ALJ/MEG/eap **Mailed 9/27/2005**

Decision 05-09-043 September 22, 2005

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Pacific Gas and Electric Company (U 39-E), for approval of the 2006 - 2008 Energy Efficiency Programs and Budget.	Application 05-06-004 (Filed June 1, 2005)
Southern California Gas Company (U 904-G), for approval of Natural Gas Energy Efficiency Programs and Budgets for Years 2006 through 2008.	Application 05-06-011 (Filed June 1, 2005)
Southern California Edison Company (U 338-E), for approval of its 2006 - 2008 Energy Efficiency Program Plans and associated Public Goods Charge (PGC) and Procurement Funding Requests.	Application 05-06-015 (Filed June 2, 2005)
San Diego Gas & Electric Company (U 902-E), for approval of Electric and Natural Gas Energy Efficiency Programs and Budgets for Years 2006 through 2008.	Application 05-06-016 (Filed June 2, 2005)

INTERIM OPINION: ENERGY EFFICIENCY PORTFOLIO PLANS AND PROGRAM FUNDING LEVELS FOR 2006-2008 - PHASE 1 ISSUES

TABLE OF CONTENTS

Title Page

INTERIM OPINION: ENERGY EFFICIENCY PORTFOLIO PLANS AND PROGRAM FUNDING LEVELS FOR 2006-2008 - PHASE 1 ISSUES 22

1. Introduction and Summary 22

2. Background and Procedural History 1010

3. Scope of Proceeding 1616

4. Overview of Utility Portfolio Plans, Funding Levels and Competitive Bidding Proposals 1818

4.1. Portfolio Plans and Funding Levels 1919

4.1.1. SCE 2020

4.1.2. PG&E 2121

4.1.3. SDG&E and SoCalGas 2424

4.1.4. Statewide Programs and Coordination 2525

4.1.5. Integrated Resource Programs 2828

4.1.6. Partnership Programs 2929

4.1.7. Co-Branding With the Climate Change Action Registry 3131

4.1.8. Green Buildings Initiative 3333

4.2. Competitive Bid Components and Evaluation Criteria 3737

4.2.1. SCE 3838

4.2.1.1. Targeted Solicitation 3838

4.2.1.2. IDEEA and INDEE Solicitations 3939

4.2.1.3. Bid Process and Evaluation Criteria 4040

4.2.2. PG&E 4141

4.2.2.1. Targeted Markets 4242

4.2.2.2. Innovative Savings and Market Integrated Demand-Side Management (MIDSM) 4343

4.2.2.3. Bid Process and Evaluation Criteria 4444

4.2.3. SDG&E and SoCalGas 4545

4.2.3.1. Targeted Solicitation 4545

4.2.3.2. Innovative Program Idea Solicitation 4646

4.2.3.3. Bid Process and Evaluation Criteria 4646

5. Incremental Funding Requirements, Requested Ratemaking Treatment and Projected Rate/Bill Impacts 4747

6. Case Management Statement and Positions of the Parties 5151

6.1. Portfolio Cost-Effectiveness 5252

6.2. Achievement of Energy Savings Goals 5454

6.3. Portfolio Balance Between Short- and Long-Term Savings 6262

6.4. Sufficient Strategies to Reduce Critical Peak Loads 6464

6.5. Allocation Among Market Sectors With Respect to Savings Potential 7070

6.6. Strategies to Minimize Lost Opportunities 7070

6.7. Statewide Programs and Coordination 7272

6.8. Competitive Bid Components and Evaluation Criteria 7575

6.8.1. PG&E 7676

6.8.2. SDG&E 7979

6.8.3. SoCalGas 8080

6.8.4. SCE 8181

6.8.5. Fund Shifting Guidelines 8383

6.8.6. Funding Levels, Rate Recovery and Associated Bill/Rate Impacts 8383

7. Savings Associated with Pre-2006 Codes and Standards Advocacy 8484

7.1. Estimates of Savings 8787

7.2. Joint Staff Recommendations 9090

7.3. Positions of the Parties 9292

8. Discussion 9494

8.1. Threshold Issue of Portfolio Cost-Effectiveness 9696

8.2. Achievement of GWh and Therm Savings Goals 9696

8.3. Peak Demand Reductions and Related Issues 101101

8.4. Competitive Bidding 114114

8.5. Codes and Standards Savings 123123

8.6. Funding Levels and Ratemaking Treatment 134134

8.7. EM&V-Related Issues 136136

8.8. Avoided Costs/E3 Calculator Related Issues 137137

8.9. Fund Shifting Guidelines 143143

8.10. Other Issues 158158

9. Interim Authorization and Next Steps 163163

10. Comments on Draft Decision 166166

11. Assignment of Proceeding 169169

Findings of Fact 169169

Conclusions of Law 183183

INTERIM ORDER 185185

Table 1: Summary Table of Portfolio Cost-Effectiveness (2006-2008)

Table 2: CO2 Emissions Savings

Table 3: Summary of Current/Proposed Funding for Statewide Programs

Table 4: Incremental Electric Revenue and Gas Funding Requirements - PG&E

Table 5: Incremental Electric Revenue Requirements - SCE

Table 6: Annual Program Budget Requirements - SDG&E

Table 7: Annual Program Budget Requirements - SoCalGas

Table 8: Adopted Fund Shifting Rules

Attachment 1: Abbreviations and Acronyms

Attachment 2: Energy Efficiency Advisory Groups: Purpose, Process and Composition

Attachment 3: Program Summaries, by Utility

Attachment 4: Program-by-Program Portfolio Budgets Projected Portfolio Savings Impacts

Attachment 5: Green Building Initiatives and Savings Projections

Attachment 6: Proposed and Adopted Competitive Bid Evaluation Criteria

Attachment 7: Projected Rate and Bill Impacts (2006-2008), Including EM&V

Attachment 8: Planning Schedule for Coordination of Statewide Activities

Attachment 9: Description of Fund Shifting Proposals

Attachment 10: Treatment of Savings From Pre-2006 Codes and Standards Advocacy

INTERIM OPINION: ENERGY EFFICIENCY PORTFOLIO PLANS AND PROGRAM FUNDING LEVELS FOR 2006-2008 - PHASE 1 ISSUES

1. Introduction and Summary[1]

By today's decision, we authorize 2006-2008 energy efficiency portfolio plans and funding levels for Pacific Gas and Electric Company (PG&E), San Diego Gas and Electric Company (SDG&E), Southern California Edison Company (SCE), and Southern California Gas Company (SoCalGas), collectively referred to as "the utilities." These plans place cost-effective energy efficiency at the forefront of utility resource acquisition, consistent with the goals of the Energy Action Plan and our energy efficiency policies.

Departing from the administrative structure for energy efficiency of recent years, we tasked the utility program administrators to develop 2006-2008 energy efficiency portfolios that would meet or exceed our aggressive energy savings goals. We required that the resulting portfolios be cost-effective from two perspectives: (1) the total resource cost perspective, whereby the value of the energy savings is greater than the total cost of installed measures and all program costs and (2) the program administrator cost perspective, whereby the value of energy savings outweighs the cost of utility financial incentives to customers and all other program costs.

Consistent with our direction in Decision (D.) 05-01-055, the utilities developed their portfolio plans through a process of constructive and collegial exchange of information and ideas among utility staff, program advisory group members, third-party program implementers (including local governments), utility customers and other members of the public. Through the development of a Case Management Statement (CMS), this constructive exchange continued after the utility applications and parties' comments on those applications were filed.

In the aggregate as well as individually, the utilities' applications show that they expect to exceed the Commission's aggressive energy savings targets cost-effectively. Projected total resource savings to ratepayers (avoided utility generation and electric power and natural gas purchases, transmission and distribution costs) are approximately $5.4 billion over the life of the measures. With total costs estimated at $2.7 billion (including customers' out-of-pocket expenditures for energy efficiency measures/equipment), the total investment in energy efficiency during 2006-2008 is projected to produce $2.7 billion in net resource benefits (resource benefits minus costs). This translates into reduced utility revenue requirements and lower bills for customers, relative to what those levels would be without the energy efficiency programs.

The utilities project that ratepayer investments in energy efficiency will be capable of avoiding the equivalent of three giant (500 megawatt (MW)) power plants over the next three years. In addition, the lifetime electricity savings that result from measures installed during that period will reduce global warming pollution by an estimated 3.4 million tons of carbon dioxide in 2008, equivalent to taking about 650,000 cars off the road.[2]

The sensitivity analysis performed in this proceeding indicates that the proposed program plans will still be cost-effective even if the utilities achieve only 60% of projected savings. For SCE and SDG&E, the portfolios would still be cost-effective at 40% of projected savings. We conclude that the proposed portfolio plans are cost-effective on a prospective basis, taking reasonable account of the uncertainties identified by parties with respect to key cost-effectiveness input parameters.

To achieve these cost-effective savings, annual ratepayer investments in energy efficiency will need to increase from approximately $500 million per year to over $800 million, including funding for evaluation, measurement and verification (EM&V). Specific EM&V plans and budgets will be authorized by subsequent decision. Today, we authorize the following 2006-2008 energy efficiency program budgets, not including funding for EM&V activities:[3]

	Current	Authorized 2006-2008 Program Budgets			
	2005	2006	2007	2008	2006-2008
PG&E	$188,899,022	$244,653,750	$279,428,777	$343,385,716	$867,468,243
SCE	$205,691,923	$216,574,075	$225,111,946	$233,145,977	$674,831,998
SDG&E	$63,304,369	$75,135,490	$84,665,039	$97,740,036	$257,540,565
SoCalGas	$37,408,392	$44,322,946	$56,582,684	$68,016,003	$168,921,633
Total	$495,303,706	$580,686,261	$645,788,446	$742,287,732	$1,968,762,439

As described in this decision, today's adopted portfolio plans reflect a mix of proven program designs and implementation strategies in combination with approaches to solicit new, innovative designs and savings technologies to enhance overall portfolio performance, both in the short- and long-run. Examples of new program strategies include on-bill financing, sustainable communities programs and integrated offerings to targeted markets, such as agricultural and food processing, which incorporate best practices, a variety of energy efficiency measures, financing, incentives, design assistance and equipment rebates. The plans also include continued and new partnerships with local governments to tap the energy savings potential in local communities.

Each of the utility portfolios support statewide program activities in the areas of emerging technologies, support for codes and standards and statewide marketing and outreach. The utilities will also be working with upstream market participants, e.g., manufacturers, retailers and distributors, in order to increase the acceptance and availability of energy efficient measures and equipment in all markets. In addition, the utilities continue to develop statewide consistency in rebate levels and participant rules. As described in this decision, they will be coordinating these activities statewide through joint meetings with their advisory groups and the development of joint plans for program implementation.

Approximately $500 million in program funds for the utilities combined will be put out to bid over the three-year program cycle to solicit third-party proposals.[4] The bid solicitations will target specific program areas that could be enhanced through improved design and implementation, or to solicit proposals for new program designs and technologies. For example, SCE will solicit bids for appliance recycling, home energy efficiency surveys, comprehensive heating, ventilating and air conditioning (HVAC) program activities, small business direct install programs, among others. PG&E plans to solicit competitive bids in each of its targeted markets, including residential new construction, agricultural and food processing, schools, colleges and universities and high technology sectors. Each of the utilities will be also be soliciting bids for new and innovative programs that have the potential for longer term cost-effective energy savings, which may include commercialization/demonstration projects for emerging technologies.

By today's decision, we adopt the bid evaluation criteria that the utilities will use to develop their request for proposals (RFPs) for these competitive bid solicitations and select the winning bidders. As described in D.05-01-055, the bid evaluation process will be monitored by a subgroup of the utilities' program advisory groups, referred to as the "Peer Review Group," or "PRG." The PRG is chaired by Energy Division staff and PRG members have no financial interest in the outcome of the bid solicitations. Their independent assessment of the bid solicitation process will be appended to the utilities' compliance filings for Commission consideration of the results of the solicitations and final program offerings, later this year. At that time, we will review updated cost-effectiveness calculations to ensure that the portfolios continue to meet our savings goals and portfolio-level cost-effectiveness requirement, based on the responses to the bids and bid selections.

With respect to codes and standards advocacy programs, we adopt the recommendation presented by Energy Division and California Energy Commission (CEC) staff (Joint Staff) to credit 50% of the energy and peak savings resulting from those programs towards the 2006-2008 savings goals, subject to the condition that the actual savings are verified in studies conducted over the next three years. Consistent with Joint Staff's recommendations, we will consider these savings as a hedge against inherent risks that other programs may not meet their performance goals, as we evaluate the final program plans during the compliance phase of this decision. However, we defer consideration of whether these savings in new buildings and appliances installed after 2008 should count towards the savings goals in subsequent years, until we have fully considered this issue in the context of how we update the savings potential and associated goals for those years. We also clarify how we will treat these savings in cost-effectiveness and performance basis calculations for the 2006-2008 program cycle, and subsequent program cycles. Finally, we identify related issues that should be considered in the EM&V phase of this proceeding, in the context of updating our savings goals, or when we specify a risk/return incentive mechanism for energy efficiency programs, as appropriate.

Today's decision also describes the process whereby the utilities, with input from their advisory groups (and PRG subgroups) and the public, will continue to refine and improve program designs, implementation strategies and offerings throughout program implementation. For this purpose, we adopt fund-shifting rules that enable the utilities to make needed mid-course corrections to improve portfolio performance during implementation. In a separate phase of this proceeding, we are establishing EM&V plans for the 2006-2008 portfolio offerings and associated reporting requirements.[5] The results of the EM&V studies and regular reports on program costs and activities will provide this Commission, utility program administrators, their advisory groups and the interested public with the information needed to ensure that the overall portfolio remains cost-effective to ratepayers throughout program implementation.

Following today's decision, the compliance phase begins as the utilities complete their competitive bid solicitations and finalize their program plans for our consideration. As part of that process, we have directed the utilities to conduct sensitivity analysis to assess whether those plans remain cost-effective and meet our savings goals if key parameters related to savings are lower than expected. We also require the utilities to hold a workshop with interested parties within 15 days of the effective date of this decision to discuss the energy efficiency avoided costs and cost-effectiveness calculator details used to estimate peak demand reductions. As discussed in this decision, besides being informational, this workshop should facilitate the identification of improvements to the "E3 calculator" that are relatively easy and quick to implement by the utilities, without causing delays to the current bid solicitation schedule. In addition, we expect that the workshop discussions will help Joint Staff and interested parties begin to identify what issues should be addressed during the post-compliance phase updating process described in today's decision.

In response to concerns over our current avoided cost valuation of peak demand reductions, in particular for those hours that are considered "critical peak," we take immediate steps today to evaluate the issues raised in this proceeding as part of the avoided cost updating process anticipated by D.05-04-024. In addition to considering refinements to the current avoided cost methodology with respect to the valuation of peak load reductions and related issues, this updating process will also consider (1) a common definition of peak demand reductions (and critical peak demand reductions or other terms, as appropriate) to use in evaluating energy efficiency resources, (2) refinements to the E3 calculator model that produces cost-effectiveness results and projections of peak load savings, and (3) improvements to the consistency in underlying load shape data and the methods by which that data is translated into peak savings estimates. As discussed in this decision, we intend to fully address these issues during the first half of 2006, or as soon thereafter as practicable.

We also address certain EM&V issues raised during this phase of the proceeding. In particular, we clarify that net-to-gross ratio assumptions will be adjusted (trued-up) on an *ex post* basis when we evaluate actual portfolio performance.[6] We also specify the expected useful life estimates to use in reporting portfolio performance and in calculating the performance basis for the 2006-2008 program cycle. In addition, we clarify that the Green Building Initiative does not create a free ridership issue with respect to projects that achieve a 20% improvement over Title 24 standards.

Pending the outcome of the compliance phase in this proceeding, today's decision authorizes the utilities to begin implementing on January 1, 2006 their non-competitive bid programs, as identified in their proposed portfolio plans. We extend this interim authorization until our final authorization of the proposed 2006-2008 energy efficiency programs, which is expected during the first quarter of 2006.

Once the roll out of energy efficiency programs begins in 2006, we will turn our efforts towards the establishment of a risk/reward incentive mechanism for energy efficiency, without further delay. We have already prepared the groundwork for developing such a mechanism by addressing administrative structure issues and threshold EM&V issues related to performance incentives earlier this year. As discussed in this decision, we believe that this task should be the next priority for our energy efficiency rulemaking, R.01-08-028. We will undertake the development of a risk/reward incentive mechanism for energy efficiency in close coordination with the overall procurement incentive policies being developed in R.04-04-003, and with the post-compliance updating process we initiate today.

[1] Attachment 1 describes the abbreviations and acronyms used in this decision.

[2] See Tables 1, 2 and the summary table of projected portfolio savings in Attachment 4.

[3] See Attachment 4. As noted in that attachment, 2005 budgets include carryover funds from previous years. The incremental funding requirements associated with these budgets, including franchise fees and uncollectibles for the electric portions, are presented in Tables 4-7. [4] As discussed in Section 4 below, the utilities plan to set aside program budgets for competitive bid solicitations as follows: SCE-$250 million, SDG&E-$51 million, SoCalGas-$34 million and PG&E-$173 million (applying 20% to the 2006-2008 program budget.) [5] The EM&V plans and related protocols are being developed pursuant to the expedited review process established by D.05-04-051 in R.01-08-028. [6] These ratios are used to estimate free ridership occurring in energy efficiency programs and are applied to gross program savings to net out the naturally occurring energy savings when determining the program's impacts.

Top of Page Next Page