
- 9

Table 1.1: Preferred Scenario—SoCalGas Projected Annual Savings Impacts for 2009 2011

	Gas	Savings (Gross	MTh)
Year	Total	CPUC Goal	% of Goal
2009	30,663,931	27,200,000	113%
2010	28,300,000	32,424,753	115%
2011	33,458,732	29,900,000	112%
Total	96,547,416	85,400,000	113%

12

13 Table 1.2: Mandated Scenario—SoCalGas Projected Annual Savings Impacts for 2009-2011

	Gas Saving	gs (Gross MTh))
Year	Total	CPUC Goal	% of Goal

2009	38,789,208	41,764,678	93%
2010	40,495,849	62,784,519	64%
2011	42,956,007	63,126,212	68%
Total	112,241,064	167,675,409	67%

B. Summary of Portfolio End Use Savings

2 Appendix F Table 1.2 shows the forecasted 2009-2011 energy savings by sector 3 and end use for SoCalGas' Preferred scenario. Appendix F.1 Table 1.2 shows the 4 forecasted 2009-2011 energy savings by sector and end use for the Mandated scenario.

5

C. Summary of Sector Savings

Appendix F Tables 1-3, 1-4, 1-5, and 1-6 show SoCalGas' 2009-2011 forecasted 6 7 energy savings by market sectors and measure groupings for its Preferred scenario. It 8 should be noted that SoCalGas' nonresidential incentive programs have been designed to 9 capture energy savings and incentives for the Institutional and Local Government 10 Partnerships. Therefore, there are no savings forecasted for these partnerships. 11 Appendix F.1 Tables 1-3, 1-4, 1-5, and 1-6 show SoCalGas' 2009-2011 forecasted 12 energy savings by market sectors and measure groupings for its Preferred scenario.

13

D. Summary of Portfolio Budget

14 The following table shows SoCalGas' requested 2009-2011 budget to support 15 meeting its aggressive energy savings goals and support the activities associated with the 16 CEESP for both the Preferred and Mandated scenarios.

17 Table 1-3: 2009-2011 Proposed Annual Budget for the Preferred and Mandated scenarios

Year	Preferred Scenario	Mandated Scenario
2009	\$88,905,034	\$175,891,141
2010	\$91,765,220	\$179,114,487
2011	\$92,594,643	\$186,921,846
Total	\$273,264,897	\$541,927,474

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

3 The details of each progam's strategic plan activities is described in Section 5e of 4 each Program Implementation Plan (see Appendix B). Some of specific program 5 activities include net zero building pilots for both residential and commercial 6 developments and enhancements to our existing new construction programs to incent 7 participants to approach net zero energy construction by incorporating even more energy 8 efficiency measures and solar. . For the HVAC BBEES we will be investing Emerging 9 Technology resources to develop advanced space heating technology in conjunction with 10 the California oriented AC development project.

In addition, SoCalGas has 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.

1 2	IV. Summary of Initiatives and Activities Designed to Accomplish the Big Bold Energy Efficiency Strategies
3	The portfolio is designed to contribute to the success of achieving the BBEES.
4	More detail on this activity is discussed in Witness Besa Testimony, Chapter II, Section
5	1.II.Band Appendix B.
6 7	V. Estimated Budgets and Energy Savings Supporting the Energy Efficiency Strategic Plan
8	Tables 1-4 and 1-5 present the budgets proposed for the activities and programs
9	SoCalGas has included in its portfolio towards supporting the CEESP under its Preferred
10	and Mandated scenarios, respectively. Some of the programs are expected to provide
11	some level of savings (see Appendix F and F.1 for savings estimates associated with
12	these activities.).

Strategic Planning Activities	Total 2009-2011 Program Cycle Budget
SW-Codes & Standards	\$2,996,224
SW-Emerging Technologies	\$5,289,583
SW-RNC	\$9,769,464
SW-Workforce Education & Training	\$11,683,888
SW-HVAC	\$2,320,586
SW-IDSM	\$600,122
SW-ME&OA - Marketing, Education & Outreach (Core)	\$6,039,130
Local Sustainable Communities	\$823,770
Local Strategic Develop & Integration	\$853,187

13 Table 1-4: Preferred Scenario—Proposed SoCalGas Programs That Support CEESP

Government Partnerships Programs Total	\$7,269,411
Total Long-Term Innovation Programs	\$47,645,366

Strategic Planning Activities	Total 2009-2011 Program Cycle Budget
SW-Codes & Standards	\$2,996,224
SW-Emerging Technologies	\$5,289,583
SW-RNC	\$13,009,619
SW-Workforce Education & Training	\$11,683,888
SW-HVAC	\$2,320,586
SW-IDSM	\$600,122
SW-ME&OA - Marketing, Education & Outreach (Core)	\$6,039,130
Local Sustainable Communities	\$823,770
Local Strategic Develop & Integration	\$853,187
Government Partnerships Programs Total	\$7,269,411
Total Long-Term Innovation Programs	\$50,885,521

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

I. Introduction

5 In this section, the four California investor-owned utilities ("Pacific Gas and 6 Electric Company, Southern California Edison Company, San Diego Gas and Electric 7 Company, and Southern California Gas Company", known as the "Joint IOUs") regulated 8 by the California Public Utilities Commission ("Commission" or "CPUC") propose key 9 policy modifications that are absolutely necessary to enable the success of California's 10 energy efficiency programs in the 2009-2011 period and beyond. This amended 11 proposed policy testimony supersedes the policy testimony submitted by the Joint IOUs 12 in support of Application 08-07-021 et al on July 21, 2008. This testimony is being 13 submitted to the Commission pursuant to Decision 07-10-032, the California Long Term 14 Energy Efficiency Strategic Plan (Strategic Plan) Decision 08-09-040 adopted on 15 September 18, 2008, the Order Instituting Rulemaking 09-01-019 on the Energy 16 Efficiency Risk Reward Incentive Mechanism issued February 4, 2009, and other rulings 17 and orders⁴ The Joint IOUs propose policies that are essential to be decided within the 18 context of the 2009-2011 proceeding and fit into two general policy categories. The first 19 category of policy requests is needed in order for the IOUs to each build well-balanced 20 portfolios that meet the sum of the Commission's annual 2009-2011 energy efficiency 21 goals cost-effectively. Changes required for cost-effective energy efficiency portfolios 22 that meet these goals are:

⁴ 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	1. Benefit and measure cost assumptions that are used for planning the
2	adopted 2009-2011 Energy Efficiency Portfolio (ex ante) should also be
3	used for portfolio reporting and evaluation. These assumptions should
4	include limited IOU-proposed revisions to the Database for Energy
5	Efficiency Resources (DEER) update proposed by the Energy Division in
6	December 2008;
7	2. Cumulative savings should be defined as the sum of the annual savings
8	goals for the three-year portfolio period upon which the proposed
9	budgets are based; and
10	3. Residential interactive effects and commercial heating interactive effects
11	should be removed from energy efficiency calculations.
12	The second category of policy requests is essential to achieve both near and long-
13	term goals of the State of California and the Commission. These include:
14	1. Certain costs in direct support of the Strategic Plan should be exempt
15	from the shareholder risk reward incentive mechanism;
16	2. IOUs should receive credit for energy efficiency actions taken by
17	customers who may be motivated in part by other influences; and
18	3. To encourage long-term measure installations, the maximum effective
19	useful life (EUL) should be extended to 30 years.
20	The IOUs also discuss a third set of policy requests that are important to
21	successful energy efficiency programs. The IOUs acknowledge that these will be
22	addressed in a subsequent rulemaking (R.09-01-019) by the CPUC. The Joint IOUs
23	constructed their respective Proposed Program Plans anticipating that this third set of
24	policy requests will be adopted by the Commission. In the event these policy requests are

1	not granted in a subsequent rulemaking, the IOUs may need to revise their 2009-2011
2	Proposed Program Plans.
3	1. Gross metrics should be used for the calculation of performance toward
4	the minimum performance standard (MPS) and performance earnings
5	basis (PEB) under the RRIM and
6	2. Mid-cycle funding augmentation rules should be revised.
7	The Commission has indicated a desire to consider policy revisions to the energy
8	efficiency process ^{.5} The Joint IOUs recognize that the Commission intends to address
9	energy efficiency policy issues and the risk/reward incentive mechanism in upcoming
10	rulemakings and their instant applications. The Joint IOUs assert it is essential that these
11	policy matters are resolved in order for the Commission to adopt successful utility 2009-
12	2011 energy efficiency portfolios. The Joint IOUs' proposal focuses on cost-effectively
13	maximizing the total energy savings necessary to meet California's aggressive vision for
14	energy efficiency. These requests allow the IOUs to focus on execution of energy
15	efficiency portfolios that support all of the State's energy efficiency goals articulated in
16	the Strategic Plan ⁶ , including the Big, Bold Energy Efficiency Strategies; AB 32 - The
17	California Global Warming Solutions Act of 2006 ⁷ ; and the State's Energy Action Plan
18	(EAP). ⁸
19	The IOUs' Proposed Program Plans for 2009-2011 are contingent upon
20	Commission adoption of the above-described policy changes. The energy savings and

21 cost effectiveness of the Proposed Program Plans are summarized in each of the IOUs'

⁵ R.09-01-019, ADD other related D.08-12-059.

⁶ <u>www.californiaenergyefficiency.com</u>

⁷ www.leginfo.ca.gov/pub/05-06/bill/asm/ab_0001-0050/ab_32_bill_20060927_chaptered.pdf

⁸ www.energy.ca.gov/energy action plan/index.html

1	individual amended testimony and tables. The individual IOU testimony and tables also
2	includes results for a Mandated scenario required by the ALJ that employs the full
3	December 2008 DEER updates proposed by the Energy Division and other current
4	policies mandated in Commission Decisions and Rulings. The IOUs are not able to
5	develop and implement reasonable and well-balanced portfolios that meet all the
6	Commission-adopted energy savings goals cost-effectively based on the Mandated
7	scenarios (i.e., if the IOU-recommended policies are not adopted). Accordingly, to
8	ensure that IOUs are able to implement portfolios that maximize energy efficiency and
9	greenhouse gas reductions and support the Commission's long-term vision for efficiency
10	as presented in the Strategic Plan and elsewhere, the Joint IOUs urge the Commission to
11	quickly adopt the proposed policy changes upon which such portfolios are built.
12 13	A. Changes Needed for Cost-effective Portfolio that Meets Commission Goals
13 14 15	Goals 1. Per-Unit Benefit And Cost Assumptions Should Be Adopted For 2009- 2011 Portfolio Planning (Ex Ante) And Also Used For Portfolio
13 14 15 16	Goals 1. Per-Unit Benefit And Cost Assumptions Should Be Adopted For 2009- 2011 Portfolio Planning (Ex Ante) And Also Used For Portfolio Evaluation
13 14 15 16 17	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
13 14 15 16 17 18	Goals1. Per-Unit Benefit And Cost Assumptions Should Be Adopted For 2009- 2011 Portfolio Planning (Ex Ante) And Also Used For Portfolio EvaluationThe IOUs' 2009-2011 Proposed Program Plans support the Commission's goalsfor both short-term and long-term resource benefits to the State, focusing on a mix of
 13 14 15 16 17 18 19 	Goals1. Per-Unit Benefit And Cost Assumptions Should Be Adopted For 2009- 2011 Portfolio Planning (Ex Ante) And Also Used For Portfolio EvaluationThe IOUs' 2009-2011 Proposed Program Plans support the Commission's goalsfor both short-term and long-term resource benefits to the State, focusing on a mix of both existing and emerging technologies and programs. Energy efficiency is the premier
 13 14 15 16 17 18 19 20 	Goals1. Per-Unit Benefit And Cost Assumptions Should Be Adopted For 2009- 2011 Portfolio Planning (Ex Ante) And Also Used For Portfolio EvaluationThe IOUs' 2009-2011 Proposed Program Plans support the Commission's goalsfor both short-term and long-term resource benefits to the State, focusing on a mix ofboth 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
 13 14 15 16 17 18 19 20 21 	Goals1. Per-Unit Benefit And Cost Assumptions Should Be Adopted For 2009- 2011 Portfolio Planning (Ex Ante) And Also Used For Portfolio EvaluationThe IOUs' 2009-2011 Proposed Program Plans support the Commission's goalsfor both short-term and long-term resource benefits to the State, focusing on a mix of 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
 13 14 15 16 17 18 19 20 21 22 	Goals1. Per-Unit Benefit And Cost Assumptions Should Be Adopted For 2009- 2011 Portfolio Planning (Ex Ante) And Also Used For Portfolio EvaluationThe IOUs' 2009-2011 Proposed Program Plans support the Commission's goalsfor both short-term and long-term resource benefits to the State, focusing on a mix of 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

1	The benefits and measure costs supporting the IOUs' amended Proposed Program
2	Plans are based on the DEER data, with limited IOU modifications as discussed herein.
3	Failure to adopt the per-unit benefit and cost assumptions (including but not limited to
4	kWh, kW, effective useful life (EUL) and measure costs) for portfolio planning,
5	reporting, and evaluation jeopardizes achievement of the CPUC's and State's energy
6	goals, as currently established. The Commission has acknowledged the inconsistency in
7	the per-unit benefit and cost assumptions underlying goal development and new
8	assumptions being released, such as the 2008 December DEER Update. The following
9	sequence describes the Commission's actions:
10	a. The goals for the period 2004-2013 set forth in D.04-09-060 were created using a
11	set of facts regarding benefits and measure costs available at that time. The
12	energy savings potential, from which the goals are derived, exists as previously
13	stated only when the underlying inputs (e.g. energy savings, costs, EULs, etc)
14	remain consistent. Variations in the underlying inputs call into question whether
15	the energy savings potential, upon which the goals are based, continues to exist.
16	b. In D.04-09-060, the Commission stated that the savings modeled in potential
17	studies for programs in 2009 and beyond are gross, with net-to-gross approaching
18	1.0. ⁹ The Commission later confirmed that the 2009-2011 goals are gross goals
19	citing D.04-09-060 and new analysis showing "that the currently-adopted
20	numeric goals for 2009-2011 are consistent with, and in most cases higher than,
21	recent analysis of maximum achievable utility gross savings potential during
22	these years." ¹⁰

⁹ D.04-09-060, p.33 ¹⁰ D.08-07-047, p.29

1	c. In D.08-07-047, the Commission found that 2009 and beyond goals were "now
2	out of date. Key assumptions embedded in the current goals do not resemble
3	trends visible in the overall energy efficiency market today. For example, the
4	net-to-gross and expected useful life assumptions in the 2009-2011 goals are
5	about ten years old." ¹¹
6	d. The Energy Division then updated key assumptions through the 2008 DEER
7	update. The Commission declined to reflect these assumption changes in the
8	goals for 2009-2011 adopted in D.08-07-047, even though the Commission
9	intends to correct the misalignment for future program cycles. ¹²
10	Accordingly, the Commission must either freeze the goals with per-unit benefit
11	and measure cost assumptions needed to achieve those goals (as presented herein) or
12	allow the goals to "float" to address the constantly changing assumptions proposed
13	through DEER and other updates. Continuous changes to the rules of the game will make
14	it vastly more difficult and expensive for utilities and third parties to effectively plan and
15	implement energy efficiency programs to meet the energy savings goals. Furthermore,
16	changes to per-unit measure and cost assumptions between program adoption and
17	evaluation compromise the Joint IOUs' ability to focus on the Strategic Plan since
18	proven, cost-effective portfolio measures cannot be used to balance new, non-cost-
19	effective efforts for both the cost-effectiveness and energy saving achievement
20	calculations. Thus, the Joint IOUs request that the Commission adopt and maintain the
21	per-unit benefit and cost assumptions, as proposed herein, throughout the program cycle
22	to meet the Commission's energy savings goals as established in D.04-09-060.

¹¹ D.08-07-047, p.28 ¹² D.08-07-047, p.33

1	a. New Process Needed for Measures in Proposed Framework
2	In light of the proposed framework, the Joint IOUs request that the existing
3	process for adding new measures, as adopted in D.05-09-043, be altered to allow for
4	proper, formal, on-the-record review of benefit and measure costs proposed by the
5	Energy Division. The new measure information will also be provided to the Joint IOUs'
6	various local peer review groups (PRGs) for informal review as required by the EE
7	Policy Manual, Version 4.0, Table 8. Upon receipt of such information, the Energy
8	Division will then be given 15 calendar days to resolve any issue. The Executive
9	Director of the Energy Division should send a letter to the local PRG and the IOU on
10	their recommended benefit and measure cost values. If the Energy Division does not
11	resolve the values that should be used by the 15th calendar day, then the IOU-proposed
12	benefit and measure cost data will be used for portfolio reporting and evaluation. If the
13	IOU does not support the Energy Division's recommendation, the IOU will have the
14	opportunity to file an Advice Letter for full Commission review and resolution. The
15	Joint IOUs believe this proposed process provides the local PRGs ongoing information
16	and the Energy Division ample opportunity to review proposed benefit and measure cost
17	values while facilitating the inclusion of new measures through a timely and transparent
18	process.
19 20 21 22 23	 <u>b. Savings Assumptions Should Include Limited IOU-Proposed Revisions</u> <u>To The Database For Energy Efficient Resources (DEER) Update</u> <u>Issued By The Energy Division in December 2008 And Should Be</u> <u>Adopted By The Commission For Portfolio Planning And Evaluation</u> The IOUs' Proposed Program Plans include limited modifications to the proposed
24	values from the DEER database, as supported by the work papers in Exhibit SCE-
25	8/PG&E Appendix E/ SDG&E Appendix D/SoCalGas Appendix D. The Proposed
	29

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.

7 The updated DEER numbers proposed by the Energy Division significantly 8 reduce the amount of energy efficiency savings available from utility programs, but 9 without reducing the energy efficiency savings goals. The Utilities support the use of 10 estimates based on Commission studies that adhere to the Commission's evaluation, 11 measurement, and verification (EM&V) protocols and that have gone through the proper 12 vetting process. The Utilities reject unsupported savings estimates proposed by Energy 13 Division that are developed outside of the protocols and lack transparency. The Joint 14 IOUs maintain, and have submitted evidence to support the conclusion that certain 15 revised DEER estimates (December 2008) are flawed and thus inappropriate for use in 16 this proceeding, as demonstrated in Exhibit SCE-8/PG&E Appendix E.

17 18

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 longerterm 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

1	2010 well after the 2009-2011 portfolio has been budgeted and adopted. Further, there
2	are no reliable studies that can quantify the amount, if any, of savings that do not still
3	persist from installations back to 2004. The Commission's existing policy on cumulative
4	savings makes the unsupported assumption that savings from decayed energy efficient
5	measures have not been replaced with like measures and/or code advances.
6	Accordingly, the Joint IOUs recommend reconsideration of the current definition
7	of cumulative savings such that cumulative be defined as the sum of the annual savings
8	goals for the three-year portfolio period (2009-2011).
9 10	a. Defining Cumulative Savings To Be Beyond The Three-year Period Is Not Consistent With Commission Goal Development And Policy
11	The Commission created goals for the 2004-2013 period in 2004 based on then
12	available potential and energy savings data. To create cumulative goals, the Commission
13	merely added the individual annual goals. No party did an assessment or adjustment for
14	decay, an assessment of the change in energy savings due to ex post measurement, or an
15	assessment of whether the cumulative goals were defined as net or gross. Such an
16	assessment would have resulted in a reduction of the cumulative goals or an increase in
17	the annual goals to replace such savings that would "fall away."
18	The potential study may have assumed that customers would replace efficient
19	measures with measures just as efficient. It is unclear whether the potential study
20	assumed these customers would participate in IOU energy efficiency programs for their
21	next efficient measure installation and thus, whether IOUs should be held responsible for
22	re-creating these savings that may already exist in the utility's load forecast.
23	The potential study underlying the Commission's goals also has not incorporated
	31

1	the increased stringency of appliance and building standards, in addition to manufacturer
2	production of more efficient technologies outside of standards and IOU programs. The
3	Commission acknowledged this by stating "the model for current goals assumed there
4	would be no further improvements in Title 24 or state and federal appliance standards." ¹³
5	Change to efficiency baselines produces real energy savings and lowers the amount of
6	potential available for IOU programs. However, there is no way to reasonably track or
7	report such savings through IOU programs, and it would be unreasonable, if not
8	impossible, for IOUs to make up for savings that have been addressed by other sectors in
9	the marketplace. For example, Codes and Standards (C&S) programs produce effective
10	and far-reaching energy savings, but valuing credit for such savings in goal
11	accomplishment has not been consistent at least since 2004. The IOUs were not allowed
12	to count C&S savings in their 2004-2005 accomplishments. The IOUs were then allowed
13	to count 50 percent of the pre-2006 and 100 percent of their post-2006 C&S savings, for
14	which they could show attribution, in their 2006-2008 energy efficiency portfolios.
15	In addition to the changes in policy as to whether to count some or all of C&S
16	savings, there have also been other changes to policy for counting savings, including the
17	variation from commitments to actual installations and from net goals to gross goals. In
18	the 2004-2005 cycle, the Commission required the IOUs to count savings based on
19	"commitments" from customers. In the 2006-2008 period, the Commission requested
20	that savings from "actual" installations only be counted toward the goals. Unfortunately,
21	this inconsistency creates a problem in implementing cumulative savings for a period
22	longer than any particular three-year program cycle. For instance, the IOUs offer

¹³ D.08-07-47, p.28

1	daylighting (also referred to as de-lamping) measures, which have a 15-year effective
2	useful life according to the Commission's protocols. According to the Commission's
3	policy for cumulative, the IOU would need to make up savings after the measure died in
4	the 15 th year. The daylighting savings are not lost, but they must be "replaced" when the
5	effective useful life is exceeded. With the Commission's current definition of cumulative
6	goals, the Commission ignores the fact that the savings may no longer be available to be
7	replaced after a measure's useful life and thus, orders the IOU to find savings to replace
8	those that still exist.
9	The change to gross from net in 2009-2011 creates an additional layer of
10	uncertainty and arbitrariness in assessing cumulative savings. In its Decision on 2009-
11	2011 goals and 2012-2020 goals, the Commission states that "2009-2011 savings will be
12	measured as ex-post gross and layered on top of 2004-2008 savings to measure
13	cumulative savings ¹⁴ . This means that the Commission will mix ex post net
14	achievements for 2004-2008 (including commitments) with ex post gross achievements
15	for 2009-2011. Layering net and gross achievements further complicates the
16	identification of cumulative savings and any counting of such savings towards
17	cumulative savings goals, as it ignores the cumulative savings that are no longer available
18	for IOU programs (since these savings were not incorporated in the accomplishments
19	during the 2004-2008 period which was defined as "net"). Any cumulative savings goals
20	beyond the three-year period need to reflect whether those energy savings are, in fact,
21	available for IOU programs or have been adequately addressed through other
22	developments in the marketplace (e.g., rising baselines, Codes and Standards, etc.).

¹⁴ Decision 08-07-047 July 31, 2008, Page 29

1	As discussed above, defining cumulative savings back to 2004 is inconsistent with
2	Commission goal development and policies on counting savings. Savings reaching the
3	cumulative goals may exist, but the IOUs cannot monitor or report such savings.
4	Accordingly, the Joint IOUs request cumulative savings for which the IOUs are
5	responsible be defined as the sum of the annual goals for the 2009-2011 period.
6 7 8	3. Residential interactive effects and Commercial heating-related interactive effects should be removed from energy efficiency calculations.
9	The Commission goals were adopted under 2002 assumptions of market potential
10	and savings assumptions. Subsequent DEER updates proposed by the Energy Division
11	were not used to modify the potential estimates or the goals derived from those estimates.
12	Furthermore, the CPUC's potential study never considered interactive effects from
13	electric measures on gas usage in its assessment.
14	However, current DEER updates proposed by the Energy Division include
15	assumptions for "interactive effects" which produce substantial increases in gas usage
16	resulting from electric savings. Any interactive electric savings effects would undermine
17	gas savings accomplishments making it impossible for gas and gas/electric utilities to
18	achieve both gas and electric goals under existing rules.
19	The Joint IOUs have strong concerns about the validity of DEER on residential
20	interactive effects and commercial heating-related interactive effects due to a reflect
21	conclusions from a CFL Energy Impact Study dated January 2009 done by San Diego
22	State University (the study is presented in SDG&E's Appendix C). San Diego State
23	University examined 2,800 low income homes in San Diego which had interior CFLs
24	installed and for which SDG&E had 12 months of pre-and post installation energy usage
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1	and hourly weather data. The study then used various regression models to test whether
2	electricity and gas effects could be correlated to the CFL installations. The study found
3	that there is strong statistical evidence that CFLs save electricity in residences as one
4	would expect. Furthermore the magnitude of the electrical savings corresponds with the
5	electricity savings estimated by the DEER model (actually the study result is slightly
6	higher). The study goes on to determine residential heating-related interactive effects are
7	insignificant, and therefore that there is no statistical evidence to support a negative therm
8	heating interactive effect due to the installation of CFLs in residences regardless of the
9	regression model used. The Joint IOUs agree with the analysis performed and the
10	conclusion that negative heating interactive effects in residences are overstated in DEER.
11	Therefore, the 2008 DEER update for this situation cannot be supported and, residential
12	interactive effects and commercial heating-related interactive effects should be removed.
13 14 15	B. Other Policy Requests Essential in Supporting the Commission's Guidance (support for Strategic Plan, Collaboration, Long-Life Measures)
16 17 18	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
19	In D.07-10-032, the Commission stated that "all parties will agree that California
20	(and likely other regions as well) will achieve far greater savings if the IOUs and
21	Commission actively engage in coordinated, long-term planning." On June 2, 2008, the
22	Joint IOUs jointly filed a Strategic Plan. ¹⁵ On September 18, 2008 the Commission
23	adopted and issued the California Long-Term Energy Efficiency Strategic Plan (Strategic

¹⁵ 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
Plan).¹⁶ The Strategic Plan contains various goals for California, both near and longterm. 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.

6 However, many of the Strategic Plan oriented items may not produce identifiable 7 or measurable energy savings, and/or may produce only minimally or even non-cost-8 effective energy savings in the near-term. The Strategic Plan oriented items include 9 market characterization reports, research, convening of stakeholders to discuss visionary 10 energy efficiency, support of the California Energy Commission or local government 11 activities, pilots, and workforce development, among other things. While the IOUs look 12 forward to helping implement the Strategic Plan for California consumers, the Strategic 13 Plan may not receive adequate financial support in light of existing policy rules. 14 Given this policy challenge, the Joint IOUs support specialized treatment of these 15 costs for these discrete Strategic Plan activities. The Joint IOUs believe that activities should be exempt from the risk/reward incentive mechanism¹⁷ if: 16 17 a) The activity explicitly supports a Strategic Plan Strategy; and 18 b) The activity will produce minimal or no cost-effective, measurable savings in 19 2009-2011.

20

The Commission's concurrence with this exemption will ensure there is a policy

¹⁶ "California Long-Term Energy Efficiency Strategic Plan", dated September 2008.

¹⁷ 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.)

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.

8 To ensure that costs for the Strategic Plan do not remove the more wide-scale 9 energy efficiency benefit from utility customers, each of the IOUs will include all the 10 savings and costs, including those from exempted programs, in its cost-effectiveness 11 calculation for their 2009-2011 portfolios. Each of the IOUs will ensure that their 12 respective portfolios, including exempted programs, also remain cost effective to ensure 13 that utility customers continue to receive a positive benefit from energy efficiency 14 programs. The cost effectiveness showing for this portfolio is discussed in Chapter I, 15 Section 1.

16 There are a number of areas in which the Strategic Plan calls for studies, market 17 characterization, research, local government initiatives, and development of training 18 materials, among other things, that will not result in cost-effective energy savings in 19 2009-2011. The IOUs cannot predict whether and how cost-effective energy savings will 20 materialize in the future from these activities. The IOUs propose that costs with a 21 significant commitment to Strategic Plan-related activities not producing measurable 22 and/or cost-effective savings in the 2009-2011 period be removed from the shareholder 23 earnings mechanism (i.e., performance earnings basis) in order to avoid a perverse

1	disincentive for the utilities engaging in such activities. However, the Joint IOUs
2	propose to include the costs within the portfolio cost-effectiveness calculation to ensure
3	that the portfolio as a whole delivers positive benefit to customers.
4	The IOUs look forward to furthering the Strategic Plan and working with
5	stakeholders to achieve the long-term vision, but want to ensure that the Strategic Plan
6	receives the appropriate, discrete resources and funding on a going-forward basis to
7	ensure the success that the Commission envisions. Tables 2-1 and 2-1 for the Preferred
8	and Mandated scenarios, respectively, showcases the programs and corresponding costs
9	that each IOU requests be outside of the shareholder earnings mechanism (i.e.,
10	performance earnings basis). The Joint IOUs recognize that the Commission has
11	instituted R.09-01-019 to evaluate and modify the existing RRIM. Accordingly, the Joint
12	IOUs recommend that that evaluation and modification of the RRIM consider the above
13	issue so that it facilitates, and not hampers, IOU activities that advance the long-term
14	goals of the Strategic Plan.
15 16 17 18 19	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
20	In D.07-10-032, the Commission made visionary statements about the future
21	direction of energy efficiency. The Commission acknowledged that programs need to be
22	leveraged and integrated to ensure maximum energy savings for the State. D.07-10-032
23	states: "In the past, we have emphasized utility programs, utility funding and utility
24	customers. This is logical given the limits of our legal jurisdiction, but this approach has
25	resulted in fractured energy efficiency program development and delivery. Cost-effective
	38

1	use of resources for maximum reductions in energy demand will require the commitment
2	of the most influential decision-makers who can affect comprehensive change. In order
3	to reach a goal of making energy efficiency an integral part of "business as usual," we
4	need a pronounced commitment from business and government leaders and a more
5	collaborative approach that involves all key stakeholders. We emphasize the need for
6	enhanced cooperation and collaboration and commit to a leadership role in reaching out
7	to key leaders to engage participation in this effort and direct the IOUs to do likewise. ¹⁸
8	Unfortunately, the traditional regulatory framework, in which savings can only be
9	applied to the Commission's goals if they are both attributable to the IOU's energy
10	efficiency program and specifically identified by the customer as the reason for engaging
11	in the activity, does not motivate increased cooperation and collaboration. In fact, the
12	current framework does the opposite as the utilities "compete" with other entities to have
13	energy savings attributable to their programs. To maximize energy savings in support of
14	the State's aggressive GHG goals, the Commission should explicitly recognize energy
15	efficiency savings credit for energy efficiency actions taken by customers who are
16	supported by IOU programs and who may be motivated by federal and state policies or
17	legislation (including that from the recent federal Economic Stimulus package), federal
18	funding or loans, local codes and ordinances, or multiple sources of "green" messaging.
19	These energy efficiency savings credits should be recognized as part of the Commission's
20	goal achievement. For example, local code enhancements (including reach codes) and
21	compliance improvement programs, as described in the Codes and Standards Program

¹⁸ 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.

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.

4	Incorporation of energy savings from customers who may be motivated in part by
5	federal and state policies or legislation, local codes and ordinances, etc. is consistent with
6	the Commission's goals for 2009-2011, as adopted in D.04-09-060. The potential study
7	upon which the goals are based did not envision other state initiatives and exclude those
8	customers' potential savings. Thus, the potential savings from those customers are
9	included in the Commission's goals. Removing the IOUs' ability to count savings from
10	these customers hampers the IOUs' ability to design and implement a portfolio that meets
11	Commission's adopted 2009-2011 goals, and does not promote the Commission's
12	important vision of increased collaboration in the State. The Joint IOUs request the same
13	treatment the Commission provided for the Governor's Green Building Initiative in D.05-
14	09-043 in which the Commission found that utility support for this state initiative would
15	not be reduced by free ridership reductions. ¹⁹ An extension of such treatment for other
16	state initiatives, including GHG reduction, allows for increased and essential
17	collaboration in making energy efficiency a way of life in California.
18 19	3. To encourage long-term measure installations, the maximum effective useful life (EUL) should be extended to 30 years.
20	Maximum Effective Useful Lives (EUL) should be extended to 30 years to better
21	reflect the true lifetime of certain measures. Currently the EULs of all energy efficiency

22

measures are subject to an arbitrary 20-year ceiling, regardless of the true lifetime of

¹⁹ D.05-09-043, page 137.

1	measures. This practice biases the portfolio toward shorter-term measures whose savings
2	are accumulated within that 20-year term span of time. However, the Commission and
3	the IOUs are looking to expand energy efficiency portfolios to implement more long-term
4	efforts such as comprehensive residential retrofits and new construction. Eliminating
5	years of savings for these measures reduces their ostensible cost-effectiveness and thus
6	limits the IOUs' ability to pursue them. Moreover, the 20-year limit contradicts the effort
7	to put energy efficiency on a level playing field with traditional supply-side options,
8	which have longer lives. The Joint IOUs thus believe that the arbitrary ceiling of 20
9	years for measures should be extended to accurately reflect savings achievements and
10	promote longer-term measures.
11 12	C. Policies that Need to Be Adopted in the CPUC's Subsequent Proceeding to Ensure the Success of Energy Efficiency
13 14	1. Gross Metrics Should Be Used For The Calculation Of Performance Toward The Performance Earnings Basis (PEB) Under The RRIM.
14	Toward The Performance Earnings Basis (PEB) Under The RRIM.
14 15	Toward The Performance Earnings Basis (PEB) Under The RRIM. The Joint IOUs support the consistent use of gross metrics to calculate the
14 15 16	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
14 15 16 17	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
14 15 16 17 18	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
14 15 16 17 18 19	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
14 15 16 17 18 19 20	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
 14 15 16 17 18 19 20 21 	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"

1	2008 Decision, ²⁰ appropriately promotes three key Commission objectives: (1)
2	maximizing energy efficiency in California, (2) underscoring Commission-set targets for
3	the IOUs to aim for in the development of portfolios in this proceeding and in the
4	implementation of these portfolios in 2009-2011, and (3) enhancing collaboration among
5	all stakeholders, including the IOUs, to meet these and other important goals. The
6	utilization of goals at the gross level better reflects the "big, bold" policies being
7	promoted by the Commission. The use of gross goals properly aligns the estimates of
8	energy efficiency program results with the real impacts of reduced load from these
9	programs on the utility systems. This alignment of focus should include the performance
10	basis used to calculate performance incentives for the administrators. It is unnecessary
11	and inappropriate to de-link the use of gross goals from the performance basis, which is
12	utilized to calculate shareholder earnings for meeting these goals. The Commission
13	should continue to align the objectives of the programs – delivery of energy savings to
14	customers – with the performance incentive mechanism. In fact, neither procurement
15	planners nor greenhouse gas reduction calculations need consider net-to-gross ratios.
16	This concept should be extended to the performance metrics for energy efficiency.
17	Utilizing both gross goals and a gross performance earnings basis calculation for
18	the 2009-2011 period can open up the opportunity for more program options that support
19	the long-term goals for energy efficiency than the use of net goals. The use of gross
20	goals should allow for parties to focus less on the attribution of savings and more on cost-
21	effectively maximizing the energy savings potential of energy efficiency programs in

²⁰ 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.

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.

4 The continued use of a net performance basis does not embody the "big, bold" 5 concepts being promoted in this proceeding. Currently, successful energy efficiency 6 programs that increase customer awareness are penalized with after-the-fact changes to 7 attribution. This penalizes the utilities for success in increasing customer awareness of 8 energy efficiency and energy efficient measures, which should not be the object of goal-9 setting and performance basis calculations. In order to focus on the overarching policies 10 for energy efficiency, including "big, bold" ideas, it is appropriate to remove this inherent 11 penalty included in the use of net-to-gross ratios. The utilities support the adoption of a 12 gross performance basis calculation for 2009-2011 which supports the development and 13 delivery of expanded program options and support the long-term policy goals for energy 14 efficiency in California. To do otherwise could adversely affect the Commission's effort 15 to promote and implement maximum levels of energy efficiency in the state.

16 Ultimately, it is gross savings impacts delivered to customers that affect future 17 resource needs and GHG emissions levels. The use of gross savings and benefits as a 18 metric will align the utility program results with the system impacts and reduced GHG 19 emissions. Consequently, the use of gross savings and benefits is also appropriate to 20 align with resource planning and GHG reduction perspectives. The Joint IOUs 21 acknowledge that the adoption of gross goals may warrant changes to the RRIM, 22 including the shared-savings rates, and look forward to addressing this issue in the new 23 incentive mechanism Rulemaking R.09-01-019.

2. Mid-Cycle Funding Augmentation Rules Should be Revised

2 The Joint IOUs propose to modify the 2006-2008 mid-cycle funding policy rule 3 for 2009-2011 to allow each of the IOUs to count all installed energy efficiency results 4 towards the Commission's aggressive energy savings and demand reduction goals. In 5 D.07-10-032, the Commission set a policy rule (Rule 12, Section IV) that did not allow 6 IOUs to claim energy savings and demand reductions results towards the achievement of 7 the Commission energy efficiency goals on the premise that mid-cycle funding 8 augmentation provides a "bonus" to utilities without any undue risk bestowed upon 9 them.²¹ D.07-10-032 also indicates that "in effect, mid-cycle funding augmentations" 10 provide the utilities with additional funding to accomplish a goal that was set with a lower budget."²² As a result of this rule, the IOUs are now discouraged from pursuing all 11 12 cost-effective energy efficiency even though there may be energy efficiency funds 13 available from prior years. The utilities propose the elimination of the 2006-2008 mid-14 cycle funding augmentation rule for 2009-2011 as it: (1) creates a disincentive to 15 propose new programs with augmented funding; (2) punishes, unnecessarily, IOUs when 16 market conditions change that may require additional funds to incent customers in order 17 to achieve the Commission energy efficiency goals (as is currently the case due to the 18 recession and credit crunch); and (3) works against the California's Energy Action Plan²³ 19 and Commission policy to pursue all cost-effective energy efficiency.

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21 innovation and ignore the creation of promising programs. This is contrary to the

An IOU's inability to record results from mid-cycle funding may stifle program

²¹ D.07-10-032, dated October 18, 2007, OP# 7, p. 143.

²² Section 6.7.3. Mid-Cycle Program Funding Augmentations, p. 100.

²³ California Energy Action Plan, adopted by D.08-09-080.

1	Commission's desire to promote innovation and test new program designs. Another key
2	fault of the 2006-2008 mid-cycle funding augmentation rule is it assumes that during the
3	program implementation cycle the marketplace remains static and acts just as assumed
4	during the planning process. The marketplace is dynamic with many actors and
5	unforeseen influences which can foreclose expected opportunities as well as create new
6	opportunities.

7 Table 2-1: Preferred Scenario—Proposed SoCalGas Program Costs to Exclude from the
 2009-2011 Earnings Mechanism

Strategic Planning Activities	Total 2009-2011 Program Cycle Budget
SW-Codes & Standards	\$2,996,224
SW-Emerging Technologies	\$5,289,583
SW-RNC	\$9,769,464
SW-Workforce Education & Training	\$11,683,888
SW-HVAC	\$2,320,586
SW-IDSM	\$600,122
SW-ME&OA - Marketing, Education & Outreach (Core)	\$6,039,130
Local Sustainable Communities	\$823,770
Local Strategic Develop & Integration	\$853,187
Government Partnerships Programs Total	\$7,269,411
Total Long-Term Innovation Programs	\$47,645,366

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Table 2-2: Mandated Scenario—Proposed SoCalGas Costs to Exclude from 2009-2011
 Earnings Mechanism

Strategic Planning Activities	Total 2009-2011 Program Cycle Budget
SW-Codes & Standards	\$2,996,224
SW-Emerging Technologies	\$5,289,583
SW-RNC	\$13,009,619
SW-Workforce Education & Training	\$11,683,888
SW-HVAC	\$2,320,586
SW-IDSM	\$600,122
SW-ME&OA - Marketing, Education & Outreach (Core)	\$6,039,130
Local Sustainable Communities	\$823,770
Local Strategic Develop & Integration	\$853,187
Government Partnerships Programs Total	\$7,269,411
Total Long-Term Innovation Programs	\$50,885,521





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1 2 3	SECTION 3 SOCALGAS' PORTFOLIO REFLECTS STATE ENERGY POLICIES AND STRATEGIC PLAN
4	I. Portfolio Supports the State's Energy Action Plan and other Energy Policies
5	A. Energy Efficiency is the Resource of First Choice
6	The 2008 update of the Energy Action Plan listed Special Action Areas and
7	specific next steps for energy efficiency. SoCalGas fully embraces those
8	recommendations and has incorporated a wide range of actions in its EE portfolio to help
9	achieve the objectives of the Energy Action Plan. Our proposed activities in each of the
10	Special Action Areas are as follows:
11	• Need for coordination and integration:
12	SoCalGas has undertaken numerous actions to improve the integration of its EE
13	programs and enhance our coordination with other supporting organizations such as SCE,
14	water agencies and local governments. Specifically, our joint Local Government
15	Partnerships with SCE are designed to provide integrated EE and DR information to the
16	cities and their residences. In addition our Residential New Construction and
17	Commercial New Construction programs are coordinated with SCE to ensure
18	comprehensive information is provided to the design and development community.
19	Finally, SoCalGas is working with SCE to pilot a whole house program for existing
20	homes. These actions demonstrate a comprehensive effort to coordinate and integrate the
21	region's energy efficiency programs to reduce costs, improve customer satisfaction and
22	increase program results.
23	• Broadening perspectives and the focus of action
24	SoCalGas has long recognized the value of early intervention into project design
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1	to achieve maximum energy savings. Our New Construction organization is charged
2	with maintaining close relationships with developers, architects and designers to promote
3	our EE programs. New to this program cycle is a proposal to test market acceptance of
4	utility ownership of major HVAC systems on commercial building under our Green
5	Energy Systems program. This program broadens our approach to achieving energy
6	savings from major energy systems that, once installed, last for up to 30 years and present
7	a significant lost opportunity if not captured up front. Another example of our broadened
8	perspectives and focus in SoCalGas' 2009-2011 portfolio is our Cool Planet program
9	with the Climate Registry which targets high level executives to promote GHG
10	reductions through EE projects.
11	• Leverage through partnerships
12	Our successful partnerships with water agencies and local governments are
13	proposed to grow in this portfolio to take further advantage of synergies in program
14	outreach and implementation and ultimately increase participation in EE programs at city
15	facilities and with the general public. We have also reorganized our program
16	management staff to operate as customer segment managers who work cooperatively
17	with their segment based SoCalGas Account Executives and
18	vendors/contractors/associations to better design and promote our EE programs.
19	The 2008 Energy Action Plan Update also lists six "next steps" recommended for
20	utility energy efficiency programs. SoCalGas has considered each of these
21	recommendations in the design of its portfolio and has included new programs or
22	program modifications to achieve each one.
23	• Statewide strategic plan roadmap
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1	SoCalGas along with PG&E, SCE and SDG&E were responsible for preparing
2	the draft California Energy Efficiency Strategic Plan and have included a roadmap of our
3	actions to implement the strategic plan in section 2) c. of this chapter.
4	• Strategies to achieve "big bold" initiative goals
5	A listing of proposed SoCalGas activities to support the big bold initiatives is in
6	section 2) b. of this chapter.
7	• New strategies to address existing buildings
8	For residential customers, SoCalGas has proposed a pilot "whole house" program
9	with SCE to encourage home owners to implement a comprehensive upgrade. This
10	program will be marketed with the assistance of realtors and contractors to capture the
11	new home buyer and home renovator and convince them to consider EE, DR and
12	renewables in their project. For commercial customers, our Green Energy Systems
13	program mentioned above is also intended to encourage comprehensive upgrades of
14	existing buildings.
15	• Partnerships with local governments
16	SoCalGas has existing partnerships with numerous cities and counties within our
17	service territory. We are confident that successful partnerships with local governments
18	can deliver energy savings through city owned buildings, enhanced code compliance and
19	enhanced public outreach and are committed to working with our partners to achieve that
20	goal.
21	Additional low-income energy efficiency initiatives
22	SoCalGas submitted its enhanced low-income energy efficiency portfolio on May 49

15th (A.08-05-025) with increased funding and greater emphasis on integration with other
 EE programs.

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B. Portfolio Supports Assembly Bill ("AB") 32 Goals

4 The regulatory requirements under AB 32 are still being debated but it is certain 5 that it will have a profound impact on California, its citizens and businesses and on 6 governments around the world. As the requirements are finalized, SoCalGas is prepared 7 to adjust its portfolio as necessary to support its implementation. In the interim, 8 SoCalGas has proposed a partnership with the Climate Registry to jointly implement a 9 program called Cool Planet to educate CEOs and CFOs of larger customers on the value 10 of early action to reduce GHG emissions, provide incentives to calculate their GHG 11 inventory and reinforce the value of energy efficiency as the lowest cost GHG reduction 12 measure. The objective is to convince senior executives to "push" the GHG message 13 down through their organization and raise the priority for capital allocation to EE 14 projects. 15 Another activity that directly supports AB 32 objectives is the statewide outreach 16 activity that SoCalGas jointly funds with PG&E, SCE and SDG&E which carries the 17 message on climate change to all Californians. 18 The following table shows the estimated environmental benefits (tons of CO2 and

- other pollutants avoided) that would result from achieving SoCalGas' proposed portfoliosavings under its Preferred and Mandated scenarios.
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- 1 Table 3-1: Preferred Scenario—Environmental Benefits Resulting from 2009-2011
- 2 Proposed Program Benefits

SoCalGasPreferred	Gas Reductions	
Annual Reductions	CO2 (tons)	NOX (lbs)
2009	179,384	347,022
2010	189,685	364,597
2011	195,734	378,178
Total Annual	564,802	1,089,797
Lifecycle Reductions		
2009	2,906,139	5,856,153
2010	3,002,833	6,017,438
2011	3,081,814	6,213,887
Total Lifecycle	8,990,785	18,087,478

* Annual Reductions are the units implemented in the year,

- multiplied by the annual emmissin reduction for the measures.
- 3
- 4 Table 3-2: Mandated Scenario—Environmental Benefits Resulting from 2009-2011
- 5 Proposed Program Benefits

SoCalGasMandated	Gas Reductions			
Annual Reductions	CO2 (tons)	NOX (lbs)		
2009	165,321	317,737		
2010	174,780	334,042		
2011	185,308	355,349		
Total Annual	525,409	1,007,129		
Lifecycle Reductions				
2009	2,673,701	5,364,065		
2010	2,766,234	5,521,914		
2011	2,940,257	5,882,505		
Total Lifecycle	8,380,191	16,768,483		

* Annual Reductions are the units implemented in the year,

multiplied by the annual emmissin reduction for the measures.

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C. Portfolio Supports Governor's Green Building Initiative

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The Governor's Green Building Initiative set a goal of achieving 20% reduction

- 9 in energy use in state buildings by 2015. SoCalGas has been actively working with state
- 10 agencies to achieve this goal but the progress has been slow due to financing and project

1	planning hurdles. To address these hurdles in its proposed portfolio, SoCalGas has
2	greatly expanded its funding of the statewide partnership with the UC/CSU system to
3	take advantage of the numerous projects that have been in the planning stage in the '06-
4	'08 program cycle. SoCalGas has also expanded its On-Bill Financing program to offer
5	up to \$250,000 financing over 10 years to institutional customers to help address the
6	financing hurdle and it has proposed the Green Energy Systems utility ownership option
7	for major HVAC systems that are typical for many state buildings.
8	The table below shows the expected savings by building type from SoCalGas'
9	2009-2011 proposed energy savings contribution to the Governor's Green Building
10	Initiative.

11	Table 3-3: Preferred Scenario—2009-2011 Green Building Initiative (GBI) Summary
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				Emissions Reduction		
Programs Contributing to the GBI		Budget(1)	Gas Savings (Gross Therms)	CO2 (tons)	Nox (lbs.)	PM10 (lbs.)
Core Programs (Commercial Sector Only)	\$	44,555,257	63,335,105	5,897,955	11,865,385	-
California State Government Buildings	\$	20,940,971	29,767,499	2,772,039	5,576,731	
Federal & Local Government Buildings	\$	12,475,472	17,733,829	1,651,427	3,322,308	
Commercial Buildings	\$	11,138,814	15,833,776	1,474,489	2,966,346	
Government Partnerships	\$	-	-	-	-	-
California State Government Buildings						
Federal & Local Government Buildings						
Commercial Buildings						
Third Parties	\$	11,138,814	15,833,776	1,474,489	2,966,346	-
California State Government Buildings	\$	5,235,243	7,441,875	693,010	1,394,183	
Federal & Local Government Buildings	\$	3,118,868	4,433,457	412,857	830,577	
Commercial Buildings	\$	2,784,704	3,958,444	368,622	741,587	
	_					
Grand Total	\$	55,694,072	79,168,881	7,372,444	14,831,732	-
California State Government Buildings Total	\$	26,176,214	37,209,374	3,465,049	6,970,914	-
Federal & Local Government Buildings Total	\$	15,594,340	22,167,287	2,064,284	4,152,885	-
Commercial Buildings Total	\$	13,923,518	19,792,220	1,843,111	3,707,933	-

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

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Table 3-4: Mandated Scenario—2009-2011 Green Building Initiative (GBI) Summary

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			En	1	
		Gas Savings			
Programs Contributing to the GBI	Budget(1)	(Gross Therms)	CO2 (tons)	Nox (lbs.)	PM10 (lbs.)
Core Programs (Commercial Sector Only)	\$ 163,196,646	80,190,138	7,559,794	15,256,393	-
California State Government Buildings	\$ 76,702,424	37,689,365	3,553,103	7,170,505	
Federal & Local Government Buildings	\$ 45,695,061	22,453,239	2,116,742	4,271,790	
Commercial Buildings	\$ 40,799,161	20,047,535	1,889,948	3,814,098	
Government Partnerships	\$ -	-	-	-	-
California State Government Buildings					
Federal & Local Government Buildings					
Commercial Buildings					
Third Parties	\$ 40,799,161	20,047,535	1,889,948	3,814,098	-
California State Government Buildings	\$ 19,175,606	9,422,341	888,276	1,792,626	
Federal & Local Government Buildings	\$ 11,423,765	5,613,310	529,186	1,067,947	
Commercial Buildings	\$ 10,199,790	5,011,884	472,487	953,525	
Grand Total	\$ 203,995,807	100,237,673	9,449,742	19,070,491	
California State Government Buildings Total	\$ <u>203,333,807</u> 95,878,029	47,111,706	4,441,379	8,963,131	
Federal & Local Government Buildings Total	\$ 57,118,826	28,066,548	2,645,928	5,339,737	
Commercial Buildings Total	\$ 50,998,952	25,059,418	2,362,436	4,767,623	-

(1) Budget contains incentives to participants only.

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

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5 II. Portfolio Supports the Statewide Energy Efficiency Strategic Plan

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

8 The most significant "local variations" applicable to SoCalGas is our high

9 concentration of industrial customers. This has warranted program changes that address

- 10 the customized nature of industrial projects and the large project costs often encountered.
- 11 SoCalGas' non residential custom program is flexible in its application and maximum
- 12 project size has been increased to \$1,000,000 to support this valuable market segment.
 - B. Portfolios Contain Appropriate Strategies and Program Designs for the Three Big Bold Energy Efficiency Strategies
 - 1. Residential New Construction

16 SoCalGas' portfolio supports the BBEES in a number of ways starting with the

17 Residential New Construction program that will be focusing on pushing builders to

achieve 35% better than Title 24. 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 small pilots for Net Zero Home
designs within this program cycle which will test the availability, cost and acceptability
of net zero building options.

7

2. Commercial New Construction

SoCalGas' 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. Our proposed Green Energy Systems pilot
should 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.

15

3. Heating, Ventilation, and Air Conditioning Industry

SoCalGas' Codes and Standards and Local Government Partnership programs
will be placing greater emphasis on cooperatively promoting and implementing quality
installation and code compliance for HVAC systems. We will also be piloting early
replacement of furnaces in older residential neighborhoods to facilitate a more rapid
turnover of these inefficient units.

C. Portfolios Support Strategic Plan Vision for All Sectors
 SoCalGas' 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.

5

1. Existing Residential

SoCalGas' 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, and partnering with SCE on a whole-house approach in our Single Family
Energy Efficiency Retrofit program. Also, our Codes and Standards program will be
focusing on promoting high efficiency local building codes through our Local
Government Partnerships.

12

2. Existing Commercial

13 SoCalGas' commercial programs fully support the Strategic Plan Vision and its 14 four key strategies by our enhanced Codes and Standards program that focuses on code 15 compliance and promotion of high efficiency local building codes through our Local 16 Government Partnerships. We also plan to have our billing system integrated with 17 Energy Star Portfolio Manager to facilitate benchmarking and will be actively promoting 18 building benchmarking. We propose to increase the funding cap and repayment period 19 for our On-Bill Financing to make it more attractive to a larger population of customers. 20 In addition our proposed Green Energy Systems pilot provides an alternative "financing" 21 option for customers. Finally, we propose zero net energy pilots to demonstrate today's 22 technologies to prospective commercial builders.

3.	Ind	us	tri	al

1	3. Industrial
2	SoCalGas has a large industrial customer segment and our Non-Residential
3	Custom Energy Efficiency programs appropriately support the Strategic Plan Vision for
4	this segment and its four key strategies. Our Mobile Workshops takes training and
5	analysis tools directly to customer facilities to address process improvement
6	opportunities. Our On-Bill Financing program can assist in the funding of the
7	recommended projects. We also plan to fully participate in the development of
8	California's energy efficiency brand through the Statewide Marketing and Outreach
9	program. Lastly, our Cool Planet program with the Climate Registry will help industrial
10	customers understand and address their GHG emissions.
11	4. Agricultural
12	SoCalGas' programs support the Strategic Plan Vision for this segment through
13	our On-Bill Financing program which has been expanded and will better match the
14	financing needs of this segment. In addition, our state-wide efforts on Marketing,
15	Education and Outreach efforts will provide consistent information across the state
16	delivered locally to this segment. We will also be jointly piloting a program with SCE
17	and local water agencies to target comprehensive process upgrades at food processing
18	facilities.
19	5. Emerging Technologies
20	The Emerging Technology programs at all of the IOUs are proposed to be
21	expanded significantly and are designed to work cooperatively to support the Strategic
22	Plan through a variety of strategies including gathering market intelligence, leveraging
23	private investment, promoting product improvements and adoption and focusing on
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leading edge technology. Specific project areas identified for funding include building
 management systems, innovative heat recovery, super-efficient boilers and residential
 whole house solutions.

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6. Codes and Standards

5 SoCalGas' Codes and Standards program is broadening its role significantly to 6 support the Strategic Plan's vision for this sector. Enhanced activities include working 7 with Local Government Partnerships to enhance code compliance and enforcement and 8 promote adoption of higher efficiency local building codes. In addition, case studies are 9 being expanded to provide more research and analysis to increase the rate technologies 10 are transitioned from programs to code.

11

7. Local Government

SoCalGas' 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 and joint outreach on EE programs
to their citizens.

17

8. Demand-Side Management Integration

This section of the testimony presents SoCalGas' current and proposed integration
activities across various program portfolios 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"). SoCalGas received approval of its 2009-2011 LIEE

1	application (A.08-05-025). SoCalGas notes that it is not the program administrator of the
2	electric EE, DR, DG and CSI program portfolios and they are currently assigned to SCE
3	for most of our service territory and with PG&E and SDG&E in smaller portions of our
4	service territory. Although, these various proceedings are currently independent of each
5	other, the CEESP provides vision and strategy to leverage these various program efforts
6	to ensure the realization of the aggressive BBEES laid out by the Commission in D.07-
7	10-032. Refer to Witness Besa's Section 4.

9. Marketing, Education, and Outreach

SoCalGas 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 compliment local utility messages that promote specific program
participation.

16

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 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.

23

Achieving success in creating a well-educated workforce well educated in energy

1	efficiency matters will require large-scale, ongoing, collaborative education, and training
2	efforts to match evolving demands for both the type of jobs and number of workers
3	needed to fully implement the Strategic Plan.
4	Addressing human capital resource requirements will require collaborative efforts
5	of federal, state and local governments; financial institutions; community-based and non-
6	profit organizations; industry and labor organizations and utilities. These entities present
7	potential funding sources and opportunities for partnerships.
8	In support of the CEESP's vision that "by 2020 California's workforce is trained
9	and engaged to provide the human capital necessary to achieve California's economic
10	energy efficiency and demand-side management potential," IOUs plan to implement a
11	variety of workforce development strategies that encourage and nurture the development
12	of "green collar" jobs through their strategic planning initiatives, and education and
13	training programs. These strategies are contained in its WE&T program implementation
14	plan (see Appendix B).
15	SoCalGas' Education and Training program will also contribute to developing a
16	"green" workforce as it provides various opportunities through its various energy
17	efficiency training programs and seminar.
18	11. Low-Income Energy Efficiency Program
19	SoCalGas' Energy Efficiency programs support the Strategic Plan's vision of
20	integration with LIEE programs in several ways. First, our Residential New Construction
21	program proposes a pilot to work with developers of affordable housing to develop best
22	practice design techniques for this segment, provide design assistance incentives,
23	financial incentives and encourage participation in a sustainable building program. Our

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Multi-family program will be integrated with LIEE to cover common areas in low
 income developments that are not covered by the LIEE program. We will also work with
 LIHEAP agencies to provide information about appliance rebates.

- 4 III.Portfolios Provide Continued Strategic Planning in 2009-2011 and Beyond
- 5

A. Strategic Development and Integration

6 SoCalGas is committed to the vision and goals outlined in the CEESP which 7 includes customer segmentation and targeted program development, the integration of 8 EE/DSM and emerging high efficiency technologies coupled with innovative and 9 comprehensive program design and theory, to create market transformation in California. 10 A focused team of qualified resources has been identified to support these activities and 11 drive the direction of the programs through innovation and the inclusion of best practices. 12 This team will be dedicated to this activity, collaborating with regulatory, program, 13 technology and other staff, as a coordinating entity. 14 The team will be specifically responsible for overseeing activities associated with 15 achieving strategic plan goals and ensuring that the strategic plan itself is updated, 16 maintaining relevance and providing guidance and direction on a continuous basis. In 17 addition, the team will be engaged in ongoing work to review and update implementation 18 of the CEESP, and 2009-2011 programs based upon it.

19 20

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

SoCalGas 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 Section 1, the IDSM section and more specifically

1 in the Program Implementation Plans in Appendix B.

Some of the pilots in SoCalGas' application include, Sustainable Communities
Case Studies, Whole House Performance Program (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
Witness Besa's Section 1.

8

C. Encumbering Funds for Long-Term Projects

9 In previous program years (prior to 2006), the Commission allowed the utilities to 10 commit incentive monies associated with customer projects with installation periods 11 longer than the program cycle. Utilities tracked commitments and reported the 12 expenditure when it finally occurred and at that time recorded the savings. This was a 13 practice as far back as 1994. SoCalGas believes that this is a reasonable process for 14 encumbering funds for long-term projects. It assures customers of the availability of 15 program funds to finance their project. However, a reasonable contract term should be 16 determined based on the target market (e.g., new construction projects should have at 17 least a 4 to 5 year commitment). Projects that fail to install within the 4 to 5 year period 18 will not be guaranteed incentives beyond that time.

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1 2	SECTION 4 WITNESS QUALIFICATIONS
3	My name is Mark F. Gaines. My business address is 555 West Fifth Street, Los
4	Angeles, CA 90013. I am employed by Southern California Gas Company as Director
5	Customer Programs. My responsibilities include Energy Efficiency and Demand
6	Response program development and implementation for SDG&E and SoCalGas. I have
7	been employed by the SoCalGas since 1983.
8	I have a Bachelor of Science in Civil and Environmental Engineering, a Masters
9	in Business Administration and am a registered professional engineer in Mechanical
10	Engineering in California. I have previously testified before this Commission.
11	The purpose of my testimony is to sponsor Chapter I of this Application.