

**ATTACHMENT 3**

**ENERGY EFFICIENCY POLICY MANUAL,  
VERSION 3**

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## ENERGY EFFICIENCY POLICY MANUAL FOR POST-2005 PROGRAMS

### I. Introduction

This document presents the California Public Utilities Commission's (Commission) policy rules and related reference documents for the development and evaluation of energy efficiency programs funded by ratepayers in California. Referred to as the Energy Efficiency Policy Manual, Version 3, this document shall apply to all energy efficiency activities commencing in program year (PY) 2006 and beyond. The policy rules, terms and definitions contained herein apply to energy efficiency activities funded through the following mechanisms:

- The electric public goods charge (PGC), as authorized by Public Utilities (PU) Code Sections 381 and 399<sup>1</sup>
- The gas PGC, as authorized by PU Code Sections 890-900.
- Procurement rates, as authorized by the Commission.

The rules in this manual do **not** currently apply to:

- Low-income energy efficiency programs (LIEE) funded by the electric or gas PGC
- California Alternative Rates for Energy (CARE) for low-income customers funded out of electric or gas PGC<sup>2</sup>
- Interruptible rate or load management programs<sup>3</sup>

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<sup>1</sup> Consistent with the provisions of AB117 (Chapter 838, Chaptered September 24, 2002), Section 381.1 was added to Public Utilities Code permitting community choice aggregators (CCAs) to apply to administer cost-effective energy efficiency and conservation programs. The Commission adopted certain procedures in Decision (D.) 03-07-034 (dated July 10, 2003) to implement portions of AB 117 affecting the allocation of energy efficiency program funds.

<sup>2</sup> A separate low-income rulemaking was initiated on August 23, 2001 (R.01-08-027).

<sup>3</sup> Interruptible and load management programs are primarily being addressed in Rulemaking (R.) 00-10-002.

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- Self-generation and demand-responsiveness programs developed in response to AB970 (PU Code Section 399.15(b)).<sup>4</sup>

This document supercedes all previous versions of the Energy Efficiency Policy Manual. Sections II-XI below articulate the Commission's policy rules ("Rules") governing energy efficiency activities, commencing in 2006.

The term "Program Administrators" refers to the following investor-owned utilities (IOUs): Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E) and Southern California Gas Company (SoCalGas).

## II. Energy Efficiency Policy Objectives and Program Funding Guidelines

1. Commission and state energy policy, as expressed in the Energy Action Plan and reaffirmed in Decision (D.) 04-12-048, make energy efficiency the utilities' highest priority procurement resource. In other words, cost-effective energy efficiency should be first in the "loading order" of resources used by the utilities to meet their customers' energy service needs. The Governor's and the state's policies also seek to reduce the environmental impact (including the greenhouse gas emissions) associated with the state's energy consumption, to protect the public's health and safety. Energy efficiency is a critical part of the state's strategy to achieve these goals.

2. The Commission's overriding goal guiding its energy efficiency efforts is to pursue all cost-effective energy efficiency opportunities over both the short- and long-term. By D.04-09-060, the Commission translated this policy into specific annual and cumulative numerical goals for electricity and natural gas savings by utility service territory. These goals shall be updated periodically by the Commission as provided for in that decision. The Commission-adopted energy savings goals are expressed in terms of annual and cumulative gigawatt hours, million-therms and peak megawatt load reductions. Program Administrators should develop their energy efficiency program

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<sup>4</sup> These programs were adopted in D.01-03-073, in R.98-07-037.

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portfolios so that they will meet or exceed these annual and cumulative savings goals, both over the short- and long-term.<sup>5</sup>

3. In order to promote the resource procurement policies articulated in the Energy Action Plan and by this Commission, energy efficiency activities funded by ratepayers should focus on programs that serve as alternatives to more costly supply-side resource options (“resource programs”), Focusing energy efficiency efforts in this way is the most equitable way to distribute program benefits: By keeping energy resource procurement costs as low as possible through the deployment of cost-effective portfolio of resource programs, over time *all* customers will share in the resource savings from energy efficiency.

4. “Lost opportunities” are those energy efficiency options which offer long-lived, cost-effective savings and which, if not exploited promptly or simultaneously with other low cost energy efficiency measures or in tandem with other load-reduction technologies or distributed generation technologies being installed at the site (e.g., solar heating or photovoltaics), are lost irretrievably or rendered much more costly to achieve. “Cream skimming” results in the pursuit of only the lowest cost energy efficiency measures, leaving behind other cost-effective opportunities. Cream skimming becomes a problem when lost opportunities are created in the process.

5. Program Administrators should manage their portfolio of programs to meet or exceed the short- and long-term savings goals established by the Commission by pursuing the most cost-effective energy efficiency resource programs first, while minimizing lost opportunities. In addition, the Program Administrators should demonstrate in their program planning applications for PY2006-PY2008 how their proposed portfolio will aggressively increase overall capacity utilization and lower peak loads through the deployment of low load factor/high critical peak saving measures. The aggressive annual and cumulative savings goals established by the Commission will serve to discourage cream- skimming program designs or implementation approaches that create lost opportunities. Nonetheless, Program

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<sup>5</sup> While the energy savings achieved by LIEE programs will count towards the Commission’s savings goals, per D.04-09-050, the Commission considers factors other than cost-effectiveness in determining LIEE program design and funding levels.

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Administrators should actively develop strategies to minimize lost opportunities, and should describe those strategies in the applications they submit for each program cycle.

6. Compliance with Rule II.5 will generally dictate the appropriate balance for portfolio funding of resource programs across market sectors (e.g., residential, industrial, commercial) and geography, as well as the most appropriate program designs. Program Administrators should also include a selection of statewide marketing and outreach programs, upstream market transformation programs, information and education programs, support for codes and standards and other activities in their proposed portfolios that support the Commission's short-term and long-term energy savings goals. Program administrators shall allocate a sufficient portion of portfolio funding to statewide marketing and outreach to continue and build upon the success of the existing program. Statewide measurement and outreach programs should convey a consistent statewide message to energy consumers in all sectors.

7. To further support the Governor's and State's goals to reduce greenhouse gas emissions, Program Administrators should explore with their advisory groups ways in which to co-brand with the California Climate Action Registry that will encourage the accurate reporting of emissions in California. This might include, for example, marketing and outreach efforts that provide information about the Registry to IOU customers and encourage larger commercial and industrial customers to participate in the Registry reporting protocols. In their program plan applications, Program Administrators shall describe the ways in which such co-branding will be supported through their proposed programs.

8. The deployment of new and improved energy efficiency products and applications can help sustain or increase current savings yields from program dollars, and serves to create a new generation of technologies available to tap the cost-effective potential of energy efficiency in ways we cannot predict today. In order to provide higher levels of bridging between available upstream innovations and the marketplace, annual funding for emerging technologies programs should increase. Program Administrators should work with the California Energy Commission (CEC) and other appropriate stakeholders to include appropriate levels of funding to demonstrate and commercialize emerging technologies funded through the California Public Interest Energy Research (PIER) program and other sources that otherwise would not receive funding for pre-commercialization demonstration. In their program planning applications, the Program Administrators shall jointly propose emerging technologies

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programs and increases to current funding levels for these programs. The main purpose of these programs should be to increase the probability that promising technologies will be commercialized within 6 years of program funding and thereby increase the chance of obtaining additional energy savings from these technologies in the long run. Program strategies should focus on reducing both the performance uncertainties associated with new products and applications and the institutional barriers to introducing them into the market.

9. Per D.04-09-060, Program Administrators with input from the public and advisory groups will develop for Commission consideration their portfolios of energy efficiency programs utilizing selection criteria that are consistent with these Rules. Program Administrators will manage a portfolio of programs implemented by IOUs and non-IOUs that are selected and evaluated based on their ability to best meet the policy objectives articulated in these Rules.

10. Pursuant to PU Code sections 381, 381.1, 399 and 890-900, PGC funds must be spent in the service territory from which the funds were collected. Additionally, gas PGC collections must fund natural gas energy efficiency programs and electric PGC collections must fund electric energy efficiency programs. However, nothing in these Rules is intended to prohibit or limit the ability of the Commission to direct the IOUs to jointly fund with PGC or other collections (e.g., via procurement rates) selected measurement studies, statewide marketing and outreach programs, or other energy-efficiency activities that reach across service territory boundaries.

### **III. Common Terms and Definitions**

1. Common terms and definitions will facilitate the review, selection and evaluation of energy efficiency activities. In particular, program definitions should be designed to facilitate to the extent possible: (1) the identification of energy efficiency activities by end-use savings potential, (2) the evaluation, measurement and verification (EM&V) of those activities based on Commission-adopted EM&V protocols, and (3) the coordination of program development and evaluation with resource planning and procurement needs. To this end, Program Administrators and program implementers should use the definitions included in Appendix B to these Rules when characterizing any proposed program activity. The burden is on them to justify any departure from those terms and definitions.

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#### IV. Cost-Effectiveness

1. The cost-effectiveness indicators referred to in these rules are described in the California Standard Practices Manual (SPM): Economic Analysis of Demand-Side Management Programs. Program Administrators and Implementers should perform cost-effectiveness analyses consistent with the indicators and methodologies included in the SPM, unless otherwise indicated.<sup>6</sup>

2. This Commission relies on the Total Resource Cost Test (TRC) as the primary indicator of energy efficiency program cost effectiveness, consistent with our view that ratepayer-funded energy efficiency should focus on programs that serve as resource alternatives to supply-side options. The TRC test measures the net resource benefits from the perspective of all ratepayers by combining the net benefits of the program to participants and non-participants. The benefits are the avoided costs of the supply-side resources avoided or deferred. The TRC costs encompass the cost of the measures/equipment installed and the costs incurred by the program administrator.<sup>7</sup> The TRC should be calculated utilizing a discount rate that reflects the utilities' weighted average cost of capital, as adopted by the Commission.<sup>8</sup>

3. The Program Administrator Cost (PAC) test of cost-effectiveness should also be considered in evaluating program and portfolio cost-effectiveness. Under the PAC test, the program benefits are the same as the TRC test, but costs are defined differently to include the costs incurred by the program administrator (including financial incentives or rebates paid to participants), but not the costs incurred by the

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<sup>6</sup> See Appendix A of this manual for information on how to obtain a copy of the SPM.

<sup>7</sup> The TRC test looks at the “incremental” measure cost (not the full cost) when an energy-efficient appliance or measure promoted through the program is installed in lieu of the standard (less efficient) appliance/measure that would have been installed, without the financial incentive or outreach program.

<sup>8</sup> Instead of utilizing different values for each IOU, a reasonable “average” of the Commission-adopted values may be used for programs across all service territories. Energy Division should post that value with the most recent version of the SPM.

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participating customer. Like the TRC test, the PAC test should be calculated utilizing a discount rate that reflects the utilities' weighted cost of capital.

4. Applying both the TRC and PAC tests of cost-effectiveness is called the "Dual-Test". In almost all instances, an energy efficiency program that passes the TRC test will also pass the PAC test. However, if deployment of the program requires rebates or financial incentives to participants that exceed the measure cost, then the program may pass the TRC test, but fail the PAC test. Considering the results of both tests when evaluating program proposals ensures that program administrators and implementers do not spend more on financial incentives or rebates to participating customers than is necessary to achieve TRC net benefits.

5. Both the TRC and PAC tests should be computed utilizing the avoided cost methodologies and input assumptions, including non-price factors (e.g., for avoiding greenhouse gas and non-greenhouse gas pollutants) that are developed for the evaluation of energy efficiency programs in our avoided cost rulemaking, R.04-04-025..

6. A prospective showing of cost-effectiveness using the Dual-Test for the entire portfolio of ratepayer-funded energy efficiency activities and programs (i.e., individual programs, plus all costs not assignable to individual programs, such as overhead, planning, evaluation, measurement verification and administrator compensation and performance, if applicable) is a threshold condition for eligibility for ratepayer funds. This threshold requirement applies to each of the following: (1) the entire statewide portfolio of programs and (2) the service-territory wide program portfolios offered by each Program Administrator, excluding emerging technologies programs. Program administrators must demonstrate that this threshold requirement is met on a prospective basis in their program funding applications to the Commission. If a prospective showing of cost-effectiveness for the entire statewide portfolio *including emerging technologies programs* does not also pass the Dual-Test, Program Administrators shall describe the benefits associated with these programs that are not reflected in the TRC or PAC tests, and describe how these programs are expected to produce benefits in excess of costs for California ratepayers over the long-term. Program Administrators must also demonstrate that the proposed level of electric and natural gas energy

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efficiency program activities are expected to meet or exceed the Commission-adopted electric and natural gas savings goals, by service territory.<sup>9</sup>

7. As described in these Rules, fuel-substitution programs must also pass the Dual-Test to be considered for inclusion in the portfolio and eligible for funding. In addition, as a condition for the inclusion of solar water heating within the definition of energy efficiency measures, solar water heating installations must be cost-effective on a stand-alone basis, i.e., pass the Dual-Test of cost-effectiveness to be eligible for funding. Other programs are not strictly required to pass the Dual test on a program level basis to be considered for funding, but their cost-effectiveness must be carefully considered in order to design an overall portfolio that passes the Dual-Test, per Rule IV.6. Accordingly, except where otherwise indicated in these Rules, Program Administrators must present estimates of TRC and PAC net benefits for each program on a prospective basis in their program funding applications, along with any other information that may be requested by the Commission, Assigned Commissioner, Administrative Law Judge or Energy Division.<sup>10</sup> However, evaluation, measurement and verification costs should not be allocated to individual programs in the calculation of TRC and PAC net benefits. Rather, all costs associated with evaluation, measurement and verification should be allocated at the total portfolio level, rather than program by program.

8. To support comparisons of all resources in the utilities' procurement portfolio, the program administrators are required to also provide levelized unit cost estimates at the portfolio, end-use and measure level consistent with the methods described in the SPM. This information should be submitted with the program administrators' compliance filings on the competitive bid results, during each program cycle

9. The usefulness of the TRC test as a primary indicator of cost-effectiveness is limited for certain programs which do not necessarily focus on the timing or type of resource needs of the utility, such as programs designed to demonstrate or commercialize promising emerging energy efficiency technologies or structurally change the marketplace. For statewide marketing and outreach programs and information-only programs, the link between programs and savings is also difficult to

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<sup>9</sup> Per D.04-09-060, savings from LIEE programs will also count towards these goals.

<sup>10</sup> See, for example, Ordering Paragraph 4, D.04-09-060.

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discern. Therefore, the Commission and program administrators will need to consider factors and performance metrics other than the TRC and PAC Tests of cost-effectiveness when evaluating such program proposals for funding and when evaluating their results.

10. Fuel substitution programs may offer resource value and environmental benefits. Fuel-substitution programs should reduce the need for supply without degrading environmental quality. Fuel-substitution programs, whether applied to retrofit or new construction applications, must pass the following three-prong test to be considered further for funding:

1. The program must not increase source-BTU consumption. Proponents of fuel substitution programs should calculate the source-BTU impacts using the current CEC-established heat rate.
2. The program must have TRC and PAC benefit-cost ratio of 1.0 or greater. The TRC and PAC tests used for this purpose should be developed in a manner consistent with these Rules.
3. The program must not adversely impact the environment. To quantify this impact, respondents should compare the environmental costs with and without the program using the most recently adopted values for residual emissions in the avoided cost rulemaking, R.04-04-025. The burden of proof lies with the sponsoring party to show that the material environmental impacts have been adequately considered in the analysis.

For purposes of applying these tests, fuel substitution proponents must compare the technologies offered by their program with the most efficient same-fuel substitute technologies available to prospective participants that would have TRC and PAC benefit-cost ratio of 1.0 or greater. The burden of proof falls on the party sponsoring the analysis to show that the baseline comparison adheres to this requirement. Fuel substitution programs with a predominantly load building or load retention character are not eligible for funding, and the proponent of a fuel-substitution program carries the burden of proof to demonstrate that the program focuses on energy efficiency and creates net resource value.

11. To the extent possible, the assumptions that are used to estimate load impacts (e.g., kWh, kW and therm savings per unit, program net-to-gross ratios, incremental measure costs and useful lives) in the calculation of the TRC and PAC tests shall be

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taken from the Database for energy Efficiency Resources (DEER).<sup>11</sup> If the required load impacts for cost-effectiveness test inputs are not available in DEER, documentation supporting the inclusion of new information from alternate sources must be provided together with the program proposal. The evaluation, measurement and verification protocols for post-2005 programs will include a schedule and process for updating DEER on a regular basis. (See Rule V.2 below)

#### **V. Evaluation, Measurement and Verification (EM&V)**

1. The development of energy efficiency programs that deliver reliable energy savings for California's ratepayers depends on well-designed methods of program evaluation, measurement and verification (EM&V). Rigorous EM&V practices are required to gauge the performance of Program Administrators and Implementers, verify energy savings, improve the design and success of future energy efficiency programs and enhance the reliability of forecasted savings for resource planning purposes.

2. The performance basis and related EM&&V protocols for energy efficiency portfolios and programs for post-2005 energy efficiency activities will be developed and updated in the EM&V phase of this rulemaking, or its successor proceeding, consistent with these Rules.

3. D.05-01-055 adopts a two-track approach to EM&V administration: Energy Division will be responsible for program and portfolio impacts-related EM&V; Program administrators and program implementers shall manage program design, evaluation and market assessment, with Energy Division taking the lead role in the selection of contractors. As also directed in D.05-01-055, Energy Division will provide for public input in the development of EM&V plans, budget, and allocation of funding. In addition, in carrying out its EM&V responsibilities, Energy Division will utilize ad hoc review committees of technical experts, as appropriate.

#### **VI. Competitive Bidding and Partnership Programs**

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<sup>11</sup> See Appendix A of this manual for information on how to access DEER.

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1. Competitive solicitations can help to identify innovative approaches or technologies for meeting savings goals with improved performance that might not otherwise be identified during the program planning process. However, not all program activities lend themselves to a competitive solicitation. It would be counterproductive to require open bids in instances where, for example, partnerships between IOUs and local governments (“local government partnership programs”) can take advantage of the unique strengths that both partners bring to the table, or a combination of partnerships and bilateral contracting arrangements with private or public entities can deliver effective statewide initiatives, such as a statewide public awareness campaign or an upstream lighting program.

2. Competition in energy efficiency procurement should focus on soliciting good, new program ideas to achieve or exceed the Commission’s savings goals, rather than allocating a specific percentage of program funding to particular implementers. Decisions on whether non-IOUs should be program implementers responsible for designing and delivering the program (rather than working to implement IOU-designed programs) should be made based on an evaluation of whether the program designs and delivery mechanisms proposed by non-IOUs are superior to those currently being implemented or planned for the future in achieving overall portfolio savings goals.

3. As directed in D.05-01-055, for each program planning cycle, the Program Administrators shall propose a portfolio of programs (with input from the Program Advisory Groups as described in that decision) that reflects the continuation of successful IOU and non-IOU implemented programs and new program initiatives designed to meet or exceed the Commission’s savings goals with cost-effective energy efficiency. As part of that process, the Program Administrators will identify a minimum of 20% of funding for the entire portfolio of programs that will be put out to competitive bid to third-parties for the purpose of soliciting innovative ideas and proposals for improved portfolio performance. The portions to put out to bid could encompass programs currently designed and delivered by a combination of IOU and non-IOU program implementers. Any current program or group of programs (IOU or non-IOU designed and implemented) that can be improved upon in this way may be subject to open bids to replace, augment or otherwise enhance current efforts. However, open bids should not be required in instances where current or potential future partnerships between the Program Administrators and local governments can take advantage of the unique strengths that both partners bring to the table to deliver cost-effective energy efficiency services, or where combination of partnerships and

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bilateral contracting arrangements with private or public entities can deliver effective statewide initiatives that enhance portfolio performance. Such activities should be funded out of the 80% (maximum) core portfolio that is not put out to competitive bid.

4. As directed in D.05-01-055, the proposed portfolio of programs, portions to put out to bid and the bid evaluation criteria will be filed by the Program Administrators in their program plan applications for each funding cycle, and subject to Commission approval. Upon receiving Commission approval of the applications, the Program Administrators will complete the process of selecting programs and program implementers to design and deliver the programs in the next program cycle. During this process, the Program Administrators will develop and issue RFPs using criteria approved by the Commission and select a set of bids. The Peer Review Groups (including Energy Division's independent consultant(s)) will observe the Program Administrators' bid selection process to ensure that the criteria are applied properly. Before finalizing their selections, the Program Administrators will discuss the proposed results of their bid review process with the Peer Review Groups (and Energy Division's independent consultants). After incorporating feedback, the Program Administrators will make public all winning bids and submit compliance filings, as directed in D.05-01-055.

5. Future partnership programs need to be developed in a manner that places the Program Administrator and local government (or private) partner on more equal footing, in terms of involvement in program design and planning, information sharing and program implementation. We recognize that some program partners may prefer or be best suited to functioning as a subcontractor to the Program Administrator and performing a supporting role for the program. However, this should not be the only option available for partnership programs. Other partnership arrangements, e.g., where the local government partner is fully involved in program planning and implementation, may take better advantage of the relative strengths of each partner. These arrangements must, in any event, be considered in light of other applicable Commission decisions, including the implementation of community choice aggregation, and should in no way diminish or dilute the responsibility and accountability of Program Administrators to meet the Commission-adopted savings goals.

6. Standard contract language should improve the effectiveness of future partnership programs. The standard language should establish the rights and responsibilities of the partners with sufficient flexibility to enable each partner to make improvements to program performance, as circumstances warrant. The standard

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language should also address information sharing, intellectual property ownership, reimbursement turn-around, dispute resolution, and other issues. Energy Division and Legal Division should work with the Program Administrators, interested local governments and other parties to develop a standard contract for future partnership programs, and submit that language with the PY2006-PY2008 program plans.

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#### VII. Advisory Groups

1. The Program Administrators should put together the advisory groups and implement the program design and selection process consistent with D.05-01-055 and in the spirit of the collaborative approach they discuss in their filings. These advisory groups should serve to: (1) promote transparency in the Program Administrator's decision-making process; (2) provide a forum to obtain valuable technical expertise from stakeholders and non-market participants; (3) encourage collaboration among stakeholders and (4) create an additional venue for public participation. The advisory groups will provide advice and feedback to the IOUs and provide annual information to the Commission, but will not have any independent decision-making or contracting authority.

2. As discussed in D.05-01-055, members of the PAGs should be drawn from the energy efficiency expertise of both market and non-market participants across the full spectrum of program areas and strategies. One purpose of the PAGs is to provide guidance to the IOUs regarding region-specific customer and program needs, and provide a forum for input and collaboration with the local interests and stakeholders served by the programs. However, the PAGs must not focus exclusively on region-specific needs. The IOUs and their PAGs should also address statewide programs and consistency issues, bringing in national expertise as appropriate to consider these issues. For the purpose, the IOUs should form a subgroup of their PAG members who will closely collaborate and coordinate on statewide marketing and outreach, support for building codes and standards, education and training and other activities that secure both short- and long-term energy savings and peak demand reductions by providing a consistent and recognizable program presence throughout the state. In addition, the PAGs and IOUs should collaborate on statewide program designs and implementation strategies that increasingly integrate energy efficiency with demand response and distributed generation offerings to end-users.

3. The IOUs and PAGs should ensure that statewide residential and nonresidential offerings take advantage of "best available practices" and avoid customer confusion by being as uniform and consistent as possible. While we recognize that differences in climate zones and other parameters may warrant some variations in program offerings to customers, these variations should be the exception and not the rule. If the need emerges to focus on a particular market segment, the IOUs and PAGs may also establish a separate working group of industry experts and stakeholders to address that need.

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4. Energy Division and ORA staff will be *ex officio* members of each PAG and peer review subgroup described below, and CEC staff is invited to participate as *ex officio* members as well. The IOUs will select additional PAG members, but participation will be voluntary and there will be no formal voting rules or designation of voting or non-voting members. Within each PAG, the IOU will also identify and select a subgroup on non-financially interested members with extensive energy efficiency expertise that are willing to serve as peer reviewers for the energy efficiency program evaluation and selection process, referred to as "Peer Review Groups" (PRGs.)

5. As described in D.05-01-055), members of each PRG will be expected to: (1) participate in the ongoing PAG process, (2) review the IOUs' submittals to the Commission and assess the IOUs' overall portfolio plans, their plans for bidding out pieces of the portfolio per the minimum bidding requirement and (3) review the bid evaluation utilized by the IOUs and their application of that criteria in selecting third-party programs. In addition, the three PRGs are expected to meet and assess the statewide portfolio in terms of its ability to meet or exceed short and long-term savings goals in compliance with these Rules.

6. The PAG meetings should be open to the public, and the IOUs should establish a clearinghouse website for noticing these meetings and posting documents to be discussed by the PAG at the meetings. In addition, the IOUs are expected to conduct public workshops, at least twice a year that are designed to solicit broad public input from non-PAG members concerning program design and implementation.

### **VIII. Performance-Based Risk and Reward Incentive Mechanism**

1. In accordance with Public Utilities Code Section 739.10, the Commission has established balancing accounts for each utility that remove significant regulatory disincentives for utility investments in energy efficiency and other demand-side management programs. With these balancing accounts, a large majority of the utilities' fixed-cost revenue requirements are no longer tied to the forecasted level of commodity electric and natural gas sales.

2. To further ensure that the utilities procure a portfolio of energy resource that meets the Commission's goals of affordable, reliable and environmentally sensitive resource procurement, the Commission is in the process of establishing an overall procurement incentive framework in Rulemaking (R.).04-04-003. Work on key aspects

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of an energy efficiency incentive mechanism is proceeding concurrently (e.g., definition of performance basis and development of measurement protocols), since these aspects need to be developed for program and portfolio evaluation irrespective of the overall procurement incentive structure. However, as stated in the Order Instituting Rulemaking in R.04-04-003, the Commission intends to adopt an overall framework for procurement incentives before making final determinations on resource-specific incentive mechanisms.

#### **IX. Affiliate and Disclosure Rules**

1. To avoid anti-competitive behavior and cross-subsidies between IOUs and their affiliates, all transactions between the IOU administrator and any implementer that is an affiliate of PG&E, SCE, SDG&E or SoCalGas are banned, per D.05-01-055.

2. The Program Administrators will not provide preferential treatment to any provider of an energy efficiency service that uses energy efficiency program funds.

3. Bidders for EM&V contracts, including program design evaluation and market assessment studies, shall provide full disclosure of any potential conflicts of interest, including all current non-energy efficiency related contracts with Program Administrators and program implementers.

#### **X. Reporting Requirements**

1. The Program Administrators shall present information in their program planning applications in compliance with Ordering Paragraph 13 of D.04-12-048, and in compliance with any further direction by this Commission, the Assigned Commissioner or Administrative Law Judge regarding the content or format of these filings. Energy Division may develop reporting requirements through workshops or other means to ensure that the types of data and the format of the information presented in the Program Administrator filings and reports is as consistent as possible.

2. The Program Administrators shall file reports on portfolio and program activities on a regular basis during the program cycle using the standardized reporting formats, definitions, timelines and narratives established by the Energy Division, as updated from time to time. The design and oversight of program-specific, portfolio-level and financial reporting requirements for energy efficiency activities will remain the responsibility of the Energy Division, as discussed in D.05-01-055. Energy Division

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shall design the reporting requirements in consultation with the Assigned Commissioner and Administrative Law Judge.

3. In addition to other reports that may be required, the Program Administrators shall publish a summary of the achievements of the energy efficiency programs on an annual basis. This report will be available to the public on the web and will contain at least the following information for the entire portfolio as well as each utility's portfolio: (1) energy savings (annual and lifecycle kWh and therms), peak demand savings, levelized costs, cost per kW saved, total cost to billpayers, total savings to billpayers, net benefits to billpayers and environmental benefits (tons of CO<sub>2</sub> and other pollutants avoided). Following each program cycle, a summary of the *ex post* measured achievements from the entire portfolio will also be published.

#### **XI. Process and Procedural Issues**

1. The Commission, the assigned Commissioner, the assigned Administrative Law Judge, or the Energy Division may utilize both formal and informal procedural vehicles as needed to (1) revise the Rules and /or any of its referenced documents, in whole or in part, at any time, upon request by interested parties or on its own initiative, and (2) resolve disputes among or complaints from various market participants, as circumstances warrant. In addition, nothing in these Rules preclude the Commission from planning and developing future energy efficiency programs, or delegating that responsibility to the assigned Commissioner, the assigned Administrative Law Judge or to Energy Division in the future.

2. The Assigned Administrative Law Judge or Commission staff may hold workshops or other forums, as needed, for interested parties, customers and market actors to provide input and feedback on energy efficiency-related issues.

3. Any program proposal for energy efficiency funding must describe a dispute resolution process to be used in dealing with complaints from end-use gas or electric consumers participating or attempting to participate in the program. In programs where the Program Administrators hold contracts with third parties, those contracts will also be required to include dispute resolution provisions.

4. With input from the Program Advisory Groups, the Program Administrators should jointly submit for Commission consideration proposed fund-shifting rules with

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their PY2006-PY2008 program applications. When finalized by the Commission, such rules shall be incorporated into this document.

**APPENDIX A: Reference Documents**

**APPENDIX B: Common Terms and Definitions**

**APPENDIX A: Reference Documents**

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1. Energy Action Plan
2. CPUC Decision 05-01-055 “Interim Opinion on the Administrative Structure for Energy Efficiency: Threshold Issues”
3. CPUC Decision 04-09-060 “Interim Opinion: Energy Savings Goals for Program Year 2006 and Beyond.” See attached tables for the savings goals adopted in that decision, by IOU service territory.
4. Standard Practice Manual. Economic Analysis of Demand-Side Management Programs. October 2001.
5. Database for Energy Efficient Resources (DEER)
6. Methodology and Forecast of Long Term Avoided Costs for the Evaluation of California Energy Efficiency Programs ***(link to be provided before document is made public)***
7. CPUC Energy Efficiency Program Reporting Requirements Manual ***(to be developed by Energy Division staff before Dec. 2005)***
8. CPUC Energy Efficiency Program EM&V Protocols ***(to be developed before Dec. 2005)***
9. Fund Shifting Rules ***(to be adopted by the Commission in the decision approving PY2006-PY2008 program plans)***

## Energy Efficiency Programs

### Approved Savings Goals and Budgets 2006 through 2013 (D.04-09-060)

#### SoCalGas

Year	Gas Savings Annual Goal (MMTh/Yr)	Cumulative Gas Savings (MMTh)**
2006	14.7	34
2007	19.3	53.3
2008	23.3	76.6
2009	27.2	103.8
2010	28.3	132.1
2011	29.9	162
2012	32.3	194.3
2013	35.8	<b>230.1</b>

The 2006 cumulative energy savings therm goal includes the cumulative impact of 19.3 MMtherms from 2004-2005 programs.

#### SDG&E

Year	Gas Savings Annual Goal (MMTh/Yr)	Cumulative Gas Savings (MMTh)**	Energy Savings Annual Goal (GWH/Yr)	Cumulative Energy Savings (GWH)**	Demand Reductions (MW/Yr)	Cumulative Demand Reductions (MW)**
2006	2.7	6.3	280.5	821.5	54.6	155.3
2007	3.1	9.4	285.1	1106.6	54.2	209.5
2008	3.7	13.1	284.4	1391	54	263.5
2009	4.1	17.2	282.3	1673.3	53.6	317.1
2010	4.5	21.7	273.6	1946.9	52	369.1
2011	4.9	26.6	262.5	2209.4	49.9	419
2012	5.3	31.9	221.7	2431.1	42.1	461.1
2013	5.7	<b>37.6</b>	214.9	<b>2646</b>	40.8	<b>501.9</b>

\*\* The 2006 cumulative demand reduction goal includes the cumulative impact of 100.7 MW from 2004-2005 programs.

The 2006 cumulative energy savings goal includes the cumulative impact of 541 GWH and 3.6 MMtherms from 2004-2005 programs.

## Energy Efficiency Programs

### Approved Savings Goals and Budgets 2006 through 2013 (D.04-09-060)

#### SCE

Year	Energy Savings Annual Goal (GWH/Yr)	Cumulative Energy Savings (GWH)**	Demand Reductions (MW/Yr)	Cumulative Demand Reductions (MW)**
2006	922	2575	207	541
2007	1046	3621	219	760
2008	1167	4788	246	1006
2009	1189	5977	249	1255
2010	1176	7153	247	1502
2011	1164	8317	245	1747
2012	1151	9468	241	1988
2013	1139	<b>10607</b>	240	<b>2228</b>

The 2006 cumulative energy savings therm goal includes the cumulative impact from 2004-2005 programs.

#### PG&E

Year	Gas Savings Annual Goal (MMTh/Yr)	Cumulative Gas Savings (MMTh)**	Energy Savings Annual Goal (GWH/Yr)	Cumulative Energy Savings (GWH)**	Demand Reductions (MW/Yr)	Cumulative Demand Reductions (MW)**
2006	12.6	32.6	829	2316	180	503
2007	14.9	47.5	944	3260	205	708
2008	17.4	64.9	1053	4313	228	936
2009	20.3	85.2	1067	5380	232	1168
2010	21.1	106.3	1015	6395	220	1388
2011	22	128.3	1086	7481	236	1624
2012	23	151.3	1173	8654	254	1878
2013	25.1	<b>176.4</b>	1277	<b>9931</b>	278	<b>2156</b>

\*\* The 2006 cumulative demand reduction goal includes the cumulative impact from 2004-2005 programs.  
The 2006 cumulative energy savings goal includes the cumulative impact from 2004-2005 programs.

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## **COMMON ENERGY EFFICIENCY TERMS AND DEFINITIONS**

### **Advanced Technologies**

Measures or processes which exceed the efficiency or thermodynamic performance of standard energy using equipment or processes.

### **Affiliate**

Any person, corporation, utility, partnership, or other entity 5% or more of whose outstanding securities are owned, controlled, or held with power to vote, directly or indirectly either by an administrator or any of its subsidiaries, or by that administrator's controlling corporation and/or any of its subsidiaries as well as any company in which the administrator, its controlling corporation, or any of the administrator's affiliates exert substantial control over the operation of the company and/or indirectly have substantial financial interests in the company exercised through means other than ownership. For purposes of these Rules, "substantial control" includes, but is not limited to, the possession, directly and indirectly and whether acting alone or in conjunction with others, of the authority to direct or cause the direction of the management of policies of a company. A direct or indirect voting interest of five percent (5%) or more by the administrator, its subsidiaries, or its affiliates in an entity's company creates a presumption of control.

### **Avoided cost**

Cost representing the value of the electricity or natural gas that, in the absence of a program, would need to be procured and delivered to an individual consumer.

### **Baseline Data**

The initial base metric for comparing the net result of programmatic changes versus what would have happened in the absence of the program or activity.

### **Coincident Peak Demand**

The metered or estimated demand of a device, circuit, or building that occurs at exactly the same time as the system peak for a given year and weather condition.

### **Community Choice Aggregators**

Organizations created by local governments pursuant to Assembly Bill 117 for the purpose of procuring power and administering energy efficiency programs on behalf of local citizens.

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#### **Competitive solicitation**

The process whereby parties are requested to submit bids offering innovative approaches to energy savings or improved program performance.

#### **Conservation**

Reduction of a customer's energy use achieved by relying on changes to the customer's behavior which may result in a lower level of end use service.

#### **Conservation Measures**

Activities and/or behaviors aimed at reducing energy consumption.

#### **Conservation Programs**

Programs which are intended to influence customer behavior as a means to reduce energy use.

#### **Cost Effectiveness**

An indicator of the relative performance or economic attractiveness of any energy efficiency investment or practice when compared to the costs of energy produced and delivered in the absence of such an investment.

#### **Cream Skimming**

Cream skimming results in the pursuit of a limited set of the most cost-effective measures, leaving behind other cost-effective opportunities. Cream skimming becomes a problem when lost opportunities are created in the process.

#### **Cross Subsidization**

Benefits enjoyed by one group, such as a customer class, that are funded by another group.

#### **Customer**

Any person or entity that pays an electric and/or gas bill to an IOU and that is the ultimate consumer of goods and services including energy efficiency products, services, or practices.

#### **Dual Test**

The requirement that an energy efficiency activity pass both the TRC and the PAC cost-effectiveness test.

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#### **Effective Useful Life**

An estimate of the median number of years that the measures installed under the program are still in place and operable.

#### **Electricity Savings**

Reduced electricity use (or savings) produced by either energy efficiency investments which maintain the same level of end use service or conservation actions which usually reduce energy use by reducing the quantity or quality of the baseline energy services demanded.

#### **Emerging Technologies**

New energy efficiency technologies, systems, or practices that have significant energy savings potential but have not yet achieved sufficient market share (for a variety of reasons) to be considered self sustaining or commercially viable. Emerging technologies include early prototypes of hardware, software, design tools or energy services that if implemented will result in energy savings.

#### **End Use**

- 1) The purpose for which energy is used (e.g. heating, cooling, lighting).
- 2) A class of energy use that an energy efficiency program is concentrating efforts upon. Typically categorized by equipment purpose, equipment energy use intensity, and/or building type.

#### **Energy Efficiency**

Activities or programs that stimulate customers to reduce customer energy use by making investments in more efficient equipment or controls that reduce energy use while maintaining a comparable level of service as perceived by the customer.

#### **Energy Efficiency Measure**

An energy using appliance, equipment, control system, or practice whose installation or implementation results in reduced energy use (purchased from the distribution utility) while maintaining a comparable or higher level of energy service as perceived by the customer. In all cases energy efficiency measures decrease the amount of energy used to provide a specific service or to accomplish a specific amount of work (e.g., kWh per cubic foot of a refrigerator held at a specific temperature, therms per gallon of hot water at a specific temperature, etc). For the purpose of these Rules, solar water heating is an eligible energy efficiency measure.

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#### **Energy Efficiency Programs**

Programs that reduce customer energy use by promoting energy efficiency investments or the adoption of conservation practices or changes in operation which maintain or increase the level of energy services provided to the customer.

#### **Energy Efficiency Savings**

The level of reduced energy use (or savings) resulting from the installation of an energy efficiency measure or the adoption of an energy efficiency practice, subject to the condition that the level of service after the investment is made is comparable to the baseline level of service. The level of service may be expressed in such ways as the volume of a refrigerator, temperature levels, production output of a manufacturing facility, or lighting level per square foot.

#### **Evaluation, Measurement and Verification (EM&V)**

Activities which evaluate, monitor, measure and verify performance or other aspects of energy efficiency programs or their market environment.

#### **Financial Incentive**

Financial support (e.g., rebates, low interest loans, free technical advice) provided to customers as an attempt to motivate the customers to install energy efficient measures or undertake energy efficiency projects. (See Rebate)

#### **Free riders (Free Ridership)**

Customers who would have installed the program measure or equipment even without the financial incentive provided by the program.

#### **Fuel Substitution**

Programs which are intended to substitute energy using equipment of one energy source with a competing energy source (e.g. switch from electric resistance heating to gas furnaces).

#### **Funding Cycle**

Period of time for which funding of energy efficiency programs have been approved by the Commission.

#### **Gas Savings**

Reduced natural gas usage (or savings) produced by either energy efficiency investments which maintain the same level of end use service or conservation actions which can reduce energy use by reducing the quantity or quality of the baseline services provided.

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#### **Incremental Measure Cost**

The additional cost of purchasing and installing a more efficient measure. Calculated from the price differential between energy-efficient equipment and standard or baseline measures. The inclusion of the word “gross” in the definition reflects incremental measure costs, which have not been adjusted for free riders. Net incremental measure costs means that the term has been adjusted for free riders; i.e., the net-to-gross ratio has been applied.

#### **Information & Education**

Information and education programs can provide a wide range of activities designed to inform or educate a customer or customer group. Generally these range from in-depth, one-on-one, on-site or centrally located classroom style instruction in topics related to energy efficiency, to programs that target information to specific types of customers, to general information provided to a wide range of customers, to short inexpensive public service announcements on FCC approved communication frequencies. Programs intended to provide customers with information regarding generic (not customer-specific) conservation and energy efficiency opportunities. For these programs, the information may be unsolicited by the customer.

#### **Innovation Incubator**

A low-cost, stand-alone program designed to grow innovative energy saving programs and processes for the larger portfolio over the long term. The incubator funds new program ideas that meet reasonable scientific scrutiny for potentially cost-effective energy savings and peak reduction.

#### **Institutional Barriers**

A type of market barrier: In this case, the internal organizational hurdles that inhibit the evaluation and or choice to take energy efficiency actions.

#### **Least Cost Best Fit**

The procurement of cost-effective supply and demand-side resources that, regardless of ownership, meet capacity and energy deliverability requirements. Energy efficiency resources are constructed from the bottoms up approach that aggregates the demand and energy savings from various energy-saving measures and activities into applicable end-use categories such as space cooling, space heating, lighting, and refrigeration, in order to provide near- and long-term peaking, intermediate, and baseload requirements.

#### **Levelized Cost**

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An estimate of the annualized cost of installing an energy efficiency measure divided by the annual energy savings. Typically calculated by multiplying the incremental cost of the measure by capital recovery factor (function of discount rate and expected useful life of the measure) and then dividing by annual energy savings.

#### **Load Management**

Programs which reduce or shift electric peak demand away from periods of high cost electricity to non-peak or lower cost time periods, with a neutral effect on or negligible increase in electric use.

#### **Load Serving Entities**

Entities that provide electric and/or gas commodity to customers.

#### **Lost Opportunities**

Energy efficiency measures that offer long-lived, cost-effective savings that are fleeting in nature. A lost opportunity occurs when a customer does not install an energy efficiency measure that is cost-effective at the time, but whose installation is unlikely to be cost-effective if the customer attempts to install the same measure later.

#### **Marketing and Outreach**

Communications activities designed to identify, reach and motivate potential customers to take actions to either learn more about or invest in energy efficiency opportunities.

#### **Measures**

- 1) Specific customer actions which reduce or otherwise modify energy end use patterns.
- 2) A product whose installation and operation at a customer's premises results in a reduction in the customer's on-site energy use, compared to what would have happened otherwise.

#### **Net to Gross Ratio**

A ratio or percentage of net program impacts divided by gross or total impacts. Net to gross ratios are used to estimate and describe the free-ridership that may be occurring within energy efficiency programs.

#### **Non-price Factors**

Those factors included in cost effectiveness tests, other than commodity prices and transportation and distribution costs, e.g., environmental factors.

#### **Partnership**

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Coordinated efforts of a utility and a local government or other entity to use the strengths of both parties to achieve energy savings goals.

#### **Peak Demand-General (kW)**

- 1) The maximum level of metered demand during a specified period, such as a billing month, or during a specified peak demand period.
- 2) Extremely high energy use, usually with reference to a particular time period.

#### **Peak Savings- Coincident (kW)**

The estimated peak (e.g. highest) demand savings (MW or kW) from a program for a specific time, date, and location coincident with the forecasted system peak for a given area and a given set of weather conditions. This estimate must also include consideration of the likelihood that the equipment is actually on at the time of coincident peak. Usage of this definition: Resource planning- for making adjustments to forecasts of peak usage for understanding reserve margins and reliability purposes.

#### **Peak Savings- Daily Average (kW)**

The average peak demand savings (kWh impacts/ # of hours in the peak rate period) for a given utility during their peak season. Example for SCE-Peak period is for summer weekdays from 12-6 PM. So - daily average savings would be the number of kWh saved/ # of kWhs saved for all weekday peak periods (= kWh/5 days/week \* 12 weeks/ summer\* 6 hours/day = kW average. Usage: Cost effectiveness analysis, primarily for valuing energy savings that occur during the peak period using “peak” average avoided costs.

#### **Peak Savings –Non coincident (kW)**

Estimated highest level of peak savings( kW or MW) for a given program during the peak time period for a given utility on the hottest day of a “normal” weather year. Thus if a group of measures saved 1MW at 2Pm, 1.7 MW at 3PM, 1.6 MW at 4PM, 1.0 MW at 5Pm and 1.2 MW at 6 pm, the peak non coincident savings would be 1.7 MW. This savings estimate does not take into account how many of the affected devices or equipment will be operating during the peak time period. Usage: Cost effectiveness analysis and procurement.

#### **Peer Review Group (PRG)**

A subset of the Program Advisory Group consisting of non-financially interested members who will review utility submittals to the Commission, assess overall portfolio plans, plans for bidding out pieces of the portfolio, and the bid evaluation criteria for selecting third-party programs.

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#### **Performance Basis**

The metrics by which a program or a group of programs is measured and evaluated for the purpose of assessing the program(s) success at displacing or deferring more costly supply-side resources and or increasing more energy efficient design and practices.

#### **Performance Uncertainties**

A market barrier: refers to new technologies or systems whose efficiency or system performance levels are uncertain due to lack of experience.

#### **Portfolio**

All IOU and non-IOU energy efficiency programs funded by ratepayers that are implemented during a program year or cycle. May also refer to a group of programs sponsored, managed, and contracted for by a particular IOU.

#### **Pre-commercialization**

A phase in the life of a product before it is readily available on the market.

#### **Program**

A collection of defined activities and measures that

- are carried out by the administrator and/or their subcontractors and implementers,
- target a specific market segment, customer class, a defined end use, or a defined set of market actors (e.g. designers, architects, homeowners),
- are designed to achieve specific efficiency related changes in behavior, investment practices or maintenance practice in the energy market,
- and are guided by a specific budget and implementation plan.

#### **Program Activities**

Any action taken by the program administrator or program implementer in the course of implementing the program.

#### **Program Administrator**

An entity tasked with the functions of portfolio management of energy efficiency programs and program choice.

#### **Program Advisory Group (PAG)**

Advisory groups for each utility service area composed of energy efficiency experts representing customer groups, academic organizations, environmental organizations, agency staff and trade allies in the energy market.

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**Program Cycle**

The period of time over which a program is funded and implemented.

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#### **Program Implementation Plan**

A detailed description of a program that includes program theory, planned program processes, expected program activities, program budget, projected energy savings and demand reduction and other program plan details as required by the Commission, assigned ALJ, or Energy Division.

#### **Program Implementers**

An entity or person that puts a program or part of a program into practice based on contacts or agreements with the portfolio manager.

#### **Program Strategy**

The set of activities deployed by the program in order to achieve the program's objectives.

#### **Program Year(s)**

The calendar year(s) during which the program operates.

#### **Ratepayer**

Those customers who pay for gas or electric service under regulated rates and conditions of service.

#### **Rebate**

A financial incentive paid to the customer in order to obtain a specific act, typically the installation of energy efficiency equipment.

#### **Resource Value**

An estimate of the net value of reliable energy (e.g., kWh, therms) and capacity (e.g., kW, Mcfd) reductions resulting from an energy efficiency program. This includes the net present value of all of the costs associated with a program and all of the estimated benefits (both energy and capacity). The calculation of resource value and associated benefits should be consistent with the avoided costs adopted in the most recent Commission proceeding or otherwise provided for by the Commission.

#### **Service Area**

The geographical area served by a utility.

#### **Short Term/Long Term**

Planning terms referring to the timing or expected timing of program activities, program impacts, or program funding. Short term indicates program activities, program impacts, or program funding that occurs during the current program cycle.

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Long term indicates program activities, program impacts, or program funding that occurs beyond the current program cycle.

**Source-BTU Consumption**

Conversion of retail energy forms (kWh, therms) into the BTU required to generate and deliver the energy to the site. This conversion is used to compare the relative impacts of switching between fuel sources at the source or BTU level for the three-prong test required for fuel-substitution programs.

**Standard Practice Manual**

The California Standard Practice Manual: Economic Analysis of Demand-side Programs and Projects is jointly issued by the California Public Utilities Commission and the California Energy Commission. It defines the standard cost effectiveness tests and their components used for energy efficiency programs.

**Statewide**

Energy efficiency programs or activities that are essentially similar in design and available in all Commission regulated utility service areas in California.

**Third Party/Non-IOU**

Non-regulated implementers of ratepayer funded energy efficiency activities.

**(END OF APPENDIX B)**

**(END OF ATTACHMENT 3)**