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Decision 92-09-080 September 16, 1992

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ORIGINAL

Order Instituting Rulemaking on the Commission's own motion to establish rules and procedures governing utility demand-side management.	R.91-08-005 (Filed August 7, 1991)
Order Instituting Investigation on the Commission's own motion to establish procedures governing demand-side management and the competitive procurement thereof.	I.91-08-002

(See Attachment 5 for List of Appearances.)

INTERIM OPINION ON DEMAND-SIDE MANAGEMENT BIDDING PILOTS

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INTERIM OPINION ON DEMAND-SIDE MANAGEMENT BIDDING PILOTS

1. Summary

By today's order, we continue the process of testing various forms of demand-side management (DSM) bidding and bid evaluation techniques, pursuant to Public Utilities (PU) Code § 747 and our adopted rules governing DSM.[1] We approve DSM pilot bidding programs for San Diego Gas & Electric Company (SDG&E), Southern California Gas Company (SoCal), and Southern California Edison Company (SCE), as modified by this order.[2]

In D.92-03-038, we authorized Pacific Gas and Electric Company (PG&E) to conduct a bidding pilot designed to enhance and augment its planned DSM programs. Today we authorize bidding pilots designed to replace portions of SoCal's, SDG&E's, and SCE's existing and planned DSM programs. We adopt SDG&E's proposal to put out its residential appliance efficiency program for bid by third parties. For SCE and SoCal, we broaden their proposals to encompass the industrial and large commercial sectors (for SCE) and the single-family residential sector (for SoCal).

Specifically, SCE is directed to solicit bids in two marketing regions to replace its energy management hardware rebate program in the small/medium commercial sector (i.e., targeted to small offices) and in the industrial and large commercial sectors. We direct SoCal to solicit bids to replace both single- and multi-family portions of its residential weatherization retrofit and appliance efficiency incentives programs. We also direct SCE to coordinate with SoCal in implementing the pilot, so that winning

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1 See Decision (D.) 92-02-075, mimeo., pp. 60-62; Rules 26-29.

2 We refer to SDG&E, SCE, and SoCal collectively as "the utilities" throughout this order.

bidders can receive payments for both gas and electric savings in gas-heated homes. As a result of these pilots, SoCal, SCE, and SDG&E will be soliciting bids for 20-30% of their 1992 DSM resource programs, or approximately 6-15% of their overall DSM budgets. The utilities are authorized to earn shareholder incentives on these pilots, in the same manner that they earn on in-house DSM resource programs.

By this order, we also establish a consistent set of cost-effectiveness criteria to be used in evaluating replacement bids. First, as a threshold requirement, the bidder's project must have a total resource cost benefit-cost ratio that exceeds the utility's program total resource cost ratio, or 1.0, whichever is greater. Projects are then ranked based on a "bang for the buck" criterion, i.e., the level of total resource net benefits per dollar of utility expenditure. In order to give credit to bidders that propose comprehensive projects (e.g., that achieve greater savings penetration per site), we direct the utilities to incorporate methods for evaluating project comprehensiveness into their bid evaluation process. We make other modifications to the utilities' proposed evaluation criteria, in order to make them more transparent to potential bidders and consistent with our determinations in D.92-03-038 for PG&E's pilot.

To implement its pilot, SCE will redirect a total of $35,398,080 (in 1993$) from DSM funding authorizations, beginning in 1993. SCE's pilot will not involve any incremental funding, or impact revenue allocation and rate design. Beginning in 1994, SoCal is authorized to spend a total of $13,658,880 (in 1993$) in DSM program funding to implement its pilot. This represents incremental funding of $324,000 (for measurement studies) relative to current authorizations, over the life of the program. Determinations on revenue allocation and rate design for this funding will be made in SoCal's 1993 biennial cost allocation proceeding.

Beginning in 1993, SDG&E is authorized to fund its DSM pilot at a total of $19,599,159 (in 1993$). This represents a funding increase of approximately $4 million above current authorized levels, over the life of the program. Determinations on revenue allocation and rate design for this funding will be made either in SDG&E's test year 1993 general rate case, or in another appropriate proceeding. We authorize all three utilities to carry over pilot program funding from year-to-year, and to exceed authorized levels to the extent that they have the flexibility to do so for their in-house DSM programs.

Within 60 days, SDG&E and SCE will file revised bid solicitation material, consistent with the modifications described in today's order. Within 120 days, SoCal and SCE will jointly file revised solicitation materials for SoCal's bidding pilot, in compliance with our directives for a coordinated program.[3]

2. Procedural Background

On August 7, 1991, the Commission issued an Order Instituting Rulemaking and companion Investigation to establish rules and procedures governing DSM activities (DSM OIR/OII). One of the procedures discussed in the August 7 rulemaking was the competitive procurement of DSM programs, referred to generally as "DSM pilot bidding." The Commission directed utilities to develop and present pilot programs for consideration, consistent with the mandate of PU Code § 747. PU Code § 747 requires that one or more energy utilities implement pilot programs to test: (1) the ability of DSM bidding to deliver benefits to utility customers, separate from any generation resource bidding system; (2) the feasibility of an integrated bidding system that includes both generation

3 Attachment 4 explains each technical acronym or other abbreviation that appears in this decision.

resources and DSM programs; and (3) a program of competitive DSM bidding auctions for gas utilities.[4] For this purpose, the Commission endorsed the formation of a Bidding Advisory Committee, with representatives from utilities, consumer and environmental groups, energy service companies (ESCOs), and other interested parties. (DSM OIR/OII, mimeo., p. 4)

By D.92-03-038, the Commission approved a DSM-only pilot bidding program for PG&E. Proposals for additional DSM-only bidding pilots were filed by SDG&E, SoCal, and SCE on February 28, 1992, after submitting them for review in the Bidding Advisory Committee.[5] At the prehearing conference on March 5, 1992, the assigned administrative law judge (ALJ) ruled that SDG&E's proposal, which involved bidding for a residential new construction program, posed procedural difficulties. Since the Commission had recently deferred consideration of guidelines on how to evaluate new construction programs until a later phase of this proceeding, the assigned ALJ directed that either (1) consideration of SDG&E's proposed bidding pilot be deferred, or (2) SDG&E replace its proposal with one that uses a program for which the Commission established guidelines in D.92-02-075. SDG&E elected to submit a revised bidding pilot proposal, and filed its revised testimony on April 3, 1992.

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4 The full text of PU Code § 747 is presented in Attachment 1.

5 Pursuant to the DSM OIR/OII directive, the Statewide Advisory Group on DSM Bidding was created to assist the utilities in developing their pilot DSM bids. The Advisory Group met three times to review and discuss SCE's, SDG&E's, and SoCal's proposals, prior to submittal. Participants included representatives of energy service companies, large and small energy consumers, the California Energy Commission, the Division of Ratepayer Advocates (DRA), the Natural Resources Defense Council and the four energy utilities. Some technical details were agreed upon, but consensus was not reached on many aspects of the proposed pilots.

Intervenor testimony was filed by DRA and Transphase Systems, Inc. (Transphase). SDG&E, SoCal, and SCE filed rebuttal testimony. Evidentiary hearings were held from April 27 to May 6, 1992. Opening briefs were filed by SDG&E, SoCal, SCE, DRA, Transphase, SESCO Inc. (SESCO), the Coalition for Energy Efficiency and Renewable Technologies (CEERT), and Utility Consumers' Action Network (UCAN).[6] SDG&E, SoCal, SCE, DRA, Transphase, and SESCO filed reply briefs.

By this interim order, we address the DSM-only bidding pilots proposed by SCE, SoCal, and SDG&E. We will address additional utility proposals for integrated and interruptible bidding pilots in separate phases of this proceeding.

3. Summary of Proposed Pilots

In D.92-03-068, we adopted a "partnership" form of bid for PG&E's pilot, where third parties compete for DSM programs that augment and enhance (rather than replace) existing or planned utility DSM activities. For their pilots, SCE, SoCal, and SDG&E propose that energy service companies (ESCOs) and other third parties compete to replace existing or planned utility DSM programs.[7]

Each utility has selected a different market sector or in-house program for its pilot. SCE proposes to conduct two

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6 SESCO is an energy service company specializing in residential conservation and low-income weatherization. UCAN is a San Diego-based consumer advocacy group supported by residential and small business ratepayers. Transphase designs, manufactures, and installs thermal energy storage systems, primarily for large commercial and industrial buildings. These systems shift cooling load from on-peak to off-peak hours. CEERT represents a coalition of environmental groups, renewable energy developers, and energy service companies.

7 We use the terms "ESCOs" and "third parties" interchangeably throughout this order to refer to nonutility providers of DSM services.

separate solicitations to replace a portion of its energy management hardware rebate program in the commercial sector: one for schools (K-12) and one for small office buildings (under 200 kilowatts (kW)). SCE plans to conduct its pilot within two marketing regions, while continuing its own programs in the remaining five regions. SoCal has targeted its bidding pilot to the existing multi-family residential sector. SoCal will solicit bids to replace multi-family portions of its home energy audit, weatherization retrofit incentives, appliance efficiency incentives, and master meter conversion programs. SDG&E proposes to replace its residential appliance efficiency incentives program, for both single and multi-family applications. Unlike SCE, SDG&E and SoCal propose to solicit bids in all geographic regions within their respective service territories.

The proposed pilots also differ with respect to bid design. SCE's small office pilot solicits proposals for third parties to implement a utility-designed program, which includes explicit design elements to test the ability of third parties to achieve high intensity savings that persist over a seven-year period. The other pilots allow bidders to propose any program design or delivery mechanism for replacing utility efforts in a particular sector. SoCal's and SCE's pilots are designed to test whether ESCOs can cost-effectively increase savings penetration or capture lost opportunities in a particular market. SDG&E's pilot, on the other hand, is designed to test whether ESCOs can achieve the same level of savings as planned by the utility for less cost.

The size and cost of the bidding pilots also vary among utilities. SoCal is seeking savings of 1 million therms per year, at an estimated cost of approximately $6.5 million over the program period (in 1993$ net present value or NPV). SCE estimates that it will award four contracts totalling 30 to 50 gigawatthours (gWh) per year at a total cost of approximately $22.4 million (in $1993 NPV). SDG&E projects savings of approximately 7.2 megawatts (MW),

30.8 gWh per year, and 2.3 million therms per year, at a cost of approximately $17.8 million (in 1993$ NPV).[8] SoCal and SDG&E are requesting increased authorizations for their pilot programs, while SCE plans to redirect existing DSM program authorizations to cover all pilot program costs. All three utilities request that the Commission include the energy savings produced by these bidding pilots in the calculation of shareholder earnings incentives for 1993 and thereafter. The costs of the proposed pilots, in 1993 dollars and NPV are presented in Table 1.

For each utility, the bid solicitation process begins with the issuance of a Request for Proposal (RFP), including a sample contract. SoCal, SDG&E, and SCE present their proposed RFPs and sample contracts in Exhibits (Exh.) 102/103, 109, and 114/115, respectively. The RFPs describe a bid evaluation and selection process that involves essentially three steps: (1) an initial screening of bidders, based on threshold or minimum requirements, (2) a bid evaluation/scoring process, based on price and non-price criteria, and (3) negotiations. The initial screening of bidders would eliminate unqualified candidates from further consideration. The bid evaluation/scoring process would be used to identify a "short list" of bid proposals for negotiations. As discussed further in the following sections, and summarized in Attachment 2, the specifics of each bid evaluation stage vary among the utilities.

SDG&E and SCE estimate that their bid solicitation process, from the issuance of the RFP through contract signing, will take approximately eight months. SoCal estimates that its bid

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8 Under SDG&E's program, the savings build up to these amounts cumulatively, whereas SCE expects to achieve approximately 30 gWh from its small offices solicitation in the first year, and maintain the savings over a seven-year period. (See Table 2 and Exh. 108, Table 2-B.)

solicitation process will take approximately one year. (Reporters Transcript (TR) at 1212, 1372.)

4. Issues to be Decided

By ALJ ruling dated March 11, 1992, parties were directed to identify and address two types of issues: threshold and implementation or technical issues. In response to that directive, parties identified the following general threshold issues:

1. What is the appropriate competitive framework for replacement bidding? In particular, should utilities be allowed to earn shareholder incentives on ESCO-delivered DSM?

2. What is the appropriate bid design and size for these pilots, from both a legal and policy standpoint:

   a. Are there legal reasons to support a particular pilot design or size? Specifically, do the utilities' DSM programs and proposed pilots violate antitrust laws?

   b. From a research perspective, what bid design and size will provide the information needed to assess DSM competitive bidding?

Parties also raised technical or implementation issues in the following areas:

1. Bid Evaluation Criteria. How should non-price and price (e.g., cost-effectiveness) criteria be defined and considered in the bid selection process?

2. Sample Contract Terms. What contract terms should be included (or conversely, excluded) from the sample contracts?

3. Funding Authorizations. What level of funding should be authorized for SoCal's and SDG&E's pilot programs? What degree of flexibility should utilities have to exceed authorized amounts, or to shift funds between DSM programs?

4. Approval of Negotiated Contracts. How should negotiated contracts between winning bidders and the utilities be reviewed and approved by the Commission?

5. Measurement and Evaluation. How should winning bidders' activities be monitored and evaluated in terms of achieved energy savings?

6. Commission Oversight. What type of Commission oversight is appropriate during bid solicitation, contract negotiation, and pilot program implementation? Should expedited or alternative dispute resolution mechanisms be adopted?

We address threshold issues in the following section. Implementation issues are addressed in Section 6, below.

5. Threshold Issues

SoCal, SCE, SDG&E, DRA, and Transphase filed testimony and briefs addressing various threshold issues and participated in the direct- and cross-examination of witnesses. SESCO did not file testimony on these issues, but participated in cross-examination and filed opening and reply briefs. UCAN filed an opening brief addressing the size and scope of SDG&E's bidding pilot. CEERT filed an opening brief responding to certain legal issues raised by Transphase.

5.1 Competitive Framework for Replacement Bidding

In its direct testimony, DRA outlines the major characteristics of a competitive framework for replacement bidding. (Exh. 118.) We present DRA's proposal first, followed by the utilities' and SESCO's responses.

5.1.1 DRA's Position

DRA contends that true competitive bidding requires a bidding process that mimics, as closely as possible, the supply-side model of qualifying facilities bidding against an identified

utility supply-side project.[9] Accordingly, DRA proposes that DSM replacement bids incorporate four "distinguishing features." First, the RFPs should clearly define the size and load characteristics of the DSM programs or program elements to be replaced through competitive bidding.

Second, bidders should be required to meet threshold performance requirements designed to ensure that the bidder/project is capable of replacing the utility's program. In particular, bidders would be required to (1) match the size and load characteristics of the utility program and/or sub-elements replaced, (2) measure project savings using protocols similar to the utility's methods, and (3) incur the primary risk of acquiring the necessary level of participation in the program and/or of paying the utility for assistance.

Third, once those minimum requirements are met, the selection of winning bidders should be based predominantly, if not exclusively, on the relative cost-effectiveness of bid proposals. Fourth, the utility should not be eligible to claim shareholder earnings on ESCO-delivered savings.

DRA argues that its recommended four features are necessary conditions for emulating the "pro-competitive" bidding framework established for the acquisition of supply-side resources. Without these features, DRA contends that the bidding framework does not enable third parties to effectively compete with the utility. In particular, DRA believes that there is no basis consistent with a competitive bidding policy for providing the utility with profits when it is not the winning bidder. To do so would, in DRA's opinion, inappropriately allow utilities to profit

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9 Qualifying facilities, or "QFs" are non-utility generators that satisfy various efficiency and technology criteria established under the Public Utility Regulatory Policies Act of 1978 (PURPA).

when all the risk for performance and financing is imposed on a third party, i.e., the ESCO.

Moreover, DRA argues that the continuation of shareholder earnings in a bidding environment eliminates "downward pressure" on utility costs that a true competitive replacement bid would provide. According to DRA, this is because ratepayers would be paying "double profits"--once for the profit margin built into the bid by the ESCO and again to utility shareholders. DRA believes that there is no basis in law or policy for "diluting ratepayers benefits from a program where not a single dollar of shareholder money is at risk." For these reasons, DRA suggests that continuing shareholder incentives for bidding pilots would expose the Commission and utilities to antitrust liability. (DRA Opening Brief, pp. 4-5, 17-18, Reply Brief, pp. 6-7.)

To ensure a favorable utility response without financial incentives, DRA recommends that the Commission adopt clear guidelines and directives regarding expected utility performance. In particular, DRA suggests that the Commission declare the planned utility 1994 DSM programs ineligible for utility earnings if a replacement bid solicitation is not conducted by a specific date. Other specific directives might include requirements that the utilities provide the results of completed customer energy audits to ESCOs on a regular basis and customer listings/billing information at the request of the ESCO, with the concurrence of the customer.

DRA also recommends that minimum requirements for utility administrative support be established. Bidders requiring additional assistance would pay the utility a fee for those services. In addition, the Commission would need to develop oversight procedures to ensure that savings measurement protocols are applied uniformly to utility and ESCO DSM activities. (DRA Opening Brief, pp. 13, 28-29; TR at 1453-1466.)

DRA recommends that its proposal be implemented in two pilot stages. During the first stage, the utilities' bidding pilots would be implemented as proposed, except for the size and scope modifications that DRA also recommends. (See Section 5.2.2 below.) SoCal, SCE, and SDG&E would be eligible for shareholder incentives on their pilots, but the pilot programs themselves would only last through 1993. During 1993, the Commission would conduct workshops to further define (1) size and load characteristics of specific DSM programs, (2) threshold performance requirements, including measurement protocols, and (3) specific regulatory procedures to ensure utility cooperation in implementing a replacement bid without shareholder incentives. (TR at 1453-1466, 1637-1638, 1689.) After those features are further defined by the workshop process, the utilities would be directed to issue a second set of RFPs soliciting replacement bids for the 1994-1995 period.

5.1.2 Responses to DRA's Position

While supportive of some aspects of DRA's proposal, SoCal and SDG&E argue that DRA's definition of competitive bidding is too restrictive for a pilot bidding program. SoCal contends that DRA's proposal is premised on the false assumption that all the utilities are required to conduct replacement bids, and that those bids must be designed according to DRA's definition. Similarly, SDG&E and SCE argue that it is inappropriate to adopt a blanket policy on what constitutes "replacement bidding" before the pilots are completed and evaluated. In the utilities' view, bidding pilots should be designed in a variety of ways to explore the potential benefits of procuring DSM services competitively.

SESCO, SoCal, SCE, and SDG&E strongly object to any definition of replacement bidding that automatically eliminates the potential for shareholder earnings on ESCO-delivered DSM. SCE argues that DRA's supply-side reference model of competition ignores important, inherent differences between demand- and supply-side resources. SCE contends that a utility carrying out an energy

efficiency bidding program can never be completely isolated from the customer, in contrast to supply-side programs. SCE argues that utilities must continue to satisfy customer needs for energy and energy services by responding to customer inquiries and ensuring quality energy service. Because the utility's role in the delivery of the proposed bidding pilots will be active and substantial, SCE believes that shareholder incentives are appropriate even if ESCOs operate the DSM programs. (Exh. 113, pp. 24-25; TR at 1313-1314.) Similarly, SoCal argues that utilities should be allowed to earn a profit on ESCO-delivered DSM, to compensate both for the profit they voluntarily forego by not making a similar investment on the supply side, and for their continued role in DSM bidding. (SoCal Opening Brief, pp. 26-28.)

SDG&E stresses the importance of viewing the proposed programs as pilots, as opposed to long-term programs. SDG&E urges the Commission to create an environment where the utilities are indifferent to the choice between participating in these pilots or continuing to run their own programs. (SDG&E Opening Brief, p. 34.) SDG&E, SoCal, SCE and SESCO argue that the most effective way to ensure utility cooperation in the pilot stage is to maintain the earnings potential in place for other utility resource programs. Without that potential, SESCO contends that utilities would construct barriers to contract execution and project implementation that would result in more utility dominance and monopolization of DSM, not less. Moreover, SESCO argues that many bidders are unlikely to compete if the Commission approves a bidding form that creates inconsistent incentives between utility- and ESCO-sponsored DSM. (SESCO Opening Brief, p. 3.) For similar reasons, SoCal argues that inclusion of shareholder incentives is likely to improve the competitive nature of the pilot bids. (SoCal Reply Brief, p. 18.)

SoCal, SCE, and SDG&E maintain that DRA's proposal to impose "strong regulatory oversight" as a method for ensuring

aggressive utility implementation of the pilots is ill-defined and flawed from a public policy perspective." SoCal argues that the "heavy-handed regulatory oversight and micro-management techniques" that DRA suggests are ones that the Commission has traditionally rejected. (SoCal Opening Brief, p. 28.) SCE, SDG&E, and SoCal argue that DRA has not proven that strong regulatory oversight will benefit utility customers. In particular, they point to the fact that DRA has performed no calculations of the cost of its proposed regulatory oversight, relative to the ratepayer cost of utility earnings. (TR at 1470.) Moreover, SDG&E and others argue that the specifics of DRA's proposal for strong regulatory oversight remain undefined. (SDG&E Opening Brief, p. 35.)

SESCO and SoCal also respond to DRA's contention that ratepayers would pay "double profits" if utility shareholders earn on ESCO-delivered programs. They argue that ratepayers regularly pay profits to more than one entity in the delivery of DSM services, since all businesses in the "DSM production chain" (e.g., manufacturers, distributors, and contractors) earn a profit. Otherwise, SoCal and SESCO contend, these entities would not participate at all. SESCO argues that the payment of such multiple profits can still lead to reduced ratepayer costs as long as the final bid price (which includes bidders' profits) is lower than the utility's internal DSM program without utility profits. (SoCal Opening Brief, p. 28; SESCO Reply Brief, p. 7.)

Finally, SESCO, SoCal, SCE, and SDG&E consider DRA's proposal to be based on an impractical timeframe. They argue that few bidders would be able to complete program installation (or even finalize program commitments) over the few months available after the solicitation, review and contract negotiation process in 1993. In addition, they argue that the information derived from those pilots would be limited. Moreover, SDG&E and others contend that, in addition to the other DSM-related activities scheduled for 1993, it would be infeasible to conduct the number of workshops necessary

to define DRA's recommended replacement bid features in time to issue another set of RFPs for 1994. SoCal also argues that its current schedule, which requires a full twelve months from the issuance of the RFP to contract signing, cannot be shortened to accommodate DRA's proposal for a 1993 solicitation.[10]

5.1.3. Discussion

DRA's proposal establishes a competitive framework for DSM replacement bidding that is designed to be identical to the framework currently in place for supply-side resources. As we stated in D.92-03-038:

> "Our bidding process for supply-side resources does not enable utilities to earn a return on winning QFs' projects. Nor are QFs limited to proposing supply-side projects that augment, rather than defer or replace, the utility's own construction plans. On the supply side, QFs compete head-to-head with the utility for planned resource additions. If the QF's bid is lower than the utility's proposed cost-effective addition, then the QF wins the bid and builds its own project. If QFs cannot beat the utility's costs, then the utility meets the resource requirements itself, and shareholders earn a rate of return on that investment." (D.92-03-038, pp. 33-34.)

As we also stated in D.92-03-038, our supply-side competitive framework has conceptual appeal for DSM bidding forms that are designed to replace current or planned utility programs, rather than augment them. (Ibid., pp. 33-37.) Despite that appeal, we conclude that DRA's proposal is premature for the reasons discussed below.

DRA's proposal is premised on the assumption that our supply-side competitive framework can be, and should be,

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10 See SESCO Reply Brief, p. 7; SoCal Opening Brief, pp. 31-35; SDG&E Opening Brief, pp. 38-40; SCE Opening Brief, p. 22.

transferable to demand-side bidding. However, the record in this case raises significant questions about the applicability of various aspects of that framework to DSM bidding. In terms of evaluation criteria, we are not convinced that predominant or exclusive reliance on the economic attribute is as appropriate for all types of demand-side bidding as it is on the supply side. As SDG&E points out, there may be fundamental differences among types of programs or customer classes that warrant different weights among evaluation criteria, and even different threshold criteria. By testing several different types of bid evaluation designs, and customer responses to the programs, we should gain some information as to whether such fundamental differences exist.

Similarly, DRA's proposal to require bidders to exactly match the size and load characteristics of the utility's program or program sub-elements may not be directly transferable to demand-side bidding. On the supply side, it is easy to project the size and load characteristics of the utility's planned addition, and identify bidders that can individually, or in aggregate, displace that resource. We have no evidence to indicate whether the same holds (or does not hold) for demand-side resources. Before establishing detailed minimum performance criteria on size and load characteristics, we would want to explore the feasibility of applying such size and load matching criteria to a DSM bidding framework. In particular, we would want to assure ourselves that doing so does not unduly restrain innovation in the development and delivery of third-party proposals.

Moreover, it is not clear to us that DRA's proposal for ensuring that bidders match the size and load characteristics of utility DSM programs is consistent with our supply-side bidding approach for multiple supply-side resources, since those policies are still evolving. (TR at 1643-1646; D.92-04-045, mimeo., pp. 94-95.) Even if it were consistent, DRA has not convinced us that, for the purpose of these pilots, it makes more sense to

develop explicit size and load criteria in the screening stage for DSM than to take those characteristics into account in the negotiation stage, as SDG&E proposes. (TR at 1649; Exh. 109, p. 1-15.)

The need to establish explicit size and load criteria, along the lines suggested by DRA, can certainly be evaluated during the pilot stage, as we learn how effectively winning bidders match the size and load characteristics of programs being replaced. For this purpose, and in order to provide bidders additional information in planning for their bids, we will require that SDG&E, SoCal, and SCE include in their RFPs the size and load characteristic information outlined in lines 1-3 of Exh. 120, Appendix B, for planned program activities. The utilities should provide this information for the program as a whole and for major program sub-categories. (See TR at 1649-1651.)

With regard to shareholder incentives, DRA contends that the only acceptable competitive framework for DSM bidding is one in which the utility loses earnings potential if it does not win the bid. DRA's contention is based on the assumption that the most effective regulatory approach for keeping ratepayer costs down is one that (1) places all utility competitive resource procurement activities in a "win-lose" situation and (2) uses strong regulatory oversight to ensure utility cooperation.

As described in Section 5.1.2 above, the utilities and SESCO challenge the appropriateness of this assumption for DSM bidding. They argue that the utility will continue to be significantly involved in the delivery of demand-side services, even if third parties deliver DSM services. Therefore, they assert that it could be more cost-effective to use financial incentives to ensure utility cooperation in DSM bidding, rather than to implement the detailed directives and oversight procedures that would be necessary in the absence of incentives. Their challenges to DRA's proposal also reflect a very different view on the most effective

regulatory approach for resource procurement. In contrast to DRA's preference for a "win-lose" competitive framework, they argue that the goal of least-cost resource procurement is best served by creating a bidding framework in which the utility maintains financial "indifference."

Parties to this phase of the proceeding raise important issues to consider in developing our regulatory framework for resource procurement in general, and for competitive bidding in particular. However, a determination on this issue at this stage of the proceeding would be premature. Many of the arguments for or against DRA's proposal have little or no factual basis in the record. For example, we have no factual evidence on the extent to which third parties can effectively provide the type of DSM-related customer services that SCE and others claim will still be required of the utilities in the future. (TR at 1287-1288.) Nor do we have evidence indicating how much administrative and customer service functions will, over time, still be required of the utilities to effectively deliver DSM services. This is not surprising, since one of the purposes of the bidding pilots is to obtain and evaluate this type of information.

Similarly, there is no information on the record to assess the relative cost-effectiveness of alternative regulatory strategies. DRA did not develop sufficient details on its "strong regulatory oversight" proposal to even begin to assess the ratepayer costs of that approach relative to a continuation of shareholder incentives. Moreover, none of the parties presented analyses comparing the relative cost-effectiveness of a "win-lose" versus a "financial indifference" competitive model in meeting Commission resource procurement objectives. This too is not surprising, since the focus of this phase of the proceeding is to develop specific test pilots in compliance with PU Code § 747.

Even if parties made the information described above available in this phase of the proceeding, we could not address the

broader regulatory issues in today's decision. As we described in D.92-02-075, issues related to the appropriateness of continuing shareholder incentives in general will be addressed in a later phase of this proceeding, beginning in 1993. If shareholder incentives are continued, we will need to further define what constitutes "comparable earnings" or "financial indifference" for the purpose of establishing the appropriate return to shareholders. As we also stated in D.92-02-075, we will consider the risk to the utility of investing its own funds in supply-side resources relative to managing ratepayer funds to procure DSM services. (See D.92-02-075, mimeo., pp. 47-53 and Rule 19.) In addition, as DRA's testimony suggests, the relative risk of utility-sponsored versus third-party contracted energy services should also be considered.[11] Until we complete that phase, we will withhold making blanket determinations on whether shareholder incentives for DSM should continue and, if so, on the appropriate level of those earnings.

We are also conducting a separate investigation of ratemaking incentives in the gas and electric industries. (I.90-08-006.) The purpose of our incentives investigation is to take a comprehensive look at current practices for regulating gas and electric utilities, and to evaluate the advantages and disadvantages of new incentive approaches. As part of that investigation, we plan to examine ongoing changes in gas and

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11 As in the case of PG&E's partnership bid, we do not have sufficient information on the record with which to assess the relative risk to the utility of a replacement bid, vis-a-vis the utility's own programs. (D.92-03-038, mimeo., p. 38.) While DRA asserts that under a replacement bid all the performance risk is placed on the third party, that assertion was not supported. For example, we note that the utilities will continue to be responsible for program accomplishments and subject to performance penalties pursuant to PU Code § 746(b).

electric utility industry structure (e.g., the emergence of competition in resource procurement) and evaluate regulatory alternatives for managing those changes. Therefore, any determinations that we make regarding the most effective competitive model for resource procurement will also need to be closely coordinated, and consistent with, the policies established in that proceeding.

Even if DRA's proposal were timely, it suffers from implementation problems, as various parties point out. Under DRA's proposal, customers could be introduced to a utility program in the first half of 1993, a new ESCO program in the second half of 1993, and yet a third program in 1994. We agree with SDG&E and others that such a sequence would unduly complicate the bid pilot process and serve to confuse both third-party bidders and utility customers. Moreover, DRA's proposal for a limited initial pilot phase is unlikely to provide the Commission with information that can be transferred to the second pilot phase. (TR at 1687-1689.) Therefore, we find that there are significant implementation disadvantages, without any compensating research advantages, to implementing the two-stage pilot approach recommended by DRA.

Finally, we find no merit in DRA's contention that providing shareholder incentives on ESCO-delivered programs would expose the Commission and utilities to antitrust liability. DRA has failed to provide any evidence that utilities would be likely to restrain trade and participate in anticompetitive behavior if they operate under a regulatory framework that provides financial incentives for successful program outcomes (and penalties for unsuccessful outcomes).

DRA asserts that overall ratepayer costs would be lower under its proposed regulatory framework; however, that argument has no bearing on whether the utility is allowing third parties to

fairly compete in its bidding pilot.[12] Nor is it obvious to us that the only effective way to put downward pressure on utility costs over the long run is to establish the competitive framework that DRA proposes. We also agree with SoCal and SESCO that DRA's "double profits" argument is poorly reasoned. The issue is not whether more than one entity receives a profit from ratepayers' investment in the short run. Rather, we seek to assess whether an incentive approach to regulation more effectively puts downward pressure on utility costs over time, relative to traditional regulatory approaches.

For the reasons stated above, we will not adopt DRA's definition of replacement bidding in today's decision. Later phases of this proceeding and our incentives investigation are the forums where we will address the broader regulatory issues raised by DRA's testimony. We will leave open the possibility of reconsidering DRA's proposal after our investigation of incentives in general, and DSM incentives in particular, has resolved threshold issues regarding the appropriate regulatory framework for resource procurement. Until then, we must view the issue of shareholder incentives within the limited context of these particular pilots. The relevant questions at this stage are whether the inclusion of shareholder incentives (1) is necessary to secure concrete results from these pilots and (2) will allow us to evaluate the potential of bidding to put downward pressure on utility costs.

Based on the testimony in this proceeding, we believe that the answer to both questions is yes. As currently designed, all the replacement pilots require substantial utility involvement

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12 In Section 5.2.6.1 below, we address the issue of whether utility DSM programs in general, and the proposed pilots in particular, are anticompetitive and violate antitrust laws.

and varying degrees of utility discretion in the solicitation, selection and negotiation stages. Therefore, the cooperation of the utilities in these pilots in an unbiased fashion is critical, if we are to obtain meaningful information about the potential of bidding to provide customer benefits.

We see no purpose to creating a test environment where utilities are penalized for cooperating in the process. Should we decide to implement a "win-lose" competitive framework for DSM in the longer term, we will have ample time to develop appropriate procedures for overseeing utility involvement. For the pilot stage, however, we agree with SDG&E and SoCal that the retention of shareholder earnings is necessary to secure concrete results from these pilots. Moreover, as DRA Witness Schultz conceded during questioning by the assigned ALJ, one can test whether an ESCO can deliver savings at a lower cost even if shareholder earnings are included in the pilot. (TR at 1532.)

Finally, the impact of retaining shareholder incentives on ratepayer costs is relatively small. The total cost of shareholder incentives for the proposed pilots of all three utilities, over the program life, is not expected to exceed $4 million (1993$, NPV). (See Table 1.) We note that inclusion of shareholder incentives in <u>replacement</u> bids does not represent an incremental cost, as it does for partnership bids, since the utility would have been authorized to earn incentives on the in-house programs being replaced.

For the reasons stated above, we approve the utilities' request to include the energy savings produced by these bidding pilots in the calculation of shareholder earnings beginning in 1993 (SCE, SDG&E) and 1994 (SoCal). In order to minimize the cost impact of this determination on ratepayers, we have directly incorporated ratepayer cost impacts into the bid-selection process. (See Section 6.2.1.2 below.)

In calculating shareholder earnings under the pilots, utilities should use the most currently adopted shareholder incentive mechanism that is applicable to the programs being replaced. The shareholder incentive mechanisms adopted for SCE in D.91-12-076 and for SoCal in D.92-06-061 are the adopted mechanisms at this time. SDG&E's incentive mechanism for 1993 will be adopted in its current general rate case (A.91-11-024). Any future modifications to these mechanisms (e.g., in a later phase of this proceeding) will also apply to these pilots on a prospective basis regardless of when ESCO projects are contracted for, paid for, or reviewed for ratemaking purposes.[13]

5.2 Bid Design and Size

Transphase, SESCO, DRA, and UCAN propose modifications to the design and size of the utilities' proposed pilots, based on legal and policy arguments. Their positions, and other parties' responses, are summarized below.

5.2.1 Position of Transphase

Transphase objects to any bid approach that targets specific sectors' regions or programs, or that excludes certain technologies from consideration (e.g., thermal energy storage and fuel substitution measures). Transphase recommends that bidders be allowed to bid for cost-effective energy or capacity savings across all sectors, similar to PG&E's pilot bidding program. In

13 For example, assume that incentive mechanism #1 is in place at the time a utility signs a contract with an ESCO in 1993, but incentive mechanism #2 is adopted in June of 1994, before the ESCO completes the project. Assume further that incentive mechanism #3 is adopted in June of 1997. Regardless of when the utility signs the contract, actually pays the ESCO, or submits its claim for shared-savings to the CPUC, shareholder earnings should be calculated based on incentive mechanism #2 for ESCO-delivered savings between June 1994 and June 1997. Shareholder earnings for ESCO-delivered savings after June 1997 should be based on incentive mechanism #3.

Transphase's opinion, all or substantially all of the utility's annual DSM funding should be put out to bid under these pilots and for all future DSM procurement.

Transphase argues that the viability of DSM bidding can only be effectively tested with a broad bidding pilot, rather than a pilot limited to "the functional equivalent of a one-eyed man with a limp." (Exh. 107, p. 6; TR at 925.) Transphase points to the fact that no other state has limited bidding programs to the market sectors selected by respondents as evidence of the unreasonableness of such selections. (Transphase Opening Brief, pp. 14-15.) Transphase contends that, by selecting unattractive market sectors, the utilities have "rigged" the pilots to demonstrate that the utilities are the only entities that can perform DSM in California. (TR at 931.) Moreover, Transphase alleges that the utilities' proposals result in utility monopolization of the DSM market, and thereby violate state and federal antitrust laws:

> "At present, California's DSM needs are only being met through the Utilities' in-house DSM programs... these programs violate federal and state antitrust laws in that they create an unlawful monopoly by the Utilities over ratepayer DSM funds and the procurement of DSM resources. There is neither competitive access to such funds nor a competitive framework for the acquisition of DSM resources. Rather, the Utilities have the sole and exclusive power within their service territories to determine how much is spent on DSM measures, what the price will be for DSM measures, the size of the market, the economic payback to host customers who install such measures, and which customers receive paybacks." (Transphase Opening Brief, pp. 2-3.)

Transphase alleges that utilities have been able to use this monopoly power to "manipulate the penetration of DSM measures in the market to serve their own purposes." (Transphase Reply Brief, p. 7.) In particular, Transphase asserts that the utilities

impede competition by setting rebate levels "arbitrarily low," to the disadvantage of both ratepayers and third-party contractors.

In support of this assertion, Transphase presents calculations on the actual cost of SCE's and SDG&E's in-house load management programs, based on the utilities' Annual DSM Reports.[14] Based on these reports, Transphase calculates the total cost of SCE's in-house thermal energy storage program at $702 per kW, of SDG&E's in-house non-residential load management program at $872 per kW, and of SDG&E's residential appliance efficiency program at $2,000 per kW. Transphase also calculates that utilities typically spend 40% or more of ratepayer funds on administrative costs alone. This is far more than warranted, in Transphase's opinion, since the utilities themselves do not design, manufacture or install DSM measures. (Transphase Opening Brief, pp. 8-9.)

Transphase argues that independent DSM contractors, such as Transphase, have installed systems with verified savings at much lower costs. But according to Transphase, independent contractors cannot compete effectively under the current programs because the utilities set customer rebate levels "arbitrarily low" (e.g., $100-$250 per kW for SDG&E's residential load management program). Without broad-based bidding, Transphase asserts that utility monopolization of the DSM market will continue to harm ratepayers and cause competitive injury to independent contractors.

Transphase argues that utility monopolization of DSM is not only inefficient from a resource procurement standpoint, but is also in violation of state and federal laws. According to Transphase, there is no statutory or regulatory authority for

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14 The utilities' March/April 1992 annual reports on 1991 DSM activities were entered into the record in this proceeding as Reference Items (Ref. Item).

utility monopolization of DSM. To the contrary, Transphase cites Chapter 984 of the Statutes of 1983 as evidence that California laws explicitly mandate a competitive framework for the procurement of energy resources.

Moreover, Transphase argues that the Commission does not actively supervise utilities' in-house programs or the DSM bid pilots, since the utilities have great flexibility in how they carry out the programs. (Transphase Opening Brief, p. 26.) For these reasons, Transphase argues that utilities' DSM programs fail to meet the 2-part test of the "state-action doctrine," which would otherwise shield state agency and utility actions from antitrust liability.[15] Therefore, Transphase asserts that the utilities' DSM programs in general, and their proposed pilots in particular, are in violation of federal and state antitrust law. Transphase also alleges that the utilities have violated antitrust laws by collaborating to divide up DSM market sectors for these pilots.

5.2.2 Position of DRA

DRA strongly opposes Transphase's recommendation that the utilities' entire DSM budgets and programs be put out for competitive bidding. DRA argues that the utility continues to play an important role in the design, development, and delivery of DSM programs to ratepayers, particularly during the pilot stage. In DRA's opinion, the purpose of the bidding pilots is to explore other market mechanisms or participants in the delivery of DSM programs, rather than to remove the utility entirely from DSM activities. Contrary to Transphase's assertions, DRA argues that nothing requires the Commission to move to an immediate wholesale adoption of competitive bidding as the only means for procuring

15 The state-action doctrine, as established by federal courts, grants antitrust immunity for state regulatory programs and actions taken by private parties in response to state directives. See Section 5.2.6.1 below.

ratepayer-funded DSM programs. In DRA's view, the current pilot bidding program can go forward without a determination of the application of antitrust laws on DSM programs in general.

However, DRA agrees with Transphase that the size and scope of SCE's and SoCal's proposed pilots are too limited for evaluation purposes. In particular, DRA questions the merits of SoCal's proposal to limit the bid to the multi-family market, since significant elements of SoCal's program for that market are not cost-effective. DRA recommends that the weatherization retrofit incentives component of SoCal's multi-family program, extended to single-family dwellings, replace SoCal's proposal. This would enable bidders to replace a larger, more successful program, in DRA's opinion. DRA also recommends that SCE and SoCal work together to develop a coordinated bidding approach for a subsequent pilot.

DRA recommends that SCE's bid be expanded to encompass the entire set of planned customized rebate activities of its commercial, industrial, and agricultural (C-I-A) energy efficiency programs, across all market regions. In DRA's view, the ESCO market that should be encouraged is one that is capable of providing comprehensive energy services. Therefore, DRA argues that it is important to obtain experience with bidding arrangements targeted toward customized rebates across these three sectors.

Although recommending that the pilots go forward at this time, DRA suggests that the utilities are inappropriately using utility monopoly power in the DSM market through their "pervasive use of unregulated vendors and contractors." (DRA Opening Brief, pp. 8-9.) DRA recommends that the Commission take a closer look at the current structure of the DSM markets, particularly those of energy efficiency equipment vendors and ESCOs which are owned either by regulated utilities or unregulated affiliates.

5.2.3 Position of SESCO

SESCO agrees with Transphase that the RFPs should not be limited to specific market sectors. In SESCO's view, the purpose of competitive bidding is to determine the least-cost generation or DSM resources available from enterprises willing to make significant capital investment, with repayment based upon performance of the resource provided. SESCO argues that limiting bidders to "a narrow subclass of utility customers" defeats this purpose by failing to obtain the valuable information about resources available in other sectors.

SESCO echoes many of Transphase's concerns regarding competitive access of third parties to DSM markets, but does not offer an opinion on whether utility conduct has violated federal or state antitrust laws. In SESCO's view, the courts may need to be called upon to resolve that issue. Nonetheless, SESCO argues that monopoly control over ratepayer funds should be mitigated by directing SoCal, SCE, and SDG&E to proceed with bidding pilots like PG&E's that allow all DSM suppliers to compete. For similar reasons, SESCO urges the Commission and utilities to move aggressively on implementing all-source demand- and supply-side bidding.

If the Commission does approve sector-specific RFPs, SESCO recommends several modifications to the utilities' proposals. First, SESCO recommends that SoCal's pilot be expanded to include weatherization of single-family residences. SESCO argues that this would reduce duplication of utility administrative costs and enable contractors to achieve economies of scale/location in treating units.

Second, SESCO recommends that SoCal and SCE offer an opportunity for bidders to provide comprehensive energy efficiency improvements to residential dwellings, whether heated by gas or by electricity. SESCO argues that this approach would reduce both the

creation of lost opportunities and the need for multiple site visits.

Third, SESCO recommends that bidders under any of the proposed programs not be required to administer appliance rebates. SESCO argues that there is no reason to expect third parties to be more efficient in administering rebates than the utility. In SESCO's opinion, the solicitation should focus on areas where ESCOs can demonstrate their efficiency, e.g., field work and actual installations.

Finally, SESCO recommends that bidders be allowed to weatherize low-income houses under SDG&E's program, if a bidder can do so cost-effectively. Otherwise, SESCO argues that the program would create pockets of untreated houses.

5.2.4 Position of UCAN

UCAN argues that SDG&E's proposed pilot will be significantly more complicated and less cost-effective than projected. UCAN asserts that SDG&E's reliance on a residential program for this pilot is motivated more by its reluctance "to lose important commercial markets to ESCOs, rather than a true desire to best test the potential for third party bidding." UCAN argues that there is no evidence that ESCOs have significant experience in delivering the kind of residential services envisioned by SDG&E, or that ESCOs have any natural economic advantages over the utility in this market. Moreover, UCAN is concerned that customer privacy difficulties and substantial costs may occur if significant amounts of customer information are required by bidders responding to SDG&E's proposal.

In view of these concerns, UCAN recommends that funding authorization for SDG&E's pilot be reduced to $10.5 million over the next three years. In the alternative, UCAN recommends that full funding be authorized for only the high efficiency refrigerator program, which UCAN believes is the most likely to

secure a competitive bid and the least likely to involve privacy complications.

5.2.5 Responses of SCE, SDG&E, SoCal, and CEERT

SDG&E and others argue that Transphase's allegations of anticompetitive motives or behavior are unsupported by factual evidence. Contrary to Transphase's assertions, SDG&E contends that its in-house programs actively promote competitive access to the market by encouraging customers to purchase and install another company's energy-reduction product or service. In response to Transphase's allegation that utility in-house programs are inefficient, SDG&E argues that it is inappropriate to compare program cost-effectiveness on the basis of either dollars per kW or per kilowatt-hour (kWh). By doing so, Transphase has presented misleading computations on the relative cost-effectiveness of utility programs, in SDG&E's opinion. CEERT, SoCal, and SCE argue that any inquiry on the potential anticompetitive effects of utility DSM in general should be fully noticed and heard separately within the generic DSM Rulemaking.

With regard to the bidding pilots themselves, SoCal argues that they are not anticompetitive because (1) they are of limited duration and (2) they specifically allow private contractors to openly compete for the installation of DSM measures. Even if anticompetitive effects were found, SoCal and CEERT argue that the Commission has the authority to approve the pilots as long as those effects are outweighed by other public interest considerations. SDG&E and others also argue that the testimony in this proceeding refutes Transphase's allegations of collusion or conspiracy in selecting the proposed pilot market sectors. Moreover, SDG&E asserts that utilities' efforts to influence the actions of regulatory agencies are protected under the Noerr-Pennington doctrine, which allows a competitor to petition its government for a statutory advantage in the marketplace.

Even if the utilities' DSM programs in general were found to be anticompetitive, SDG&E asserts that state-action immunity would apply. SDG&E argues that the first prong of the state-action immunity test is satisfied because the Legislature has given the Commission a clear directive to regulate the involvement of energy utilities in DSM, including their involvement in these specific bidding pilots. SDG&E also points to the many DSM-related review proceedings and oversight procedures at the Commission as evidence that the utilities' DSM programs satisfy the second prong of the test.

SoCal and CEERT echo SDG&E's arguments that the state-action exemption applies to these specific bidding pilots. They argue that the Commission is acting under direct legislative mandate to implement DSM bidding experiments and that, by definition, these experiments should be small in scale. They also argue that the decisions and rulings in this proceeding demonstrate that the design, scope and structure of the pilots will be actively supervised by the Commission.

From a research standpoint, SoCal and others argue that the value of each bidding pilot should be viewed in the context of the full set of planned bidding experiments. In their opinion, the PG&E, SoCal, SCE, and SDG&E pilots provide a very diverse and substantial array of experiments upon which the Commission can base its evaluation of DSM bidding.

Moreover, the utilities contend that sector- or region-specific approaches to testing replacement bidding have distinct research advantages to a broad, multi-sector approach. By targeting sectors, the utilities argue that the bidding pilots can clearly identify the capabilities of ESCOs to replace utility activities or to exceed the utilities' savings penetration in specific markets. SoCal and SDG&E assert that it is particularly appropriate to target replacement bidding to the residential sector, since that sector is often overlooked by bidders when they

can bid across all markets. SCE argues that limiting pilot bidding to specific geographic regions, while the utility continues its program in other regions, provides a unique "controlled experiment" of DSM bidding.

In addition, SDG&E and SCE argue that a sector-specific approach is more conducive to testing and evaluating different bid designs. By soliciting bids in separate customer markets, SCE contends that it is possible to compare the results of two bid evaluation designs for averting lost opportunities. (SCE Reply Brief, p. 5.) SDG&E also asserts that a self-scoring bid evaluation process, along the lines that it proposes, loses effectiveness if it is generalized to cover all sectors (TR at 808-809, 1107-1111.)

The utilities also present arguments to support their selection of specific market sectors, and the overall size of their proposed pilot. SCE argues that the commercial sectors it has chosen are reasonable because they complement the various market sectors proposed for other bidding pilots, and represent an overall pilot program size that is consistent with the size approved for PG&E's bidding pilot. Within the size constraints of a pilot program, SCE argues that it is easier to achieve a greater number of data points working with smaller customers than if large commercial/industrial customers were included in the pilot. Moreover, SCE asserts that there is already a body of information on DSM bidding in the large commercial sector that will be gained from other states' bidding experiences and from PG&E's pilot. Finally, SCE argues that the special needs of schools (e.g., budget constraints) provide added value to targeting schools for the bidding experiment. (Exh. 113, p. 4; TR at 1306, 1340, 1243-1246; SCE Opening Brief, pp. 9-10.)

In support of its selection, SDG&E argues that the residential appliance efficiency incentives program is large and successful enough to provide meaningful information on the ability

of DSM bidding to reduce the cost of energy efficiency. (Exh. 108, pp. 1-11 to 1-12.) While the same could also be said about SDG&E's commercial programs, SDG&E argues that introducing replacement bidding into their commercial DSM activities at this time would be disruptive to current competitive bidding efforts in the design and delivery of DSM lighting services. (TR at 984-985; Ref. Item GG, pp. 2-39 to 2-40.)

In response to SESCO's recommendations, SDG&E argues that the inclusion of its Direct Assistance Program in the pilot is inappropriate, since the program is conducted for equity reasons and is not cost-effective. Moreover, SDG&E argues that excluding this program would not create pockets of untreated houses, as SESCO asserts. SDG&E states that, under the Direct Assistance Program, ESCOs are currently employed to provide free weatherization, repair and appliance services to low-income customers. (SDG&E Reply Brief, pp. 6-7.)

In response to UCAN's concerns, SDG&E argues that appliance measures and the provision of low-cost measures (e.g., compact fluorescent lights and low-flow showerheads) should not require specific customer information. If customer information is required by an ESCO (e.g., for weatherization services), SDG&E states that the specific terms and conditions for providing that information will be negotiated as part of revisions to the sample contract, and reviewed by the Commission.

SoCal argues that, contrary to Transphase's assertions, the multi-family sector provides a substantial opportunity for ESCOs to increase savings penetration in a market where SoCal has had limited success, and one in which lost opportunities may be prevalent. Of SoCal's 4.6 million customers, SoCal asserts that nearly 1.6 million reside in multi-family dwellings, and that multi-family gas use makes up approximately 32% of the entire residential market. (Exh. 102, p. 1, 23.) SoCal contends that a bidding pilot in the commercial sector would be inconsistent with

the intent of PU Code § 747(c), since SoCal is at risk for the loss of sales or revenues for 25% of its noncore load. (Opening Brief, p. 14.)

In response to SESCO's and DRA's recommendations to include the single-family market in its bid pilot, SoCal argues that this could create interface and overlap problems with the programs that SoCal would continue to run in the single-family sector (e.g., the home energy audit program). SoCal's concern is that the synergies of such programs would be lost if the energy auditor does not also have current information regarding available weatherization or appliance efficiency programs. (TR at 811-812.)

Moreover, SoCal argues that DRA's proposal to limit the pilot to weatherization retrofit technologies actually limits the opportunity for ESCOs to achieve savings with innovative combinations of measures (e.g., weatherization, efficient appliances and/or master meter conversions). For ESCOs that are interested in limiting their business to installing weatherization measures only, SoCal argues that they may already participate in SoCal's present weatherization program by making their own customers aware of available rebates. (Ex. 105, p. 4.) In SoCal's opinion, a pilot program is not needed to give ESCOs the opportunity to participate in a program that is already available to them.

SoCal also objects to any requirement that the utility handle all appliance rebates, as SESCO recommends. In SoCal's view, a replacement bid should be designed to replace all the functions associated with providing a particular program. Moreover, SoCal argues that there is no evidence to indicate that third parties cannot administer appliance efficiency rebates as cost-effectively as the utility, as SESCO asserts.

Finally, in response to recommendations for a joint SCE/SoCal bidding pilot, SoCal argues that its proposed pilot already offers opportunities for bidders to provide comprehensive

gas/electric treatment to multi-family dwellings. SoCal points out that, under its RFP, bidders may install electric measures, as well as natural gas measures, and may apply to SCE for rebate information. A combined pilot bidding program is not feasible, in SoCal's opinion, until several questions are resolved. These include questions about who should administer the program, how costs are shared, which measures would be eligible for bidding, and who would do the work. (TR at 794, 823, 893.)

5.2.6 Discussion

Parties to this proceeding have raised threshold antitrust issues that need to be addressed before turning to the specifics of how to design these bidding pilots. Accordingly, we address those issues first, in Section 5.2.6.1 below. In Section 5.2.6.2, we address parties' specific proposals for the design and size of the pilots and present our determinations.

5.2.6.1 Antitrust Issues

Federal and state antitrust laws prohibit entities from unreasonably restraining trade, or conspiring to restrain trade in the private sector.[16] However, these laws do not prohibit states from imposing restraints on competition. The "state-action doctrine," as established by federal courts, grants antitrust immunity for state regulatory programs and actions taken by private parties in response to state directives. The courts have generally granted antitrust immunity under this doctrine if the alleged anticompetitive behavior meets a two-prong test: (1) the state must have clearly articulated and affirmatively expressed a policy

16 Sherman Antitrust Act (15 U.S.C. §§ 1, 2); Cartwright Act (Cal. Bus. & Prof. Code § 16700 et seq.)

of restraining trade, and (2) the state must actively supervise the enforcement of that policy.[17]

As we recently reiterated in D.91-05-028, "competition is one of the factors bearing on the exercise of this Commission's discretion, and one of the facts that must be considered in its decisionmaking process." (D.91-05-028, mimeo., p. 20; Northern California Power Agency v. Public Util. Commission (1971) 5 Cal.3d 370.) DRA and Transphase rightfully point out that the consideration of competition is particularly pertinent to our oversight of utility activities in the DSM market. By enacting Chapter 984 of the Statutes of 1983, the Legislature stated its intention that public utility regulations be clearly based on the principle that the energy conservation industry should be allowed to develop in a competitive manner.[18]

Since 1975, by our own initiative and by legislative mandate, utilities have used ratepayer funds to promote DSM as a cost-effective alternative to traditional supply-side resources.[19]

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17 Parker v. Brown (1943) 317 US 341; Cantor v. Detroit Edison Company (1975) 428 US 579; California Retail Dealers Ass'n v. Midcal Aluminum, Inc. (1980) 445 US 97; Southern Motor Carriers Rate Conference v. United States (1985) 471 US 48. Goldfarb v. Virginia State Bar 421 US 773 (1975).

18 The full text of Chapter 984 is appended to this order (see Attachment 3).

19 The Commission's interest in having utilities explore all cost-effective DSM was first expressed in 1975, in a PG&E general rate case proceeding. (D.84902, 78 CPUC 746 (1975).) See also D.91107, 2 CPUC2d 706 (1979). Also in 1975, the Legislature added §§ 2781-2788 to the PU Code, which directed the Commission to adopt requirements for utility home insulation assistance and financing programs. (Stats. 1975, Ch. 1201.) Ratepayer funding for those programs was authorized in D.87242, (81 CPUC 557 (1977) and D.88661, (83 CPUC 503 (1978)). Ongoing utility activities to

(Footnote continues on next page)

Our own policies have echoed the Legislature's intent to foster a competitive market in DSM services.[20] To this end, we have authorized utilities to initiate programs that reduce the informational and financial barriers inhibiting the implementation of cost-effective DSM in the private market. Through ratepayer-funded DSM programs, utilities have provided energy audits to its customers, targeted DSM information to relevant retail and wholesale decisionmakers, and provided DSM financial incentives to reduce the investment payback to customers. These programs were authorized with the intent of fostering competition, not inhibiting it. Given the clear language of Chapter 984, we find no merit to SDG&E's argument that, for DSM programs in general, utilities are immune under the state-action doctrine from antitrust violations in the DSM market.

At the same time, we disagree with Transphase that the pilot bidding programs must encompass all or substantially all of the utilities' annual DSM funding in order to comport with legislative intent. Transphase's arguments are based on two unsupported assertions. The first is that utilities are currently using their access to ratepayer funds in a manner that is anticompetitive and detrimental to ratepayers. The second is that the best way to rectify this situation is to move to full implementation of DSM bidding.

Transphase has failed to present sufficient evidence to support its allegations that utilities are restraining competition

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(Footnote continued from previous page)

promote cost-effective DSM programs have been authorized in subsequent utility general rate cases. See, e.g., D.84-12-068, 16 CPUC2d 721, 820-840.

20 See DSM OIR/OII, pp. 4, 8-9, 40-42.

and imposing unnecessarily high costs on ratepayers in the process. The mere fact that a utility offers relatively low rebates for a cost-effective DSM investment is not sufficient evidence that the utility is manipulating the market. The utility might not offer larger rebates because the incremental savings from that additional expenditure may be relatively low. Or, shifting dollars into another cost-effective DSM program may yield higher net resource benefits to ratepayers. The evidence on this issue is inconclusive.

With regard to ratepayer costs, Transphase's reliance on per kW cost comparisons as evidence of utility inefficiencies is misleading, as SDG&E points out, because utilities invest in DSM for both energy and capacity cost savings.[21] For that reason, we require utilities to compare DSM program cost-effectiveness using the avoided costs of both energy and capacity, rather than relying on costs per kW or per kWh comparisons.[22] Moreover, Transphase's assertions that third parties can provide ratepayers with commensurate energy savings, at lower total costs, presumes an outcome of DSM bidding that we have yet to test. Transphase does not even present evidence that third parties have actually bid at lower total costs to perform similar programs in other parts of the country, or have agreed to subcontract with utilities at lower total costs. Based on the evidence in this proceeding, we cannot

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21 Transphase's per kW cost calculation for SCE is also misleading, for two reasons. First, the calculation ignores a correction made by SCE witness Hassan, which would adjust the per kW figure down to approximately $539/kW. Second, Transphase includes incentive and administrative costs attributable to projects signed prior to 1991 in the numerator, while dividing only by the 1991 sign-ups in the denominator. (TR at 1331-1335.)

22 See Section 6.1.2.1 below for a discussion of the cost-effectiveness tests used to evaluate DSM programs.

conclude, as Transphase does, that utilities are using their access to DSM program funds in an anticompetitive manner.

We also do not agree with Transphase that the utilities have "conspired" to restrain trade in their development of the proposed bidding pilots. The utilities testified in this proceeding, upon cross-examination by Transphase, that each selections of market sectors were made independently, based on each company's own assessment of what would constitute an appropriate replacement bid, and in response to feedback from Advisory Committee attendees and the assigned ALJ. (TR at 779-781, 982-983, 986-992, 1243-1244; SDG&E Reply Brief, p. 18; ALJ Ruling dated March 11, 1992.)[23]

Even if such anticompetitive behavior were proven, we would not necessarily require that all ratepayer funding for DSM be put out to bid by third parties, as Transphase proposes. This does not mean that we would condone such behavior, but only that we would find another remedy. Transphase apparently believes that anything short of that is in direct violation of Chapter 984. We strongly disagree. Chapter 984 expresses the Legislature's intent that the DSM market develop in a manner that is competitive, and

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23 However, we agree with Transphase that neither the Noerr-Pennington doctrine nor Section 17024 of the California Business & Professions Code apply here, as SDG&E asserts. (See SDG&E Opening Brief pp. 8-10; Transphase Reply Brief, pp. 16-18.) The Noerr-Pennington doctrine basically says that a competitor can petition its government for a statutory advantage in the marketplace. Blank v. Kirwin (1985) 39 Cal.3d 311; Eastern Railroad Presidents Conf. v. Noerr Motor Freight Inc. (1961) 365 US 127; United Mine Workers v. Pennington (1965) 381 US 657; California Motor Transport Co. v. Trucking Unlimited (1972) 404 US 508. However, Transphase has not alleged that the utilities' petitions to the Commission or Legislature violate antitrust laws. Nor has Transphase claimed that SDG&E has violated the Unfair Practices Act, to which Section 17024 of the California Business & Professions Code applies.

"free from the potential dominance of regulated electrical and gas corporations." It does not specify, however, the method by which we should ensure that outcome. It certainly does not state that we should prefer a regulatory approach that provides ratepayer funding for third-party investments in DSM via a competitive auction process. Rather than dictate the means by which we regulate utility involvement in DSM, the Legislature has generally elected to delegate to this Commission the authority for taking whatever actions are necessary to fulfill our regulatory mandate. (See PU Code § 701.)

In the instance of DSM bidding, however, the Legislature has chosen to provide explicit guidance, a fact that Transphase apparently ignores. By adding § 747(c) to the PU Code in 1990, the Legislature clearly directs us to "test the waters" of DSM bidding on a pilot basis. (See Attachment 1.) While the statute itself does not define the term "pilot projects," we agree with SDG&E that the only reasonable interpretation of § 747 requires that we first test DSM competitive bid auctions on a pilot or trial scale before considering larger scale implementation. As we recently stated in our decision to reduce PG&E's proposed bidding pilot from 50 MW to 20 MW:

> "Once we have had the opportunity to evaluate all of the bidding pilots initiated pursuant to PU Code § 747, we will be in a better position to determine how large the role of DSM competitive bidding should be in delivering energy services. This approach is consistent with PU Code § 747(c), which requires that we first 'assess the feasibility and implications of implementing the tested bidding systems,' before making recommendations on whether DSM bidding systems should be used to fulfill future electric utility resource needs." (D.92-03-038, p. 65.)

For similar reasons, we denied Transphase's motion to allow third-party providers of DSM services to bid, along with QFs, for the deferrable generation authorized in D.92-04-045:

> "...we prefer to test various forms of DSM bidding on a pilot scale, before allocating a large amount of capacity through any single auction and form of bidding. This approach is consistent with PU Code § 747(c), which requires that we 'assess the feasibility and implications of implementing the tested bidding system' before making recommendations on whether DSM bidding systems should be used to fulfill future electric utility resource needs. We disagree with Transphase that the only 'true test' of integrated bidding requires immediate implementation of the integrated bidding pilot(s) at a scale commensurate with supply-side bidding." (D.92-04-045, pp. 38-39.)[24]

Hence, we find no merit to Transphase's arguments that limiting the size or scope of these DSM bidding pilots would violate state and federal antitrust laws. The state-action doctrine clearly applies to our decision to limit the size and scope of these bidding pilots and to utility actions to carry out pilots which, by definition, limit the access of third parties to ratepayer-funded DSM. As SoCal and others point out, we are acting under direct legislative mandate to implement DSM bidding experiments and that, by definition, these experiments should be small in scale. Moreover, we have been given the explicit authority by the Legislature to regulate these pilots, and are overseeing their development, implementation, and evaluation. (See D.92-03-038 and D.92-02-075, pp. 61-62.) This degree of regulatory

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24 We also denied Transphase's motion for rehearing of our decision on this matter. See D.92-07-027.

oversight goes far beyond the minimum level of supervision found appropriate in prior state action cases.[25]

Our approach to testing DSM bidding is not only consistent with legislative intent, but it is also grounded in sound public policy. A competitive auction process puts California ratepayers in the role of directly financing non-utility investments in DSM resources. Before committing ratepayers to that new role, we must carefully assess the potential benefits of such arrangements, and make sure that those arrangements appropriately allocate risks and rewards among ratepayers, utilities, and third parties. To do otherwise would not serve the public interest.

At the same time, the public interest also requires that we regularly reassess whether and how ratepayers should continue to finance utility involvement in the DSM market. As SDG&E points out, we currently address these types of issues in various utility-specific and generic DSM proceedings. (See SDG&E Opening Brief, p. 7.) Transphase's testimony serves as an important reminder that we must also regularly reassess utility involvement in DSM to ensure that it fosters, rather than impedes, private market developments. Clearly, utility-sponsored DSM programs will need to change in response to the changing realities of the marketplace.

It is therefore our responsibility to ensure that utility programs are designed and implemented in ways that acknowledge and accommodate such changes. For example, a DSM rebate or "give away" program designed to foster competition at the manufacturers' level may at some future time have a dampening effect on retail competition, as that market also develops. Therefore, the nature of a utility's involvement in that market should also change.

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25 See Patrick v. Burget (1988) 486 US 94; Washington State Electrical Contractors Ass'n, Inc. v. Forrest (9th Cir 1988) 839 F.2d 547; Turf Paradise, Inc. v. Arizona Downs (9th Cir 1982) 670 F.2d 813; Llewellyn v. Crothers (9th Cir 1985) 765 F.2d 769; Bates v. State Bar of Arizona (1977) 433 US 362.

Rebate levels established at one point in time may also need to be adjusted to optimize the penetration of cost-effective DSM measures. Funds originally earmarked for one type of DSM activity may need to be reallocated to another, based on new information on public receptiveness and changes in economics that increase or decrease program cost-effectiveness.

We have long recognized that the DSM market is dynamic, and that utility programs must evolve as part of a continual learning process.[26] Accordingly, we have given the utilities flexibility to modify Commission-adopted expenditure levels and program designs in order to accommodate market changes. (See Section 6.4.2 below.) Utilities also have flexibility to subcontract with third parties to deliver DSM services, and are expected to do so in ways that maximize program effectiveness and efficiency. Consistent with Chapter 984 and our own stated objectives, we expect utilities to use their program management discretion in ways that foster a competitive market in DSM. The introduction of DSM shareholder incentives does not change our expectations, and those of the Legislature, that regulated utilities will involve themselves in DSM markets in a procompetitive manner, and will extricate themselves from market sectors where their involvement is no longer necessary.

The specific issue of utility interface with private DSM markets can be assessed and monitored in several Commission forums. The potential impact of planned utility DSM activities on competition can most effectively be evaluated in our general rate case proceedings, where we consider DSM funding requests. In all future funding proceedings, utilities should present testimony on how their proposed DSM programs interface with private market activities and foster competition in DSM markets. This will

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26 See D.91107 2 CPUC2d 706, 707 (1979).

provide intervenors, such as Transphase, with a specific forum for bringing potential anticompetitive program design problems to our attention. We will use this information in our evaluation of utility DSM funding proposals, in order to ensure that Commission-approved programs foster competition.

Once ratepayer funds are authorized for DSM programs, we rely on the good faith efforts of utility management to use the funding and operational flexibility we have awarded them to the benefit of ratepayers. Moreover, any changes that utilities make to those programs must be consistent with our goal of fostering a competitive private market. Instances where the utility is using its flexibility in a manner inconsistent with our policies can be brought to our attention via our complaint procedures, or by special motion as DRA has recently done in SCE's general rate case proceeding (Application (A.) 90-12-018).[27] We will also initiate generic investigations, when appropriate. However, we agree with SESCO that any actions based on a failure to comply with state or federal antitrust statutes should be heard by the courts, not this Commission.[28]

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27 DRA's Motion, dated April 3, 1992, relates to an investigation into the potential misuse of ratepayer funds by SCE employees and sub-contractors providing services to SCE for their DSM-related programs.

28 In its comments on the ALJ proposed decision, SoCal argues that this Commission, not the courts, should have primary jurisdiction over disputes concerning antitrust violations. We disagree. While this Commission clearly has an obligation to consider the antitrust implications of applications brought before it, this Commission does not have jurisdiction to determine violations of antitrust laws. This distinction was clearly articulated by the Supreme Court in Northern California Power Agency v. Public Utilities Commission when it explained: "This is not to suggest, however, that regulatory agencies have jurisdiction

(Footnote continues on next page)

The issue of utility interface with DSM private markets will also be considered as we reexamine the effectiveness of DSM shareholder incentives, beginning in 1993. In particular, we will examine how shareholder incentives affect utility involvement in the DSM market and how best to structure those incentives, if they are continued, to ensure that the market continues to develop competitively. In addition, our evaluation of the DSM bidding pilots will assess how best to structure the relationship between utilities and third parties in a competitive bidding environment.

While it is important to identify Commission procedures for addressing these issues, we also recognize that litigation and the formal hearing process are resource intensive and time consuming for all involved. Therefore, we encourage parties to also try to resolve their specific concerns about utility DSM program implementation informally. The utility Advisory Committee process was established for this very purpose.[29] In addition to their other advisory activities, these Committees should play a role in alerting utilities to potential conflicts between their

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(Footnote continued from previous page)

to determine violations of the antitrust laws." [(1971) 5 Cal.3d, 377, quoting from Northern Natural Gas Co. v. Federal Power Com'n (1968) 399 F.2d 953]. The Supreme Court goes on to explain that the Commission's consideration of antitrust problems is "for purposes quite different from those of the courts." (Id. at p. 378.)

29 Pursuant to settlement agreements approved by the Commission in D.90-08-068, each utility has formed Advisory Committees to assist in the implementation of its DSM programs. The Advisory Committees provide an informal forum for parties to review progress made by the utility in implementing approved DSM activities, and to work with the utility on proposed changes. Advisory Committee clearinghouse procedures were developed to improve the coordination of Committee activities. See Joint Clearinghouse Report dated May 19, 1992.

program activities and private market development. We therefore direct respondents, via the Advisory Committee clearinghouse, to schedule joint meetings of the SCE, SoCal, SDG&E, and PG&E Advisory Committees to discuss inter-utility issues, including potential conflicts between utility program activities and competitive private market developments. The Advisory Committee clearinghouse administrator should use due diligence in sending notice of these joint Advisory Committee meetings to private DSM suppliers potentially affected by utility involvement in the market, including existing vendors, contractors, and subcontractors eligible to deliver DSM measures and services under contract with utilities. Notice of these joint meetings should also be sent to the service list in this proceeding.

5.2.6.2 Bid Design and Size

Before addressing parties' specific proposals on the bid design and size of these pilots, we will review our intended purpose for conducting DSM bidding pilot programs, including PG&E's pilot approved in D.92-03-038 and the upcoming integrated bidding pilots. That purpose is best summarized by our discussion in D.92-03-038:

> "In our view, the primary purpose of the bidding programs is to test various forms of competition on a pilot scale before committing to any single form. At this point in time, we do not know what the future competitive market in DSM will look like, or what exact role the ESCOs will play in that market. As we recently stated in D.92-02-075, 'these bidding experiments will help us learn more about alternative DSM delivery mechanisms, and assess the role of DSM bidding to provide least-cost DSM services to ratepayers.'
>
> "Therefore, we do not have the expectation, or objective, that these pilots will greatly expand the base of DSM activities in California, or the potential market for ESCOs. Our commitment to tapping DSM's potential for providing reliable, least-cost environmentally sensitive energy services is continuing with various different efforts, as described in D.92-02-075, not the

> least of which is the funding expansions we have authorized for utility DSM programs since 1989. Once we have had the opportunity to evaluate all of the bidding pilots initiated pursuant to PU Code § 747, we will be in a better position to determine how large the role of DSM competitive bidding should be in delivering energy services." (D.92-03-038, mimeo., pp. 64-65.)

Hence, the threshold issue on bid design and size is whether the proposed pilots will provide us with sufficient information with which to evaluate the potential benefits of DSM bidding and the value, or lack of value, of differing program methodologies. We are not committed at this juncture to one bid design or form over another; nor are we able to assess the appropriate role of the utility vis-a-vis third parties in delivering DSM services over the longer term. We plan to address these issues at a later date, once the pilot bidding programs are underway and we have begun to evaluate their results. Our objective in this phase of the proceeding is to approve bidding pilots that, in combination, provide a variety of approaches to evaluate.

As described in Section 4 above, the utilities have proposed a variety of bid designs and bid evaluation methods for testing replacement bidding in several market sectors. We agree with the utilities that sector-specific approaches have distinct research advantages for evaluating alternative bid designs and bid selection methods for replacement bids. The fact that other states have not taken a sector-specific approach is irrelevant, since we are one of the only states to have initiated <u>replacement</u> bidding, and the only one that has chosen to conduct pilot bidding experiments on alternative bid designs. (TR at 260, 960-961.) Moreover, the PG&E pilot, which allows bidding across all market sectors, will provide insight on how competitive bidding affects the distribution of ESCO-delivered versus utility-delivered services across all DSM markets. Therefore, we will limit bidding

under these pilots to the designated market sectors or programs. We also agree with SCE that its proposal to limit bidding to certain geographic regions, and conduct its own program in parallel, provides a useful controlled experiment for its pilots.

However, the specific sectors chosen should be large and successful enough to provide meaningful information on the ability of DSM replacement bidding to reduce the cost of DSM resources. In addition, we want to obtain sufficient information on the potential benefits of replacement bidding across a broad range of market sectors and DSM measures. Table 2 summarizes parties' proposals for the size and scope of these bidding pilots.

In view of these objectives, we agree with DRA and Transphase that DSM replacement bidding should be tested for large nonresidential markets as part of these pilots. Contrary to SCE's assertions, other states' experiences will not provide sufficient information about these markets since we are one of the only states testing replacement bidding. Moreover, we believe that SCE is the logical candidate to conduct this test, given the relative size of the company and annual DSM budget. We note that, as currently proposed, SCE's pilot represents only 5% of its 1992 DSM resource budget and 10% of 1992 resource savings goals. (See Table 2.)[30] Moreover, introducing competitive bidding into SCE's large

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30 SCE justifies the size of its pilot by comparing the equivalent MW savings (i.e., 15-20 MW) to the 20 MW size adopted in D.92-03-038 for PG&E's pilot. However, PG&E's partnership pilot represents, by definition, an overall augmentation to PG&E's DSM activities involving over $17 million in additional funding (in 1992$) in 1993-1995. Our decision to limit the size of the pilot was primarily influenced by this fact. (See D.92-03-038, p. 35.) In contrast, replacement bidding requires minimal amounts of incremental funding (see Section 6.4 below). Therefore, we do not require that both types of bidding pilots (partnership and replacement) be identical in size; rather, we are looking to establish pilots that will provide meaningful information for evaluation purposes, at reasonable costs to ratepayers.

nonresidential sector would not be particularly disruptive to existing nonresidential programs, as it would for SDG&E, or put SCE at risk for loss of revenues, as it would for SoCal.

In our judgment, the best way to augment SCE's program, without requiring significant bid design modifications, is to replace SCE's schools program with an expanded solicitation for industrial and large commercial DSM applications in the two marketing regions. While we applaud SCE's attempt to provide alternative delivery mechanisms to schools, we believe that such a limited application will not adequately test program design features that can be applied broadly. The ability to test whether ESCOs can deliver savings to that sector will also be limited by the severity of recent budget cuts to schools. Moreover, the school sector represents a very small fraction of DSM resource programs, i.e., less than 2% of the annual budget and less than 3% of annual savings. (See Table 2.)

Therefore, we direct SCE to solicit bids for replacing in-house DSM programs in the industrial and large commercial sectors, in addition to the small offices sector, within the two designated market regions. Accordingly, SCE should modify its RFP and Sample Contract in Exh. 114 to refer to the industrial and large commercial sectors, rather than schools. The RFP should refer to all DSM applications in those sectors, including load management, and allow for multiple winners. We agree with Transphase that load management technologies for large customer loads should be given an opportunity to compete in a replacement pilot, as they are in PG&E's partnership bid.[31] Load management

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31 However, it is premature to include fuel substitution programs in the 1993 bidding pilots, as Transphase proposes, since we are in the process of developing a framework for assessing the utility's own fuel substitution programs, and have not yet implemented that framework for utility-sponsored fuel-substitution programs. (See D.92-02-075, Rule 16 and D.92-03-038, p. 53.)

technologies can be readily evaluated vis-a-vis energy efficiency measures, using the bid evaluation criteria proposed in Exh. 114. The bid evaluation criteria will remain the same, except as modified elsewhere in this order. SCE should modify its sample contract, however, to allow payments on either a per kWh or per kW basis to winning bidders of its industrial and large commercial solicitation.

SoCal's proposed pilot should be expanded to include the non-low income single-family market.[32] SoCal's attempts to cost-effectively achieve savings penetration in the multi-family sector have not been particularly successful. SoCal's current achievements in that sector represent approximately 1.4% of its total DSM resource goals for 1992, and only the weatherization and appliance efficiency components of SoCal's programs pass the total resource test of cost-effectiveness.[33] SoCal only spent approximately $400,000 in that sector in 1991, which represents

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32 However, we do not agree with DRA that SoCal's pilot should be limited to weatherization measures. To do so would limit the bidders' flexibility to design a comprehensive program, using a variety of energy efficiency approaches. We have addressed DRA's concern about program cost-effectiveness by requiring that bid proposals pass a threshold total resource cost benefit-cost ratio of 1.0 for SoCal's program. See Section 6.1.2.3 below.

33 See Exh. 102, p. 17 and Exh. 106. For the first six months of 1991, SoCal achieved 81,565 therms of savings in the multi-family market, for an annual equivalent of approximately 164,000 therms. This compares to DSM resource program goals of 11,861,800 therms for 1992 (Ref. Item AA, Table 2.2). SoCal's goal of achieving 1,000,000 therms in energy savings from competitive bidding in this sector appears overly ambitious, given the above statistics.

less than 3% of DSM resource program expenditures.[34] As discussed above, we prefer to test competitive bidding in sectors that have demonstrable potential for cost-effective penetration. Adding the non-low income single-family sector to SoCal's pilot would achieve this goal, while still maintaining the program at a pilot scale, i.e., at approximately 11.8% of DSM resource program goals. (See Table 2.)

We do not believe that adding the single-family sector to SoCal's pilot will pose insurmountable implementation problems, as SoCal claims. The fact that SoCal may continue to offer some of its in-house DSM programs in the single-family sector should not diminish its ability to measure pilot results. As SESCO points out, any house receiving treatment under another SoCal program can simply be removed from the pilot measurement group. (SESCO, Reply Brief, p. 5.) Moreover, as SoCal Witness Morrow testified, including single-family residences in its pilot would actually serve to reduce duplication of utility administrative costs. (TR at 821.)

However, we recognize that adding the single-family sector to SoCal's pilot may dilute the interest of third parties to bid in the multi-family sector. We agree with SoCal that it would be useful to obtain information on whether third parties can more effectively achieve savings penetration in that particular sector. Accordingly, SoCal should give bidders a "bonus" in the bid evaluation process if they target DSM activities to SoCal's

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34 1991 expenditure levels for the multi-family portion of SoCal's weatherization and appliance efficiency programs were provided in Exh. 106. Comparable figures for the master meter program were presented in Reference Item AA, Table 2.1. Expenditure levels for the multi-family portion of home energy audits were not available. Total expenditures for DSM resource programs in 1991 (i.e., weatherization and appliance efficiency programs for all sectors) were $13,995,000. (See Exh. 126.)

multi-family market. Given the design of SoCal's selection process, the most appropriate way to do this is to incorporate a bonus factor into the calculations of project cost-effectiveness. Specifically, SoCal should apply a "multi-family target" factor of +10% (in addition to a penetration factor) to bids that target the multi-family sector. (See Section 6.1.2.4 below.)

SoCal should continue to offer its home energy audit program in-house, for both multi- and single-family residences. As discussed below, non-resource DSM programs are not suitable candidates for these pilot bids. By continuing to provide these audits, SoCal can make sure that all residential customers have an opportunity to avail themselves of mail-in or on-site energy audits. We see no reason why SoCal's auditors cannot become adequately informed on the types and costs of services that winning ESCOs can perform and/or give the results of the audits to the winning bidders for follow-up.[35] The appropriate funding level for this program should be determined in SoCal's 1994 general rate case.

Under SoCal's current proposal, an ESCO would be paid to install gas-saving measures in a gas-heated dwelling, but the customer would have to separately arrange for any rebates or incentives on higher efficiency electric appliances through SCE's program. We agree with DRA and others that the preferred approach is to have the winning bidder provide comprehensive energy efficiency treatment at each site, and be paid accordingly. In other words, an ESCO should be able to bid measures (and be paid based on that bid) for achieving both gas and electric savings in

35 SoCal should include language in its negotiated contracts that addresses customer confidentiality issues.

gas-heated homes.[36] Accordingly, we authorize SCE to pay for electric savings achieved by winning bidders working for SoCal, under SoCal's residential bidding pilot. This funding should come out of existing authorizations for DSM resource programs. Since SoCal's pilot will not commence until 1994, SoCal and SCE will have ample opportunity to continue their discussions and resolve specific implementation details.

With regard to SDG&E's pilot, no changes in size or scope are necessary.[37] SDG&E has selected a program and market sector that are large and successful enough to provide useful information about the potential benefits from DSM bidding. We believe that the specifics of SDG&E's RFP, bid selection process and contract terms appropriately address all of the concerns that UCAN has raised. Documentation of the ESCO's experience in delivering DSM services to the residential sector is both a threshold requirement of SDG&E's bid and an important bid selection criterion. (See Attachment 2.) SDG&E's cost-effectiveness criteria, and the criteria adopted in this order, explicitly require that ESCO-delivered savings be lower in total costs than the utility's own program. Finally, as SDG&E explains, if customer-specific information is required by a winning bidder, then the specific terms and conditions for providing that information will be added to the contract for review by the Commission.

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36 We disagree with SESCO that winning bidders should be able to weatherize both gas-heated and electric-heated homes. SCE will already be conducting a sizeable pilot for commercial and industrial customers, as discussed above. The coordinated approach that we envision is for bidders to improve the efficiency of electric appliances (e.g., air conditioners, refrigerators) as part of a coordinated approach to increasing overall energy efficiency in gas-heated homes.

37 However, we deny SDG&E's requested funding amount for the high efficiency air conditioning component. See Section 6.4.1 below.

We also agree with SDG&E that it would be inappropriate to include Direct Assistance programs in these pilots. As we expressed in D.92-02-075, we view the DSM bidding pilots as a vehicle for testing competition in the procurement of utility DSM resources, i.e., by augmenting or replacing utility programs designed to promote energy efficiency. (D.92-02-075, pp. 40-41.) That purpose would be diluted if we extended SDG&E's or SoCal's bidding pilots to programs designed and implemented primarily for equity considerations. Our decision to focus on resource programs for these pilots does not preclude utilities from introducing competitive bidding approaches in their equity programs, as SDG&E has done with its Commercial Lighting Program. Nor does it preclude us from expanding the scope of competitive bidding beyond resource programs at a future date.

Finally, we agree with SoCal that utilities should be able to bid out their direct rebate functions, in order to assess whether ESCOs can either administer those rebates more cost-effectively or develop alternative, cost-effective methods for motivating customer investments in DSM.

With the adjustments described above, we are authorizing pilot replacement bids on the order of 20-30% of each utility's 1992 DSM resource budget, with estimated savings between 12-30% of each utility's DSM resource goals. (See Table 2.) Replacement bidding pilot of this size and scope will provide us with a viable test of this form of bidding. Coupled with the PG&E partnership pilot and the integrated bidding pilots being developed, these pilots will provide us with a broad base of information with which to assess the potential benefits of DSM bidding to utility customers.

6. Implementation Issues

SoCal, SCE, SDG&E, and DRA filed testimony and briefs addressing various implementation issues, including bid evaluation criteria, contract terms, and funding authorizations. SESCO did

not file testimony on these issues, but participated in cross-examination and filed opening and reply briefs. We discuss implementation issues in the following sections.[38]

6.1 Bid Evaluation Criteria

Attachment 2 summarizes the bid evaluation approaches proposed by SCE, SDG&E, and SoCal. Each approach takes into account both non-price and price, or cost-effectiveness, criteria. However the proposals differ in the way they define specific evaluation criteria and take those criteria into account in the selection process. In particular, proposals vary with respect to the types of costs considered in the cost-effectiveness evaluation, i.e., total resource costs versus utility costs. They also vary with regard to the definition of total resource costs, proposed threshold cost-effectiveness requirements, net-to-gross ratio assumptions, the treatment of utility administrative costs and the relative weight of cost-effectiveness in the bid evaluation process.

6.1.1 Positions of the Parties

DRA and SESCO propose alternative approaches for ranking or scoring bid proposals based on cost-effectiveness, and raise specific objections to the inclusion of certain non-price criteria in the bid evaluation process. We describe the positions of the parties on bid evaluation issues in the following sections, beginning with a brief overview of DSM cost characteristics and definitions.

6.1.1.1 Consideration of Total Resource and Utility Costs

DSM programs are funded by ratepayers as a whole, through utility revenue requirements (which are reflected in utility

38 Transphase did not testify or cross-examine witnesses on implementation issues. However, in its Reply Brief, Transphase indicated its support for SESCO's position on certain issues, as we note in the following sections.

rates), and in many cases through out-of-pocket contributions by participating customers (customer contribution). Direct assistance, information, and energy audit programs are funded entirely by revenue requirement authorizations. Many DSM "resource" programs, on the other hand, require customer contributions. DSM resource programs are designed to defer or avoid the cost of more expensive supply options. For these types of programs, individual participating customers are motivated to contribute a portion of the resource cost because they realize a direct return from that investment, in the form of bill savings.

Because the utility revenue requirement can be different from the total cost of the DSM program, due to customer contributions, we think of two types of costs when considering DSM program cost-effectiveness: total resource costs and utility costs. Total resource costs represent the total cost of obtaining the DSM program as a utility resource, and include both the program participants' out-of-pocket costs (i.e, customer contribution) and the utility's revenue requirement costs (e.g., rebates, administrative expenses). Utility costs reflect the revenue requirement impact of obtaining a DSM resource, excluding any customer contributions.

Total resource costs are considered in the total resource cost (or "TRC") test of cost-effectiveness, which measures the net impact of a DSM program as a resource option, based on the total costs of the resource. Utility costs are considered in the utility cost (or "UC") test of cost-effectiveness, which measures the net impact of acquiring a DSM resource, based on the utility costs of the program. For both the TRC and UC tests, the benefit side of the equation reflects the value of the energy and capacity saved (i.e., avoided costs). The results of these tests can be expressed as benefit-cost ratios (benefits divided by costs, in net present value), or as net benefits (benefits minus costs, in net present value). We refer to the net benefits from a TRC perspective as

"total resource net benefits" and those from a UC perspective as "utility net benefits."

By definition, utility and total resource costs are identical for supply-side resources. This is because the full costs of supply-side resources are recovered through the utility's revenue requirement, i.e., there are no individual customers that pay for a portion of the resource. Therefore, on the supply side, bidders who maximize total resource net benefits are simultaneously striving to minimize utility costs. This is not necessarily the case on the demand side, where a bidder may be able to achieve the same level of total resource net benefits with different levels of utility costs (e.g., different levels of rebates or corresponding customer contributions).

Moreover, since individual customers that participate in DSM resource programs realize direct bill savings, they are generally willing to fund a greater percentage of the investment than non-participating customers. This is not the case for supply-side resources, where all customers are assumed to benefit from the investment equally and, within the same rate class, pay an equal price for the supply-side resource. Hence, unlike on the supply-side, bidders on the demand side may be able to leverage participating customers' private funds to the benefit of all ratepayers. One of the major issues in this phase of the proceeding is how to address this "dual-cost" characteristic and associated leveraging capability of DSM, in evaluating bid proposals.

SoCal recommends that the dual-cost issue be addressed by ranking bids based on the TRC test of cost-effectiveness, and using the UC test as a tie-breaker. In other words, for bids with the same level of total resource net benefits, SoCal would select the one with highest utility net benefits. This approach is consistent with the one adopted for PG&E's pilot bidding project in D.92-03-038. SESCO supports this approach.

Other parties propose alternative methods of factoring utility costs (or, conversely, customer contribution) into the ranking and scoring process. SDG&E proposes giving equal weight to the results of the TRC and UC tests, as does SCE for its Schools Program. For its Small Office Buildings pilot, however, SCE would exclusively consider utility costs in evaluating bidders' tiered-pricing proposals. (See Section 6.1.1.4 below.) DRA proposes using a benefit-cost ratio that gives 50% weight to total resource costs, and 25% weight to utility costs. DRA and others argue that their alternatives would encourage bidders to maximize customer contributions and, in general, would keep utility revenue requirements from becoming unnecessarily high.

6.1.1.2 Definition of Total Resource Costs

Parties also differ on how to define total resource costs for the purpose of calculating TRC benefit-cost ratios or total resource net benefits. DRA defines total resource costs as the sum of net measure costs, utility administrative costs, and the cost of any shareholder earnings.[39] SDG&E and others apparently agree in principle that utility administrative costs and the cost of shareholder earnings should be included in both the TRC and UC tests, although their proposed RFPs do not clearly include those

39 Measure costs represent the program participant's total cost of installing and maintaining the DSM device, without consideration of any utility rebates or incentives. "Net" measure costs represent the measure cost per unit times the number of participating customer units, multiplied by a net-to-gross factor. The net-to-gross factor adjusts costs to account for the degree of customer participation that would have occurred without the program. Similarly, savings estimates are adjusted by a net-to-gross factor. Some analysts also adjust measure costs to reflect the incremental value to customers in terms of reduced equipment costs (e.g., incandescent bulbs). See TR at 1191-1193.

components. (TR at 828-829, 882-883, 1061-1062, 1198, 1361, 1368-1369.) However, SDG&E defines total resource costs to also include any costs over and above net measure costs that are included in the bid price (e.g., bidders' profit margin and bidders' own marketing/administrative expenses).

DRA argues that its proposed definition of total resource costs is the most consistent with the definitions presented in the Standard Practice Manual (SPM), which are used to evaluate utility-sponsored DSM programs. The SPM is a joint publication by the staffs of this Commission (CPUC) and the California Energy Commission (CEC). Most of the major utilities in California and other interested parties attended workshops with CPUC and CEC staff to develop this document.[40] Although not officially reviewed or approved by the CPUC, the SPM has been widely used by parties to our proceedings.

DRA also believes that SDG&E's proposed definition is deficient because it requires the bidder to reveal its earnings and administration costs and relies on estimates of customer contributions. DRA argues that it is unnecessary and inappropriate to have ESCOs identify these types of costs in the bid evaluation process.

SDG&E contends that strict adherence to the SPM definitions in a bidding situation leads to incongruous and undesirable results. With DRA's exclusive focus on measure costs, SDG&E argues that a bidder could achieve the same TRC ratio or level of total resource net benefits, regardless of the amount of

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40 Originally published in February 1983, the SPM was modified in December 1987. The December 1987 version is entitled: Standard Practice Manual: Economic Analysis of Demand-Side Management Programs. The SPM was also corrected by an addendum, dated October 7, 1988, to add the net-to-gross ratio adjustment on the cost side of the TRC test. (See Reference Item G.)

bid or the components of the bidder's costs. In SDG&E's view, using DRA's definition of total resource costs would lead to the following consequences: (1) cost-effective utility programs could not compete with higher cost bid programs, (2) bidders would have little incentive to hold down administrative costs, and (3) utilities could achieve higher scoring programs by doing nothing more than setting up ESCO subsidiaries.

6.1.1.3 Threshold for TRC/UC Cost-Effectiveness

SCE and SDG&E establish clear threshold cost-effectiveness criteria in their RFPs. Bidders under SDG&E's and SCE's programs must have TRC benefit/cost ratios greater than 1.0 in order to be eligible. In addition, bidders under SDG&E's program must have TRC and UC ratios that, when weighted 50/50, exceed the corresponding weighted average of SDG&E's TRC and UC ratios. In contrast, SoCal does not require bidders in all instances to have TRCs greater than 1.0. (TR at 858.)

SESCO objects to SDG&E's approach of comparing the cost-effectiveness of bid proposals to SDG&E's program cost-effectiveness. In SESCO's view, this approach would penalize bidders offering comprehensive proposals. SESCO argues that SDG&E's existing residential programs do not offer comprehensive treatment and therefore requiring the bidder to be more cost-effective than SDG&E would encourage cream-skimming submittals. SESCO recommends that SDG&E evaluate any bid producing a TRC benefit/cost ratio higher than 1.0. Coupled with a tiered pricing scheme, this approach better meets the Commission's objectives to minimize the creation of lost opportunities, SESCO believes.

6.1.1.4 Savings Intensity/Site Penetration

SCE, SoCal, and SESCO recommend that the adopted cost-effectiveness criteria take account of different levels of savings intensity. Savings intensity refers to the penetration of savings within each building or site. Specifically, SoCal proposes

to calculate the penetration of each bid by taking estimated energy savings per participating customer as a percentage of average multi-family customer gas use. The TRC for each bid would be multiplied by a "penetration factor," i.e., the ratio of that bid's penetration (as defined above) to the average penetration of all the bidders. The factor would be limited to a range of plus or minus 20%.

SCE proposes to encourage site penetration for its small offices pilot by evaluating bids based on a three-tiered pricing system. Under a tiered system, bidders offer different prices for increasing levels of achieved savings, in contrast to a system where bidders bid the same price for each and every kWh saved. SCE proposes that bidders submit three tiers of $/kWh for three different penetration levels in kWh/sq. ft./year. These penetration levels would equal 10%, 20%, and 30% of base usage of electricity. Bidders would be able to self-score their three-tier bid price by multiplying the tiered prices by 10/3/1, respectively, and then adding the results for a final score.[41] Winning bidders would be paid for energy savings in each of these blocks according to their submitted respective tiers of $/kWh. SESCO supports the use of tiered pricing for SDG&E's bidding pilot as well. (SESCO Opening Brief, page 9.)

6.1.1.5 Net-to-Gross Ratio

The net-to-gross (NTG) ratio is designed to discount the value of estimated energy savings to account for several factors. First, it accounts for free riders, who are customers who would

41 For example, if in a given building, historical billing and pre-installation audits indicate a 20 kWh/conditioned sq.ft./year consumption, the three penetration levels will then be 2, 4 and 6 kWh/sq.ft./year. If a bid provides a 1 cent, 2 cents, and 9 cents/kWh structure, the formula would yield a bidder score of 25.

have installed, solely at their own expense and without any payment from either a utility or any third party, the energy efficiency measures installed as a result of the program. The NTG ratio also captures the "rebound effect," where, for example, people put in insulation and then turn up the heat to make themselves more comfortable for the same energy use.

In its RFP, SDG&E has proposed NTG ratios for various equipment based on the NTG ratios adopted for its own program. (Exh. 109, pp. 2-25 to 2-26.) For equipment or measures not included in the RFP, the bidder can propose a NTG with appropriate documentation, subject to negotiations. (TR at 1048-1049, 1130-1131.) SCE proposes to use a 0.5 NTG ratio for its Schools Program. For its Small Offices Program, SCE uses NTG ratios of 0.5, 0.75, and 1.0 for the first, second, and third tier of prices, respectively. (Exh. 114, p. 9; Exh. 115, p. 10.) The 0.5 NTG figure was derived from an econometric study of audit and hardware rebate programs for the commercial and industrial customers. SCE has used this figure for its own programs since 1988. (TR at 1584.)

SESCO and Transphase recommend that the Commission adopt the same process for determining NTG ratios as the method adopted for PG&E's bidding pilot in D.92-03-038. This would set the NTG ratio equal to 1.0 for projects with a payback greater than two years. For bidders who fail to demonstrate greater than a two-year payback, the default NTG ratios would be set at the values used by the utility for its current program measures. (D.92-03-038, mimeo., pp. 47-48.)

6.1.1.6 Utility Administrative Cost Assumption

All parties agree that the utility should take project-specific administrative costs into account in the bid evaluation process. SCE proposes to assign an equal cents/kWh administrative cost component to each bid. If the actual level of requested administrative services is higher, SCE would negotiate

with that winning bidder. (TR at 1368-1369.) Similarly, SDG&E proposes to negotiate differences in basic administrative costs once its short list has been selected. (SDG&E Reply Brief, p. 14.)

SoCal, DRA, SESCO, and Transphase prefer an approach where the utility provides bidders with a menu of administrative functions and their approximate costs. Bidders would then have the option of performing those functions themselves (and reflecting those costs in their bid proposal), or reimbursing the utility for those services. (TR at 882-883, 1685-1685; SESCO Opening Brief, p. 11.)

6.1.1.7 Non-Price Criteria

SESCO contends that the non-price threshold requirements proposed by SoCal enable the utility to perform a subjective evaluation of the bidder's qualifications, marketing plan, and proposed measures. SESCO argues that this level of subjectivity was rejected for PG&E's pilot, and should be similarly rejected for SoCal's RFP. SESCO recommends that SoCal be directed to develop a self-scoring system, similar to SDG&E's. For similar reasons, SESCO argues that SDG&E should not be able to choose the actual winners off the short list, without stating specific criteria for doing so.

SESCO also objects to two of the bidder qualification requirements included in SoCal's RFP. In SESCO's view, the requirement that a bidder be "properly licensed to install the proposed conservation measures/appliances in California" prior to submitting a bid would exclude from bidding any company not already doing business in California. SESCO also believes that requiring a bidder to demonstrate that it is "not in litigation based on a claim of its default" is not a proper criterion for disqualifying a bidder. SESCO contends that virtually any company doing business can be confronted with litigation claiming that a default has occurred.

As discussed in Section 5.1.1 above, DRA raises several generic bid evaluation issues in conjunction with its proposed definition of replacement bidding. In addition, DRA specifically objects to SDG&E's consideration of "customer value" in the bid evaluation process. DRA argues that this element is virtually identical to the incremental customer value issue that was proposed for the PG&E bidding pilot, and rejected by the Commission in D.92-03-038.

6.1.2 Discussion

Many of the cost-effectiveness issues raised by parties in this phase of the proceeding are similar to those raised in earlier phases of this proceeding. However, the appropriate definition of total resource costs for the purpose of bid evaluation is an issue that was raised for the first time in this phase. We address this issue first, since resolution of the definition affects the calculations and results of most parties' proposed cost-effectiveness criteria.

6.1.2.1 Definition of Total Resource Costs

DRA is correct that the SPM equation for total resource costs considers net measure costs, not the sub-components of utility incentives to customers or customer contributions. However, as SDG&E points out, the SPM was developed for the evaluation of utility-sponsored DSM programs, without specific consideration of bidding situations. Moreover, we agree with SDG&E that applying the same formula to a bidding situation makes little sense. Considering only measure costs in evaluating bid proposals would ignore real economic costs to all ratepayers. Specifically, it ignores the bidders' profit and administration costs, which are compensated for in the bid price. At the same time, DRA's interpretation includes those same costs in the evaluation of an identical program run by a utility.

As illustrated in Exhibit 123, use of DRA's interpretation can result in bidders with identical resource

benefits out-scoring the utility program even if the bidder's total costs are higher than those of the utility. Similarly, DRA's interpretation does not properly distinguish between bid proposals that have identical net measure costs, but where bidders are asking for different levels of total payments to cover rebates, administration and bidder profit. As SDG&E points out, the SPM indicates that all equipment costs, installation, operation and maintenance, cost of removal (less salvage value), and administrative costs, no matter who pays for them, are included..." in TRC test costs (SPM, p. 26).

Rule 10 of D.92-02-075 also requires that we include shareholder earnings in total resource (and utility) costs. For the purpose of calculating these costs, we see no conceptual difference between earnings that accrue to utility shareholders and earnings that accrue to winning bidders. Both types of earnings are paid for by ratepayers as a real economic cost of DSM. Therefore, we believe that consideration of the total bid price, which includes bidders' administrative costs and earnings, is consistent with the theory used in developing the TRC test of cost-effectiveness. We also note that this interpretation is consistent with the approach that PG&E proposed, and we subsequently adopted for PG&E's bidding pilot. (TR at 1565-1566.)

Contrary to DRA's assertions, one does not need the specific breakdown of bidders' profit and administration costs to adopt a definition of total resource costs that includes them. (DRA Opening Brief, p. 26.) Rather, the TRC test can be calculated with information on the total payment to bidders (or the utility payment to customers) and customer contributions. However, we agree with DRA that it is inappropriate to require bidders to reveal their estimated profit margin, and therefore direct SDG&E to modify Conservation Evaluation Form 6 of its RFP accordingly. (See TR at 1597-1601.)

We do not share DRA's concern about estimating the customer contribution component of total resource costs. For PG&E's pilot program, we determined that the total payment to bidders, including customer contributions should not exceed the estimates of total resource costs presented in the bid proposal. (D.92-03-038, mimeo., pp. 42-43.) We will apply the same payment limits to winning bidders in SCE's, SoCal's, and SDG&E's pilot programs. Hence, it will be necessary for bidders to estimate, and the utilities to verify, customer contributions. Other states have required estimates of customer contributions and have similarly limited total payments to winning bidders. (TR at 196-197.)

A related definitional issue is the treatment of rebates or incentives to customers when they are in excess of net measure costs, such as for SDG&E's residential compact fluorescent light bulb, high efficiency refrigerator, and high efficiency air conditioner programs. The SPM definition of the TRC test treats all utility payments to customers as transfers, even when they exceed the net measure cost. In D.91-12-076, we raised the issue of whether or not this treatment is appropriate, and directed that the TRC formula should be revisited in this proceeding. (D.91-12-076, mimeo., p. 166.) The debate over which costs to include in the TRC for the purpose of bidding raises this issue in a bidding context.

In our view, the total resource cost of a DSM measure is either (1) the full cost of installing and maintaining the DSM device without any utility rebate or incentive or (2) the full cost of utility incentives to participating customers, whichever is greater. It makes little sense to consider two bids equally desirable from a total resource perspective, when one gives customer rebates in excess of measure costs, all other things being equal. Doing so would ignore a portion of costs that all ratepayers incur in implementing a particular DSM measure, and would dilute the full resource impact of making such expenditures.

Therefore, we see no reason to exclude consideration of that portion of utility or bidder payments to customers that exceed the measure costs, as DRA and SDG&E would in their calculations.[42] In sum, our adopted definition of total resource costs, for the purpose of these pilots, is the sum of utility payments to bidders or customers, customer contributions, utility administration costs, and the ratepayer cost of shareholder incentives. We believe that this definition will yield more consistent, conceptually sound results in a bidding environment than the alternatives presented in this proceeding.[43]

In effect, our adopted definition of total resource costs equates the UC and TRC tests whenever utility payments to customers or bidders are greater than the net measure cost. However, for the majority of DSM resource programs, where the rebate level is less than the net measure cost, the TRC and UC tests will yield different results. For these situations, the SPM practice of treating rebates or incentives to participating customers as a transfer payment is consistent with our adopted definition.

DRA raises an additional definitional issue with respect to the calculation of total resource costs. In DRA's Opening Brief, DRA presents variations on how the NTG ratio might be applied to total resource costs. In particular, DRA presents

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42 DRA expresses customer contribution as a negative number in examples where the rebate is greater than the measure cost. (See Attachment A of DRA's Opening Brief.) Similarly, SDG&E Witness Fuller testified that he would subtract the portion of customer rebates in excess of net measure costs from payments to bidders, in order to arrive at total resource costs. (TR at 1601-1603.)

43 We also understood PG&E's proposed definition of total resource costs for its pilot bidding program to be consistent with this definition. In Exh. 5, p. 57, PG&E defines total resource costs as the total payment to bidders plus total net customer cost, where net customer cost must be greater than or equal to zero (p. 55).

examples where the NTG ratio is not applied at all to total resource costs, and one where it is applied to the sum of customer contribution and payments to bidders. (See DRA's Opening Brief, Attachment A, PG&E examples.)

In D.92-03-038, we adopted DRA's position that, consistent with recent modifications to the SPM, the NTG ratio should apply to measure costs, as well as to energy savings. (D.92-03-038, mimeo., p. 48.) However, the issue of how to define total resource costs was not explicitly raised by parties to that phase of the proceeding. As a result, we did not carefully consider whether or how to apply the NTG ratio to total resource costs in a bidding environment. Since our adopted definition of total resource costs does not explicitly include measure costs, it is not clear that the NTG ratio should be considered at all. In any event, if a NTG ratio is included in the TRC formula, the method selected should not create perverse results, e.g., by creating an advantage to bidders over the utility program even when the projects have identical total costs and benefits.

We ask that respondents and interested parties address the issue of whether the NTG ratio should be applied to total resource calculations for these bidding pilots, and if so, how. Comments should be filed with the Commission Docket Office within 30 days. Reply comments should be filed within 45 days. Comments should be served on all parties to this proceeding. After receiving these comments, the assigned ALJ will either issue a ruling resolving the issue of NTG treatment in the TRC formula for the bidding pilots, or make recommendations to the Commission as to the appropriate course of further action.

Our conclusions today apply to the definition of total resource costs used in a bidding environment. However, as directed in D.91-12-076, the issue of treating rebates as a transfer payment in the TRC test needs to also be revisited for the evaluation of utility DSM programs that are not subject to bidding. We direct

respondents and interested parties to file comments on this issue within 90 days. We encourage the SPM working group to convene and provide an informal forum for discussing this issue prior to the filing of comments. After receiving these comments, the assigned ALJ will identify the appropriate forum for resolving this and other outstanding SPM issues.[44]

6.1.2.2 Consideration of Total Resource and Utility Costs

Having addressed definitional issues, we turn to the issue of how to consider total resource and utility costs in the bid evaluation process. In considering the same issue for PG&E's bidding pilot, we looked to our recently issued rules governing the evaluation, funding, and implementation of DSM programs (Rules) for guidance:[45]

> "Rule 6 states that, for programs that serve as alternatives to supply-side resources, we rely on the TRC test as the primary indicator of DSM program cost-effectiveness. This is appropriate because, unlike the UC test, the TRC test looks at the total resource costs of DSM options in making comparisons among programs. Basing the ranking and funding of DSM programs primarily on the UC test would lead to the inefficient allocation of resources, since investments would be based on an evaluation of only a portion of total costs. For this reason, we look at total costs and benefits in evaluating supply-side resources.... Therefore, we direct PG&E to use the TRC test, and not the UC test, as the primary indicator of cost-effectiveness in ranking bid proposals under its pilot bidding program." (D.92-03-038, mimeo., pp. 39-40.)
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> "....the Rules emphasize the consideration of total resource costs and benefits in evaluating all resource options. In other words, the primary consideration under our resource

44 See D.92-02-075, Rules 9 and 10.

45 See D.92-02-075, Attachment 1.

> procurement framework is to select the most economically efficient resource for meeting energy needs." (Ibid., p. 41.)
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> "This does not mean that ratepayer impacts are ignored in reviewing and approving DSM programs. As we state in D.92-03-075, we will always need to examine the rate impacts of pursuing least-cost resource options. For utilities' ongoing programs, we look at potential rate impacts in deciding the overall level of DSM funding to authorize in a given period....However, for the purpose of ranking DSM programs, relative to one another, we believe that the primary criterion should be economic efficiency, i.e., which programs yield the greatest net benefits from a resource perspective." (Ibid., pp. 41-42.)

The primary objective of the bid evaluation process should be to encourage bidders to develop, and utilities to select, the most economically efficient project from a total resource perspective. However, DSM bidders should be encouraged to maximize the efficiency with which they achieve resource benefits with utility program expenditures. This is particularly appropriate for replacement bids where the utility DSM program has already passed a resource planning evaluation process that identifies that program as a cost-effective addition. Put another way, we want the "biggest bang for the buck" in terms of achieving total resource net benefits with ratepayer dollars. The question is: Which bid evaluation approach is the most effective in achieving this dual objective?

SCE's proposal to consider only utility costs in evaluating small office bids is clearly inconsistent with the policy established in D.92-02-075. For a given level of savings, SCE would always select the bid with the lowest revenue requirement impact, regardless of the impact of the program on total resource costs. As we acknowledged in D.92-02-075 and D.92-03-038, this approach would lead to the inefficient allocation of resources. In D.92-02-075, we also recognized that exclusive reliance on the UC

test would inappropriately bias resource planning decisions in favor of DSM, relative to supply-side resources. Avoiding such biases becomes particularly important as we more fully integrate supply- and demand-side resource procurement. (See D.92-02-075, pp. 35-36.)

The weighted average approaches proposed by DRA and SDG&E attempt to meet the above-stated objective by averaging the results of the TRC and UC tests into the scoring process. In D.92-03-038, we considered similar proposals for PG&E's pilot bidding program. However, we rejected proposals where it was unclear how the tradeoff between economic efficiency objectives (i.e., maximizing total resource net benefits) and utility cost minimization goals (i.e., minimizing revenue requirements) would be made. In particular, we found that using a weighted average approach could result in a selection process that prefers projects with relatively lower total resource net benefits over those with relatively higher utility costs, without any apparent rationale for such preferences. (D.92-03-038, mimeo., pp. 40-41.) When questioned by the assigned ALJ in this phase of the proceeding, DRA, SCE, and SDG&E acknowledged that their proposed cost-effectiveness criteria could yield similar results, in both DSM-only and integrated bidding arenas. (TR at 1077-1079, 1185-1189, 1356-1357, 1538, 1665-1669.)

While there are circumstances under which maximizing total resource net benefits are properly tempered by the relative impact on revenue requirements, we have made clear that this type of tradeoff should be made as explicit as possible, and should make intuitive sense. DRA's and SDG&E's proposals do neither. For example, when spelled out mathematically, DRA's cost-effectiveness criterion can be expressed as follows: Resource benefits less the sum of 100% of shareholder incentives, 100% of utility administration costs, 75% of utility payment to bidders and of 50% out-of-pocket customer costs. Even the DRA witness acknowledged

that one could not readily translate this formula into a "plain English" concept of net benefits, other than saying it represents a weighted average of costs and benefits. (TR at 1539, 1562-1564.)

Similarly, SDG&E's 50/50 weighting of utility and total resource costs translates into a net benefits formula that weights individual cost components differently, without any explicit rationale. For example, SDG&E's formula effectively places 100% weight on shareholder incentives and utility administration costs (as does DRA), but places 100% weight on utility payment to bidders and 50% weight on out-of-pocket customer costs. When adjusted for differences in the definition of total resource costs and the treatment of shareholder incentives, these two formulas rank bidders in a similar manner.

As we stated in D.92-03-038, we prefer an approach that selects the most economically efficient resource for meeting energy needs, while making the consideration of utility costs as explicit as possible. An alternative approach considered and adopted for PG&E's bidding pilot, and proposed by SoCal in this phase of the proceeding, uses the UC test as a "tie-breaker." Under this approach, all bids are first ranked or scored based on the results of the TRC test of cost-effectiveness. For bid proposals that yield the same level of total resource net benefits, the one with the best UC benefit-cost ratio (or level of utility net benefits) is ranked ahead or given a higher score. We adopted this approach for PG&E's partnership bid as an improvement over PG&E's proposal to primarily consider UC costs, and over the approaches that DRA was advocating for a cost-effectiveness formula comprised of both UC and TRC cost components. In comparison to those proposals, and for the purpose of a partnership form of bid, the tie-breaker approach best meets our stated objectives.

Nonetheless, for the purpose of replacement bidding, parties in this phase of the proceeding have presented convincing reasons for adopting a different approach. SDG&E argues that the

tie-breaker approach may be the most useful test to select between bid programs that are allowed to target customer sectors not currently addressed by the utility, such as the case with PG&E's partnership bid. This is because the selection of DSM programs that expand or augment current utility DSM activities is an integral part of the resource planning process, i.e., the process that selects utility resource additions based on total resource costs and benefits.

In contrast, as both SDG&E and DRA point out, a replacement bid starts at the resource acquisition stage where the DSM program to be replaced has already been identified as cost-effective from a total resource perspective. They contend that the objective in resource acquisition is to acquire those cost-effective DSM resources in the most efficient manner from a program expenditure point of view.

We agree. As our Rules recognize, economic efficiency is our primary goal, but ratepayer impacts should not be ignored in the resource procurement process. As discussed above, our objective is to encourage bidders to propose, and the utility to select, bidder projects that maximize total resource net benefits in a manner that achieves the "biggest bang for the buck" with program funds. The most explicit way to translate this objective into cost-effectiveness criteria is to look at the level of total resource net benefits per dollar of utility program expenditures.[46] This approach explicitly assesses whether the

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46 During evidentiary hearings on PG&E's pilot, DRA augmented its prepared testimony to recommend this same formula, as an alternative to a weighted average approach. (See Exh. 9A, 23, 23-A, and DRA Opening Brief/PG&E, pp. 14-15.) However, as in this phase of the proceeding, DRA's sample calculations in the PG&E pilot phase reflected an interpretation of the SPM that no other

(Footnote continues on next page)

incremental increase in resource benefits attributable to higher customer rebates or more intensive marketing approaches is the most efficient use of additional ratepayer funds. In other words, it encourages program designers (whether utility or third-party bidders) to propose projects with increasing rates of return to all ratepayers (in the form of total resource net benefits) per dollar of revenue requirement. Mathematically speaking, this criterion prefers the project with the highest "slope" along a curve that graphs total resource net benefits as a function of program costs.

Unlike weighted average approaches, our adopted "bang for the buck" criterion is explicit in making the tradeoff between the TRC and UC tests. The outcome is unambiguous: a project wins the bid if it yields the highest level of total resource net benefits per dollar of utility expenditure. This is not a predictable outcome using weighted average approaches. For example, suppose two bidders propose projects that each cost $300 million from a total resource perspective. Bid A yields energy savings of $400 million, at a utility cost of $50 million. Bid B yields energy savings of $500 million, at a utility cost of $200 million. Using a 50/50 weighted average approach, one would select Bid B,

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parties used, and that we have rejected in today's order. Because this was not brought out in the earlier hearings, the anomalous results of DRA's numerical examples in PG&E's pilot phase were attributed to the formula itself, rather than to differences in the definition of terms. Moreover, DRA made no conceptual distinction between this particular formula and weighted average approaches, other than to refer to differences in the relative weighting of cost components. (DRA Opening Brief/PG&E, p. 17.) Finally, DRA's earlier formula was presented in the context of PG&E's partnership bid proposal, rather than a proposed replacement bid. As a result, we are only now able to separate the "wheat from the chaff" in evaluating DRA's earlier recommendation as an appropriate cost-effectiveness formula for evaluating replacement bids.

even though the amount of total resource net benefits per dollar of utility expenditure is twice as high for Bid A as for Bid B.[47] As discussed in Section 6.1.2.3 below, if both bids yield TRC benefit-cost ratios in excess of the utility's program, then Bid A should be preferred over either Bid B or the utility program being replaced.

The tie-breaker approach adopted in D.92-03-038 will identify the project that reduces total resource net benefits per dollar of revenue requirements, but only in situations where projects have identical total resource net benefits or benefit-cost ratios. In a partnership bid, there is a reasonable possibility that projects will tie because bidders can develop projects with many different possible combinations of savings levels and total resource costs. In a replacement bid, however, bidders attempt to achieve a predetermined level of energy and/or capacity savings, as defined by the utility program to be replaced. Hence, the number of possible savings/costs combinations that can result in a tie are relatively limited. As a result, using a tie-breaker approach for replacement bids is less likely to motivate bidders to keep both total resource costs and utility costs as low as possible.

In conclusion, we find that SoCal, SCE, and SDG&E should evaluate the relative cost-effectiveness of replacement bid proposals using the ratio between total resource net benefits and

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47 In this example, Bid A has total resource net benefits of $100 million ($400 - $300) and utility net benefits of $350 million ($400 - $50). Taking a 50/50 weighted average of total resource and utility net benefits yields $225. The ratio of total resource net benefits to utility costs is 2.0 ($100 divided by $50).

Bid B has total resource net benefits of $200 million ($500 - $300) and utility net benefits of $300 ($500 - $200). The 50/50 weighted average of total resource and utility net benefits is $250. The ratio of total resource net benefits to utility costs is 1.0 ($200 divided by $200).

utility costs, once certain threshold cost-effectiveness criteria are met. As described in Section 6.1.2.4 below, this evaluation process should also take into account the relative comprehensiveness or savings intensity of bid proposals.

6.1.2.3 Threshold Cost-Effectiveness Criteria

In order to receive ratepayer funding, a DSM program designed to replace supply-side resources must be less expensive from a total resource perspective than any other supply-side option. In other words, DSM resource programs (i.e., programs that serve as alternatives to supply-side resource options) should, by definition, pass the TRC test. (See Rule 6, D.92-02-075.) Once this threshold is met, utility DSM programs are ranked and selected for funding in descending order of TRC benefit/cost ratios or net benefits, subject to budget limitations. Similarly, in an integrated resource planning environment, DSM programs are added to the resource plan in the order in which they lower total resource costs. (See TR at 118-1183 and D.92-02-075, pp. 8-12.)

Replacement bidding is an alternative method of acquiring DSM resources, once cost-effective utility DSM programs are identified in our planning and funding process. Since a utility DSM resource program should not be added to the utility's resource plan if doing so does not lower total resource costs, we see no reason to permit bidders to propose projects with TRC benefit-cost ratios less than 1.0. All bid proposals should be required to be cost-effective from a total resource perspective, even if the primary purpose of the proposal is to enhance savings intensity or site penetration.

SESCO objects to the requirement that the bidders' proposal "beat" the TRC benefit/cost ratio of the utility's program, which in the case of SDG&E's pilot is significantly greater than 1.0. From a resource planning perspective, we believe that the utility's TRC results should be a threshold for bidders in bidding situations where utility DSM activities are being replaced.

As described above and in D.92-03-038, a particular utility DSM program is selected for funding based on its relative TRC results. If bidders with lower TRC results are allowed to win the bid, then the optimal timing and/or selection of DSM resources in the planning process could be compromised. (TR at 1185-1187.) In other words, bid proposals under a replacement bid should have TRC benefit/cost ratios that exceed 1.0 or the utility's program TRC (as defined in this order), whichever is greater.[48] This determination is consistent with our findings in D.92-03-038 on the appropriate "yardstick" for avoided costs. (See D.92-03-048, mimeo., pp. 44-46, Findings of Fact 44, 45.)

As SESCO observes, SDG&E's replacement bid was not designed with residential weatherization measures in mind. This is because SDG&E itself does not conduct a non-low income residential weatherization program. (TR at 1042.) The issue of whether SDG&E should include weatherization measures in its residential programs, and whether overall program funding should be increased for that purpose, is properly addressed in SDG&E's general rate case proceeding where utility DSM program fundings decisions are made. The purpose of SDG&E's bidding pilot is to assess whether third-party DSM providers can effectively replace the non-low income appliance efficiency incentives program that SDG&E currently conducts, which has been found to be cost-effective. Therefore, it is appropriate for the TRC threshold to be tied to the performance of SDG&E's existing program. Otherwise, SDG&E's bidding pilot becomes a form of partnership bid, where bidders are competing to augment utility DSM activities and savings, rather than replace utility programs. This does not mean that bidders are precluded

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48 For SoCal's pilot program, the threshold should be 1.0, since there are no comparable existing TRCs for the type of coordinated residential program we have authorized in today's order. (See Section 5.2.6.2 above.)

from proposing weatherization measures in their bid package. However, the overall bid proposal must be at least as cost-effective as SDG&E's current program from a total resource perspective.[49] Once this threshold is met, bidders compete to deliver total resource net benefits in a manner that maximizes those benefits per dollar of program expenditure. In their RFPs, the utilities should provide TRC information on the overall program and program components being replaced by the pilot.

As discussed above, we want to ensure that replacement bids are lower cost than the utility's current or planned program, from a total resource perspective. However, because one of our objectives in conducting this pilot is to test the ability of third parties to propose innovative DSM delivery approaches and services, we do not want to automatically exclude from further consideration proposals that require proportionately higher utility expenditures than the utility's in-house program being replaced. Therefore, for the purpose of these pilots, we will not require bid proposals to exceed the utility's bang-for-the-buck ratio as a threshold requirement. However, all bidders will still be competing against each other to maximize the bang-for-the-buck in order to win the bid.

6.1.2.4 Savings Intensity/Site Penetration

Evaluating bid proposals based on an average cost per kWh or kW (whether that cost is defined in terms of total resource, utility costs, or some combination of the two) tends to favor a bidder that pursues only the most cost-effective measures in each

49 We find it appropriate to compare bid proposals with the TRC benefit/cost ratio of the most comparable program component. For weatherization proposals, SDG&E should use the TRC for its appliance efficiency options program, rather than for its overall program, as the cost-effectiveness threshold. (See Exh. 109, p. 2-18; SDG&E Reply Brief, pp. 11-12.)

building or site. As we acknowledged in D.92-03-038, this could result in the creation of lost opportunities. For PG&E's pilot, this impact was minimized by using a "comprehensiveness" attribute in the bid evaluation process which, among other things, gave favorable consideration to bidders that bid prices in a tiered system. (D.92-03-038, mimeo., p. 52.)

While tiered pricing is one viable approach for comparing the relative savings intensity of bidders' proposals, we do not agree with SESCO that it should be required for all of the pilots. The nature of the program to be replaced may simply not lend itself to tiered pricing. For example, because there are a limited number of appliances to be replaced at each site, tiered-pricing may not be appropriate for a replacement bid designed to replace energy inefficient appliances, such as SDG&E's pilot. Moreover, as part of these pilots, we want to test and evaluate alternative approaches for capturing non-price considerations, including savings intensity, in the bid evaluation process.

Therefore, while we will require that all utilities incorporate relative savings intensity/project comprehensiveness into their bid evaluation process, we will not require that they utilize identical approaches.[50] We note that SDG&E's pilot and SCE's industrial and large commercial (formerly schools) RFP currently lack any consideration of relative project comprehensiveness or savings intensity. Accordingly, SDG&E should

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50 Ideally, each utility program could also be characterized in terms of comprehensiveness or savings intensity. The savings intensity of bid proposals could then be compared to that of the utility's program, as a component of the overall evaluation of program cost-effectiveness. However, there is no record in this proceeding with which to develop or implement such an approach. As we proceed with the development of DSM bidding, we will explore approaches for characterizing the relative savings intensity/ comprehesiveness of utility programs with bid proposals.

develop a self-scoring comprehensiveness attribute and assign it a maximum of 50 points. SCE should also add a comprehensiveness criterion to its evaluation of industrial and large commercial sector bids, and give it a 5% weight in the evaluation process. SCE should reduce the weighting factor for its experience criterion from 20% to 15%, which gives that criterion a weighting more in keeping with other bid proposals.[51] ESCOs that bid prices in a tiered system should be given favorable consideration in assigning points/relative scores within SDG&E's and SCE's comprehensiveness attribute.

SoCal should retain its proposed penetration factor, but that factor needs to be applied to the cost-effectiveness criteria adopted in today's order, i.e., the ratio of total resource net benefits to total utility costs. Similarly, SCE's tiered pricing approach for its small offices solicitation must be modified to reflect today's determinations on cost-effectiveness criteria. Specifically, bidders should bid tiered prices based on the total resource costs of their proposals. The resulting tiered price score would then be calculated, based on SCE's proposed weighting/scoring formula.

SCE proposes to use the tiered price scores to directly rank bid proposals, i.e., the highest ranking bidder would be the one with the lowest score. However, this approach is not compatible with our adopted "bang for the buck" cost-effectiveness criterion. Instead, SCE should use the tiered price score to adjust the relative ranking of proposals based on our adopted criterion. Specifically, SCE should divide its tiered price score <u>into</u> the ratio of total resource net benefits to total utility costs. In other words, the "bang for the buck" criterion becomes

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51 Bidder qualifications is assigned a 10% weight in PG&E's pilot, and a 14% weight in SDG&E's proposed pilot.

the numerator, and the tiered price score becomes the denominator, of a ratio that bidders try to maximize. SCE would rank bidders based on that ratio, with the highest ranking bidder being the one with the highest score. This will ensure that, in the overall evaluation of project cost-effectiveness, bidders are given credit for achieving greater site penetration.

6.1.2.5 NTG Ratio/Administrative Cost Assumptions

The approaches adopted in D.92-03-038 for determining NTG ratios and applying utility administrative cost assumptions should be adopted for SoCal's, SCE's, and SDG&E's bidding pilots. In that decision, we considered various alternatives, including those proposed in this phase of the proceeding. We specifically rejected PG&E's recommendation to perform and pay for all administrative functions related to its bidding pilot and to allocate those costs for bid evaluation purposes on an equal cents/kWh basis. (See TR at 455.) We found that this approach would penalize bidders requiring less administrative oversight or involvement from the utility relative to bidders requiring more oversight or involvement.

We also found that the use of NTG ratios adopted for the utility's programs may be too low for certain types of ESCO-delivered programs. At the same time, we acknowledged that it would be difficult to evaluate individual NTG proposals, as proposed by some parties. We decided to set the NTG ratio to 1.0 for programs with greater than a 2-year payback (with utility program NTGs used for other programs), as a reasonable accommodation of parties' concerns. On the issue of administrative costs, we directed PG&E to provide bidders with a menu of administrative functions and their approximate costs. Bidders were directed to specifically identify which functions they would perform themselves, which functions were not needed for their proposal, and/or which functions PG&E should perform for which the bidder would reimburse PG&E.

We have not been presented with additional information or argument that would persuade us to alter our determinations in D.92-03-038 on the treatment of NTG ratios and utility administrative costs. Therefore, SCE, SoCal, and SDG&E should modify their RFPs to conform to those determinations.

6.1.2.6 Avoided Cost Updating

PU Code § 701.1(c) directs this Commission to include a value for any costs and benefits to the environment in calculating the cost-effectiveness of energy resources, including conservation and load management. In our adopted Rules, we direct respondents to use avoided costs and non-price (e.g., environmental) values that are consistent with the values developed in the Biennial Resource Plan Update proceeding (Investigation (I.) 89-07-004) and, when completed, in our gas marginal cost investigation (I.86-06-005.) SCE, SDG&E, and SoCal are aware of these directives, and intend to update their avoided cost assumptions based on the outcome of these proceedings. (TR 870, 877, 883-884, 1151-1153, 1200-1201, 1358-1359.) We expect the utilities to provide estimates of updated avoided costs in the compliance filings required by today's order. In particular, the utilities should incorporate the findings of D.92-04-045 in their avoided cost updates.[52]

6.1.2.7 Non-price Criteria

Under SoCal's proposal, bids will be determined to be "acceptable" or "unacceptable" based on SoCal's subjective evaluation of the bidders' marketing plan, proposed measures and

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52 For their compliance filings, SCE, SoCal, and SDG&E should use their preferred methods for translating the findings of D.92-04-045 into avoided cost updates. However, we may require modifications to those methods prior to the final issuance of the RFPs, based on the outcome of the workshops and CACD's report on consistency issues, due November 1, 1992 (See D.92-02-075, Ordering Paragraph 9.)

"demonstrable experience" delivering similar programs. (Exh. 102, pp. 7-9.) In contrast, SCE establishes specific minimum requirements (e.g., a minimum of five years of experience) and SDG&E establishes a self-scoring system for non-price attributes. (See Attachment 2.)

We do not expect SoCal to convert its bid evaluation process into a self-scoring RFP, as SESCO requests. We want to explore various bid designs, including those that are based on non-self scoring approaches, before determining which methods are the most effective. However, as currently structured, SoCal's bid evaluation method provides little guidance to potential bidders on how they will be evaluated for threshold requirements. Therefore, we direct SoCal to provide more explicit threshold criteria in its RFP by (1) describing threshold requirements more fully (e.g., what type of information is required to demonstrate acceptable experience), and (2) assigning relative weights to the non-price threshold considerations (e.g., qualifications, marketing plan, and selected measures).

With regard to SoCal's specific threshold requirements, we agree with SESCO that the existence of litigation claiming default is not a proper criterion for disqualifying a bidder. The fact that someone alleges that a particular company has breached a contract provision does not make that company unreliable. (TR at 840.) We also agree with SESCO that requiring every bidder to become fully licensed in California prior to submitting a bid will unreasonably discourage out-of-state firms from participating. However, we find nothing unreasonable about the requirement that the bidder, or bidder's representative, be appropriately licensed before commencing to provide services in California. SoCal should modify its RFP to conform to this distinction.

SESCO also asserts that SDG&E's process for selecting winners, once the short list is identified, is too subjective. Contrary to SESCO's assertions, however, the criterion that SDG&E

will use to make final selections is clearly stated in SDG&E's RFP. SDG&E will examine selected markets or program designs to make sure that the overall program is cohesive and comprehensive:

> "At the negotiations stage, it is SDG&E's intent to select the best mix of Bidders from the Short List to be able to serve the Existing Residential Customer market with a cohesive and comprehensive set of Programs for energy efficiency. In order to do this, significant changes may need to be made to one or more Proposals in order to avoid overlaps and conflicts between Programs. Some otherwise attractive bids may fail to be selected because their selected target markets or Program designs will not mesh well with those of other Bidders on the Short List. The initial rankings of projects become less important once Bidders become part of the Short List." (Exh. 109, p. 1-15.)

Such flexibility after short list selection is appropriate for a bid designed to replace a specific utility program. However, SDG&E should make available to all short-listed bidders the reasons why the winning bidders contributed most effectively to overall program cohesiveness/comprehensiveness. As we did for PG&E, we will also require SDG&E, SCE, and SoCal to make available summaries of project proposals and a final score or ranking under each evaluation criterion to all bidders and anyone else requesting a copy. This information should be available at the time the utilities announce their short list of bid proposals for negotiation.

Finally, consideration of "customer value" should be deleted from SDG&E's bid evaluation criteria. SDG&E has established no criteria for evaluating customer value or awarding up to 50 points for this attribute. (Exh. 109, p. 2-19, Form 13.) Moreover, this element is virtually identical to the "incremental customer value" component of project benefits that we rejected for PG&E's bidding pilot. As we stated in D.92-03-038, we will not include this benefit in the evaluation of bid proposals until an

acceptable method for quantifying and consistently applying customer value across both utility and ESCO-delivered programs has been established. Accordingly, SDG&E should delete Form 13 from its RFP, and replace it with a self-scored evaluation of project comprehensiveness/savings intensity, as directed in Section 6.1.2.4 above.

6.2 Measurement and Verification

Each of the utilities plans to handle the measurement and verification (M&V) of energy savings under its pilot somewhat differently. Per-measure savings under SDG&E's pilot will be based on prespecified assumptions contained in the bidder's proposal, or as agreed upon in negotiations. SDG&E will also allow bidders to propose performance-type programs, in which some or all of the payment may be based on measured savings. SDG&E will perform all M&V studies needed for making payments to winning bidders, and for evaluating the residential appliance efficiency program in general. (Exh. 110; TR at 1202-1203.)

Similarly, SoCal provides bidders with the option of proposing fixed payments based on prespecified energy savings for each measure installed, or payments per therm based on measured and verified savings. (Exh. 102, p. 5.) However, bidders are expected to perform all ex post measurement themselves, based on an agreed upon M&V plan. SoCal will conduct supplemental M&V studies for the program as a whole. (TR at 880-881.)

In contrast, SCE proposes to pay all bidders based on measured savings, using "pre/post" methodologies developed by SCE for specific measures. (Exh. 114, Appendix C.) SCE will perform all of the M&V studies/monitoring necessary for the program.

SESCO argues that the Commission should insist on requiring comparable M&V standards for both bid DSM projects and the utility's own DSM programs and that bidders proposing performance-based pricing should receive extra credit in the bid evaluation process. (SESCO Opening Brief, pp. 6-7, 10.) DRA

prefers an approach that uses prespecified savings estimates as the bases for bidder payments in 1993, subject to change as the Commission adopts ex post protocols for 1994. (TR at 1673-1675.)

We are currently in transition from using prespecified estimates of DSM savings, to using post-installation, or ex post, measurements. As we stated in Rule 21 of D.92-02-075, we expect to shift to ex post measurement of savings for utility shareholder incentives by 1994. As in the case of PG&E's pilot, however, we must adopt M&V provisions for DSM bidding prior to completing this transition.

During the PG&E pilot phase, several parties raised the issue of consistency between the M&V requirements for ESCOs and those for utilities. (D.92-03-038, p. 25.) As in this phase of the proceeding, they argued that the M&V standards for the bidding pilot should be identical to those currently in place for utility-sponsored programs. We disagree. We reject the notion that the standards for these pilots should be based on a M&V approach we have chosen to move away from for utility-sponsored programs. Instead, the pilots should be designed to yield useful information about the application of ex post measurement in a bidding environment. By requiring third parties to develop ex post measurement plans as part of their proposals, we should gain useful information on alternative approaches for both ESCO- and utility-sponsored programs in the future.

We recognize that there are bound to be some inconsistencies between ex post M&V protocols proposed and negotiated for these particular pilots, and those that we will adopt in the upcoming measurement and evaluation phase of this

proceeding.[53] DRA suggests that the M&V provisions of these contracts be subject to change, based on our final determinations on ex post measurement protocols. We reject that suggestion because it would introduce an unacceptably high level of uncertainty into the payment provisions of the contracts. The approach adopted for PG&E's pilot is reasonable for these pilots; namely, to let bidders propose their own ex post M&V programs, including the baseline reference, subject to the utility's case-by-case evaluation. As we did for PG&E's pilot, we will also require that the baseline reference for calculating energy savings be the minimum standards equipment, not existing equipment. Bidders should include in their Response Packages the basis for their minimum standards baseline reference, including supporting data and documentation. (See D.92-03-035, p. 54.) Since all bidders will be required to propose performance-based pricing, SESCO's suggestion that extra credit be given for such proposals is moot. Accordingly, the utilities should modify their RFPs and sample contracts to reflect this requirement.

6.3 Payment Provisions/Contract Terms

SoCal, SCE, and SDG&E each provide a sample energy efficiency contract for winning bidders. (See Exhs. 103, 114/115, and 109.) The contracts include sample provisions on payment terms, security requirements, termination provisions, force majeure, default and remedies, and confidentiality of customer-related data, among others. SESCO raises objections to several provisions in these contracts.

As currently proposed, SDG&E's contract limits total payments to the bid price, and SoCal's contract contains maximum

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53 How to account for these differences in calculating shareholder incentives or for forecasting purposes should be addressed in the upcoming measurement and evaluation phase of this proceeding.

payment and savings clauses. SCE's contract pays for up to 125% of the contracted savings level (i.e., 12.5 gWh for each 10 gWh contract). SESCO argues that payments to bidders should exceed the bid price if the projects are successful in achieving cost-effective conservation.[54]

SDG&E's contract contains a clause requiring arbitration for all disputes under $100,000, while SCE's contract provides for arbitration upon written consent of both parties. SoCal's sample contract does not provide for arbitration. SESCO argues that the utility contracts should include provisions requiring arbitration of all disputes involving less than $500,000.

SESCO also objects to the persistence and cost-effectiveness security provisions contained in SDG&E's sample contract. With regard to persistence security, SESCO objects to SDG&E's assumption that energy savings deteriorate over time on a linear basis.[55] SESCO claims that SDG&E's cost-effectiveness security provisions are excessive and unworkable for performance bidders.

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54 We have addressed Transphase's argument that payments should be based on either kW or kWh savings, by directing SCE to pay bidders on this basis for its large commercial/industrial bid solicitation. Since the other pilots are not designed to solicit electric load management technologies, per kW payment terms do not have to be included in the sample contracts; rather they can be negotiated on a case-by-case basis.

55 SESCO also objects to language under SDG&E's sample persistence security provisions that permits SDG&E to use lifetime energy savings assumptions that are different from the ones originally approved. However, that particular provision becomes moot with our determination that payments to bidders for all measures should be performance-based. For performance-based measures, SDG&E states that it will perform ex post measurement in the final year of the performance period to determine the amount of security to be kept by SDG&E or returned to the ESCO. (See Exh. 109, pp. 3-6.) For this purpose, we expect SDG&E to employ the measurement and verification methods agreed to in the contract.

In addition, SESCO objects to a provision in SDG&E's contract that conditions the validity of the agreement upon a Commission decision to "unconditionally" authorize full recovery of contract costs. SESCO argues that the Commission does not issue orders guaranteeing, in advance, full recovery of such costs. Finally, SESCO argues that SDG&E's termination provisions enable SDG&E to terminate the agreement for technical, immaterial breaches. In SESCO's view, only material breaches should cause termination.

As described in each utility's RFP, all aspects of the sample contract provisions are negotiable, and subject to change. Many of the specifics raised by SESCO are ones that should become part of negotiations. For example, as SDG&E points out, the assumption of linearity in savings deterioration is open to change, if bidders can offer substantiation of alternative decay functions. In D.92-03-038, we encouraged PG&E to be open to alternative forms of front-loaded security, and we expect SDG&E, SoCal, and SCE to be similarly receptive during their negotiations with short-listed bidders. If the sample security provisions are unworkable for performance-based bidders, we expect suitable modifications to be negotiated.[56]

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56 We note that SESCO first raises this particular issue in its Reply Brief. As a result, SDG&E has had no opportunity to directly respond to this aspect of its security provisions. Reply Briefs are to be used to respond to issues argued in Opening Briefs, and not to raise new issues. In the future, SESCO should cover all of its major points in its Opening Brief.

We do not intend to approve or reject specific contract language in today's order.[57] Rather, we expect the utilities to negotiate with short-listed bidders in good faith, and work with bidders to develop a package of price and non-price contract terms that appropriately allocate the risks and benefits of the agreement among affected parties, including ratepayers. However, we agree with SESCO on several general principles, which SoCal, SCE, and SDG&E should incorporate into their sample and final contracts.

First, contract payment provisions should allow for payments above the total bid price or contractual savings levels, provided that the ESCO meets all of the performance requirements of the contract and the project continues to be cost-effective from a total resource perspective. All utilities currently have flexibility to shift funds among in-house resource programs, and some can also exceed authorized funding levels up to certain limits, in order to maximize the ratepayer benefits of their programs. As described in Section 6.4.2 below, we will extend the same degree of funding flexibility to these pilots.

Since these pilots are designed to replace planned in-house DSM programs, we see no reason why the energy or capacity savings produced by these pilots should be rigidly capped at contracted amounts, if those savings continue to be reliable and cost-effective. As described in this order, winning bidders will be held to high standards for these pilots--their projects must "beat" the utility's projected cost-effectiveness performance, and their payments will be based on ex post verified savings.

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57 We make one exception: SDG&E should delete the word "unconditionally" in Section 33 of its sample contract. Even standard offer contracts are not unconditionally approved by the Commission, if the terms of those contracts are not prudently administered by the utility. (See, for example, D.91-07-054, pp. 18-19.)

Therefore, the utility should pay for greater than estimated savings under these contracts. At the same time, utilities need to retain flexibility to allocate ratepayer funds to other resource programs that are equally or more cost-effective. SCE's approach of paying for up to 125% of estimated savings represents an appropriate balance. Therefore, SoCal and SDG&E should also include provisions in their sample contracts to pay for up to 125% of estimated savings (based on bid amounts). If contract performance exceeds this level, we encourage SoCal, SCE, and SDG&E to negotiate with winning bidders to modify the terms and conditions of the contract, as appropriate.

All of the sample contracts should include arbitration provisions. As we acknowledged in D.92-03-038, potential ambiguities or disputes with regard to termination provisions, or any other aspect of the contract, can be more effectively addressed by having an arbitration option built into the contract. (D.92-03-038, p. 56.) Rather than prespecify the language of each arbitration provision, we will leave it up to the utilities to develop sample language, subject to negotiations.

Finally, as we required of PG&E in D.92-03-038, SCE, SoCal, and SCE should clearly state in their RFPs that proposed changes to their sample contracts will not be considered in the bid evaluation process, up to the selection of the short list. The evaluation process should consider only the criteria described in their RFPs, as modified by this order. (D.92-03-038, p. 57.)

6.4 Funding Issues/Commission Review Process

In their testimony and briefs, several parties raise issues concerning program funding and the Commission review process. We address these issues below.

6.4.1 Authorized Funding Levels

To implement its pilot, SDG&E is requesting program funding authorization of $6.8 million for 1993, $6.8 million for

1984, and $6.7 million for 1995 (in 1993$), including funds for administrative costs and measurement and evaluation.[58] (Exh. 108-2-A, using a 5% inflation rate.) This compares with 1992 annual authorized funding levels of $5.1 million, in 1993 dollars. (Ref. Item CC, Part III, Table 2.1., using a 5% inflation rate.) The program is cost-effective at the requested funding level, with the exception of the high efficiency air conditioning program component. (Exh. 109, Table 2-B.) This program element is not cost-effective and should not be funded. We reduce SDG&E's funding authorization accordingly.

In sum, we authorize SDG&E to recover in rates the following total amounts for its residential appliance efficiency incentives program, which will be used to implement SDG&E's DSM bidding pilot: $6,565,832 in 1993, $6,553,626 in 1994, and $6,479,701 in 1995 for a total of $19,599,159 (in 1993$) over the three-year program period.[59] These figures include funds for measurement and evaluation in the amount of $158,090 in 1993, $145,884 in 1994, and $71,959 in 1995 (in 1993$). From these funds will also come the administrative costs for SDG&E's program support role. Determinations on revenue allocation and rate design for SDG&E's pilot will be made either in SDG&E's current general rate case proceeding, or in another appropriate forum.[60]

SCE estimates that it will require a total of $19.2 million, or an average of $2.1 million per year over

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58 SDG&E will conduct the residential appliance efficiency incentives program in-house during 1993, while bids are being solicited, reviewed, and selected. Therefore, SDG&E is requesting authorization for its own activities during 1993, as well as for the bidding pilot.

59 Program Budget figures plus M&E from Exh. 108-1-A minus $265,176 for the air conditioning program.

60 See ALJ Ruling dated April 2, 1992 in A.91-11-024/I.92-01-004.

1993-2002 (in 1993$) to implement its small offices solicitation in the two designated regions. (See Tables 1 and 2.) This funding level includes administrative and measurement costs. At the requested funding level, this program is cost-effective from a total resource perspective. (See Exh. 116-B.) SCE proposes to implement its pilot within the energy management hardware program levels already authorized in rates.

As described in Section 5.2.6.2 above, we have expanded SCE's replacement pilot to include a solicitation for the industrial and large commercial sectors in the two designated regions. Funding for SCE's current industrial and large commercial programs was found reasonable SCE's test year 1992 general rate case. (See D.91-12-076.) Based on 1992 authorized funding levels, SCE should redirect a total of $16.2 million over the program period, or $5.4 million annually in 1993, 1994, and 1995 (in 1993$) to implement the industrial and large commercial solicitation. (See Table 2.) To implement both solicitations within the designated regions, SCE will need to redirect a total of $35.4 million (in 1993$) from its in-house commercial and industrial energy management hardware rebate program.

We authorize SCE to make these funding redirections. Specifically, for 1993 and 1994, SCE should redirect $7,577,178 each year from industrial and commercial portions of the energy management hardware rebate program approved in SCE's test year 1992 general rate case. For 1995, SCE should similarly redirect $7,577,178 from funds authorized in its test year 1995 general rate case, or the appropriate DSM funding proceeding.[61] To continue to

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61 This should not require any increase in rates in 1995 and beyond, since funding for these solicitations in the designated regions represents less than half of 1992 authorizations for all of SCE's commercial and industrial energy management hardware rebate programs.

fund its small office solicitation program during the 1996-2002 period, SCE should redirect $2,133,120 (in 1993$) per year, beginning in 1996, from future funding authorizations for its in-house commercial energy management hardware rebate program.[62]

SCE should also redirect authorized funding from its in-house residential programs to pay for electric savings achieved by winning bidders for SoCal, under SoCal's residential bidding pilot. Finally, SCE is authorized to redirect authorized funding for the measurement and evaluation of its in-house programs to measure and verify savings from its pilot program, as appropriate.[63] Since SCE will be implementing its pilot within authorized funding levels, our determinations today have no impact on incremental funding, revenue allocation or rates for SCE. As discussed in Section 6.4.2 below, SCE will be able to carryover all redirected funds from year-to-year, in order to make payments to bidders based on project performance. While bids are being solicited, reviewed, and selected during 1992 and 1993, SCE should continue its in-house commercial and industrial energy management hardware rebate program in the two designated regions.

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62 Unlike its industrial and large commercial (formerly schools) solicitation, the small offices solicitation is budgeted to pay for projects with high intensity savings that persist over seven years. Therefore, SCE will need to redirect to this solicitation proportionately more than it currently budgets for its small offices program. We authorize redirections spread over a seven-year period, in order to avoid disrupting funding for SCE's other commercial programs, including small office activities in SCE's non-pilot regions.

63 In D.91-12-076, we authorized over $15 million in funding for SCE's in-house measurement and evaluation activities. We will address funding for these activities for 1995-1997 in SCE's test year 1995 general rate case, or in another appropriate DSM funding proceeding.

We have also expanded SoCal's pilot to encompass both the single- and multi-family sectors. (See Section 5.2.6.2 above.) The current authorized funding level for SoCal's residential weatherization, appliance efficiency, and master meter conversion programs is $4,818,320 per year (in 1993$). (Ref. Item AA, Table 2.1, multiplied by 4% inflation.) However, SoCal's current master meter program is far from cost-effective with a TRC ratio of .29. SoCal even testified that it would not propose continued in-house funding for this program element, given these cost-effectiveness results. (TR at 859.) Accordingly, we will remove the master meter component and authorize the differential, $4,444,960 per year in 1994, 1995, and 1996, for payments to bidders and utility administrative costs associated with SoCal's pilot. We will authorize an additional $108,000 per year (in 1993$), for SoCal's proposed supplemental M&V activities. Determinations on revenue allocation and rate design for this funding will be made in SoCal's 1993 biennial cost allocation proceeding. This represents total program authorizations of $13,658,880 per year (in 1993$) for SoCal's pilot (i.e., $4,444,960 per year over the three-year installation period.) As we provided for SCE and SDG&E, SoCal should continue its authorized in-house programs into 1994 if the bid solicitation, review, and selection process cannot be completed by the end of 1993.

In its comments on the ALJ's proposed decision, SoCal requests that final determinations on pilot program funding be deferred to its upcoming 1994 general rate case.[64] The size,

64 We note that SoCal has filed its Notice of Intent for the 1994 general rate case with a funding request for its residential weatherization and appliance efficiency programs that exceeds today's authorization by approximately $325,000. In its rate case application, SoCal's funding requests for these programs should be modified to conform with today's authorizations.

scope, and funding for these pilots were identified as issues for this proceeding, not the general rate case, and these issues were fully explored in direct testimony and during cross-examination. We see no reason to delay our determinations on these matters. Doing so would introduce considerable uncertainty with regard to the funding levels for these pilots. For similar reasons, we have rejected SCE's proposal to authorize the redirection of funds for 1993 and 1994 only in today's order and to leave consideration of additional funding for completing the pilot in future funding proceedings. (See SCE Comments, pp. 4-5.)

SoCal, SCE, and SDG&E should plan on implementing the adopted bidding pilots (or conducting their own in-house programs if they are not displaced by bidding) within the total funding authorizations approved by today's order. Should experience with pilot implementation warrant additional funding for this purpose, the utilities may make their requests for increased authorizations in the appropriate DSM funding proceeding.

Table 2 summarizes our annual funding authorizations for SoCal's, SDG&E's, and SCE's DSM bidding pilots.[65] As indicated in Table 2, each utility will conduct replacement bids in the range of 20-30% of 1992 annual resource budget authorizations. With the adjustments described above, we are authorizing replacement bidding for in-house programs that have all been found to be reasonable and cost-effective from a total resource perspective. Since winning bidders will need to "beat" threshold cost-effectiveness requirements, we are assured that these programs will also be cost-effective when put out to bid.

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65 Today's order does not authorize funding for shareholder incentives associated with the pilots. Those funds are currently authorized in our fuel offset proceedings.

6.4.2 Balancing Account Treatment and Funding Flexibility

Parties raised the following balancing account/funding flexibility issues:

1. Whether the utility should have the flexibility to shift funds between utility DSM programs and the bidding pilots,

2. Whether the utility should have flexibility to exceed authorized spending levels for the pilot, and

3. Whether the utility should be able to carry-over unexpended bidding pilot funds from year-to-year.

SDG&E requests that it be able to move funds from the bidding pilot to cover energy efficiency options that are not adequately addressed by bidders (e.g., super high efficiency refrigerators). SCE also asks for flexibility to shift funds from the pilot program to in-house DSM programs. SoCal does not request such flexibility. DRA recommends against any shifting from the pilot program to in-house programs, and SESCO specifically objects to SDG&E's intention to reduce pilot funds if bidders do not offer programs for super high efficiency refrigerators.

SDG&E and SoCal do not seek flexibility to exceed the pilot funding authorizations. They plan to discontinue the program when funds are exhausted. SCE desires the flexibility to exceed authorized funds, and SESCO supports that flexibility for all utilities.[66]

SCE, SDG&E, and SoCal seek authority to carry-over unexpended DSM pilot funding from year-to-year, as long as total funding levels for the pilots are not exceeded. DRA would limit carry-over flexibility to projects completed within the authorization period. SESCO recommends that the utilities carry

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66 DRA's position on this issue is not clear (see Exh. 112).

over funds through 1996, so that ESCOs have a reasonable implementation period for their projects.

As we discuss in Section 6.3 above, utilities should pay winning bidders for savings beyond their bid levels, as long as the ESCO meets all of the performance requirements of the contract and the project continues to be cost-effective from a total resource perspective. This means that utilities will need flexibility to expand pilot program funding, should the pilot yield more cost-effective savings than expected. For their own programs, we have given utilities flexibility to reallocate funds among resource programs and, in some cases, to even exceed total authorized funding levels.[67]

We see no reason why the same degree of flexibility should not be adopted for replacement bids. If the utility needs to continue certain aspects of its in-house programs, based on bidder response, then it should have the flexibility to allocate funding to those activities.[68] If, on the other hand, the pilot program yields more cost-effective savings than originally estimated, the utility should have the flexibility to shift

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67 All utilities may shift funds within program categories, up to certain limits (e.g., $2.5 million for SCE). SoCal is currently allowed to spend up to 200% of its planned budget for resource programs in any particular year. PG&E is currently authorized to exceed its total resource program budget by 130% and spend up to 150% of any given resource program's budget. SDG&E currently is authorized to spend up to $50 million for its $44.8 million program. SCE cannot currently exceed its total authorized budget.

68 In contrast, under a partnership bid, the utility is augmenting its DSM activities with the pilot. Therefore, PG&E did not request, and we did not authorize, flexibility to shift funds from the pilot program into in-house DSM activities. See D.92-03-038, p. 59. The flexibility we are granting in today's order does not extend, however, to shifting funds from the pilot into in-house DSM activities in programs <u>other</u> than the ones designed to be replaced by third-party bidding.

additional funds into that program. However, we agree with SESCO that the utilities should not prespecify what aspects of its current in-house programs should continue. If bid proposals can cost-effectively replace SDG&E's high efficiency refrigerator program, then funding should be allocated to those proposals. If it is cost-effective to do so, SDG&E can continue this particular program by shifting funds from other, less cost-effective in-house resource programs and/or by exceeding funding levels up to the authorized limits.

Year-by-year payments to winning bidders will be uncertain, particularly in view of our requirement to base payments on ex post measured savings. Funds should also be available for payments to winning bidders that require longer leadtimes. Therefore, we will also give the utilities authority to carry over unexpended DSM bidding pilot funding from year-to-year, as long as the total funding level does not exceed authorized levels, including any flexibility that the utility has now or in the future to exceed those amounts.[69] Expenditures for the utilities' bidding pilots should be included in the existing balancing accounts for other DSM resource programs. (i.e., the Electric and Gas Efficiency Balancing Accounts for SDG&E, the Demand-Side Management Adjustment Clause for SCE and the Conservation Expense Account for SoCal).

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69 This carryover authority does not change the general timeframe for the program solicitation and installation period (the period over which bids are solicited, winning bidders are selected, and projects are completed.) Rather, it allows the payment period to winning bidders to extend beyond project installation, consistent with our determination that all payments be based on ex post measured savings. With the possible exception of winning bidders that require somewhat longer leadtimes, we expect the pilot projects to be completed within a three-year solicitation and installation period.

6.4.3 Approval of Negotiated Contracts/Complaint Procedure

All three utilities plan to submit the negotiated contracts with winning bidders for Commission approval. SDG&E and SCE specifically request that approval be given via the Commission's Advice Letter process. SESCO urges the Commission to develop special procedures that would accommodate Commission oversight of contract negotiations, and provide expedited Commission review of complaints or contract disputes. (SESCO Opening Brief, pp. 5-6.)

As we discussed in D.92-03-038, our review of the reasonableness of negotiated contracts and associated payments does not need to take the form of preapproval. A utility may sign what it considers to be reasonable contracts with ESCOs without obtaining preapproval from this Commission. Instead, these contracts are subject to reasonableness review in the utility's fuel offset proceeding, consistent with the treatment of all other negotiated power purchase agreements that the utility enters into without Commission preapproval. In PG&E's case, we left it up to the utility to decide whether to request preapproval for negotiated contracts under its bidding pilot. If preapproval were sought, we required PG&E to submit the majority of these contracts for our review at one time, rather than one-by-one as they are signed.

In terms of the form of preapproval, we rejected PG&E's proposal to obtain Commission approval by Advice Letter, given the fact that the contract terms presented by PG&E for our consideration were proposed and reviewed as a starting point for negotiations, not as a standard offer. Therefore, we determined that if PG&E applies for preapproval of these contracts, it should do so by filing a formal application with service on all parties to this proceeding. We also required PG&E to provide sufficient information on the cost impacts of each negotiated contract and a comparative analysis of specific contract provisions across all of

the contracts, as part of its application for preapproval. (D.92-02-038, Ordering Paragraph 11.)

SDG&E and SCE have presented no additional facts or arguments to support a different preapproval process for their bidding pilots. We, therefore, adopt the same procedures for SoCal, SDG&E, and SCE, as we did for PG&E. We also note, as we did in D.92-03-038, that our current complaint procedures are available to all ESCOs, as they have been to QFs for resolving bid selection or negotiation disputes. As we stated in response to similar suggestions for PG&E's pilot, we are not willing to establish a separate appeals process for this program. The issue of whether disputes can be minimized through alternative program design, and whether an alternative appeals process is appropriate, will be assessed as part of the Commission's Advisory and Compliance Division's overall evaluation of these pilots. (See D.92-03-038, pp. 60-61.)

6.5 Motions to Strike

In its reply brief, SDG&E moved to strike Attachment A of DRA's opening brief and portions of SESCO's opening brief. SESCO replied to SDG&E's motion on June 20, 1992.

We have reviewed SDG&E's motion, SESCO's response, and the relevant portions of DRA's and SESCO's briefs. We agree with SDG&E that SESCO's discussion of the RFPs currently issued by Portland General Electric Company and by Pacific Power & Light Company refers to matters not presented on the record and should be striken (i.e., the last three sentences on page 9.)

However, we deny SDG&E's motion to strike other sections of SESCO's brief and Attachment A of DRA's brief. SESCO has adequately responded to SDG&E's motion by referencing the record in PG&E's pilot phase and Commission language in D.92-03-038. Attachment A of DRA's brief represents a compilation of numbers and calculations readily available from the record in this proceeding. We do agree with SDG&E, however, that Attachment A should not be

considered a definitive statement and comparison of all economic attributes proposed by the various parties without allowing input from those parties. Therefore, our consideration of Attachment A is limited to identifying certain definitional issues related to the calculation of total resource costs. (See Section 6.1.2.1 above.) We encourage DRA and others to present such comparison tables as part of their testimony, or as cross-examination exhibits, so that they can be thoroughly analyzed and evaluated on the record.

6.6 Utility Compliance Filings

In compliance with today's decision, we direct SCE and SDG&E to revise their RFPs, Response Packages and Sample Contracts (i.e., Exhs. 114, 115, and 109), and to file those revisions within 60 days from the effective date of this order. SoCal and SCE should jointly file revisions to Exhs. 102 and 103, in compliance with our directives for a coordinated residential pilot, within 120 days from the effective date of this order. SCE should include in that filing a description of the in-house residential programs that will be partially or fully replaced by winning bidders under the coordinated pilot, along with estimates of the funding level to be allocated to this pilot.

In their joint filing, SoCal and SCE should also describe their proposal for administering the coordinated pilot. This filing should include estimates of funding redirections (in 1993$ and NPV) that SCE will need to make to pay for electric savings achieved by winning bidders working for SoCal. The revised exhibits should clearly indicate what deletions/additions were made to the text or tables of the RFP, Response Packages, and Sample Contracts in response to today's directives. SoCal, SCE, and SDG&E should also describe how and when they will incorporate minimum performance goals for these pilots into the goals for their DSM resource programs affected by these pilots. Comments on the utilities' compliance filings shall be filed within 30 days from

their filing date. We remind parties that this comment process does not give them the opportunity to reargue their positions; rather, it is designed to solicit comments on whether the utilities' revisions comply with today's order.

The utilities' compliance filings and interested parties' comments shall be filed at the Commission's Docket Office, and served on all appearances and the state service list in these proceedings. After reviewing the compliance filing and parties' comments, the assigned ALJ will either issue a ruling addressing any outstanding compliance issues and setting forth a final schedule for bid solicitation, or make recommendations to the Commission as to the appropriate course of further action.

7.0 Response to Comments on ALJ's Proposed Decision

Pursuant to PU Code § 311 and to our governing Rules of Practice and Procedure (California Code of Regulations, Title 20, Rules 77 to 77.5), the proposed decision of ALJ Gottstein was issued before today's decision. PG&E, SCE, SDG&E, SoCal, DRA, and SESCO filed timely comments to the proposed decision, and SoCal, SESCO, SDG&E, and SCE filed reply comments.

We have made several revisions to the text and tables, all nonsubstantive. Chiefly, we have corrected and clarified the funding requirements for SDG&E's and SCE's pilots, in response to comments. We have also clarified that Advisory Committee discussions on utility/private market interface should occur within the current Advisory Committee process and using the adopted clearinghouse procedures.

Findings of Fact

1. PU Code § 747 requires that one or more energy utilities implement pilot programs to test the ability of DSM bidding to deliver benefits to utility customers, separate from any generation resource bidding system.

2. Our current bidding framework for supply-side resources identifies a cost-effective supply-side resource or resources to be replaced by bidders, evaluates bid proposals based predominantly on the bid price, and does not include utility shareholder incentives when third-parties wins the bid.

3. There is no evidence on the record regarding the feasibility of applying size and load matching criteria to a DSM bidding framework, as DRA proposes.

4. We have not yet established a final policy on how bidders should match the size and load characteristics of supply-side resources. Approaches for multiple resources on the supply-side are still being developed in I.89-07-004.

5. The record contains no evidence that the most cost-effective approach for keeping ratepayer costs down over the long run is one that (1) places all utility competitive resource procurement activities in a "win-lose" situation and (2) ensures utility cooperation with strong regulatory oversight.

6. The record contains no evidence that the utilities' assistance and involvement will be needed over time for the successful delivery of DSM services when third parties provide the programs.

7. None of the parties presented analyses comparing the relative cost-effectiveness of a "win-lose" versus a "financial indifference" competitive model in meeting Commission resource procurement objectives.

8. Per D.92-02-075, we are scheduled to reevaluate our DSM shareholder incentives policy in a later phase of this proceeding.

9. There are significant implementation disadvantages, and no apparent research advantages, to implementing DRA's two-stage pilot program.

10. There is no evidence that the utilities would be likely to restrain trade and participate in anticompetitive behavior under a regulatory framework that provides financial incentives for successful program outcomes (and penalties for unsuccessful outcomes).

11. Utilities all earn shareholder incentives on the programs they have identified to be replaced by these bidding pilots.

12. As currently designed, all the replacement pilots require substantial utility involvement and varying degrees of utility discretion in the solicitation, selection, and negotiation stages.

13. The cooperation of the utilities in these pilots in an unbiased fashion is critical to obtaining meaningful information about the potential of bidding to provide customer benefits.

14. It is unlikely that utilities would pursue these pilots wholeheartedly if shareholder incentives are removed.

15. The impact of retaining shareholder incentives on ratepayer costs is relatively small (e.g., less than $4 million (1993$ in NPV) for all three utilities for their proposed pilots.)

16. Inclusion of shareholder incentives in replacement bids does not represent an incremental cost, since the utility would have been authorized to earn incentives on the in-house program(s) being replaced.

17. By enacting Chapter 984 of the Statutes of 1983, the Legislature clearly stated its intention that the energy conservation industry be allowed to develop in a competitive manner.

18. This Commission's own policies have echoed the Legislature's intent to foster a competitive market in DSM services.

19. The mere fact that a utility offers relatively low rebates for a cost-effective DSM investment is not sufficient evidence that the utility is manipulating the market.

20. Reliance on per kW cost comparisons as evidence of utility inefficiencies is misleading because utilities invest in DSM for both energy and capacity cost savings.

21. Transphase's per kW cost calculation for SCE ignores a correction made by SCE witness Hassan and includes incentive and administrative costs attributable to projects signed prior to 1991 in the numerator, while dividing only by the 1991 sign-ups in the denominator.

22. There is no evidence on the record that third parties can provide ratepayers with commensurate energy savings, at lower total costs than the utilities' DSM activities.

23. Chapter 984 gives this Commission the explicit mandate to regulate the involvement of electrical and gas corporations in energy conservation development.

24. Chapter 984 does not specify the method by which this Commission should ensure that the DSM market develops in a manner that is competitive.

25. Chapter 984 does not state that the Commission should prefer a regulatory approach that provides ratepayer funding for third party investments in DSM via a competitive auction process.

26. Section 747(c) of the PU Code requires that the Commission first "assess the feasibility and implications of implementing the tested bidding systems" before making recommendations on whether DSM bidding systems should be used to fulfill future electric utility resource needs.

27. Testing DSM bidding on a pilot or trial scale before considering larger scale implementation is consistent with the Legislative intent expressed in PU Code § 747.

28. The degree of Commission oversight for the development, implementation, and evaluation of these pilots goes far beyond the

minimum level of supervision found appropriate in prior state action cases.

29. It would not serve the public interest to put ratepayers in the role of directly financing nonutility investments in DSM resources without carefully assessing the potential benefits of such arrangements, and making sure that those arrangements properly allocate risks and rewards among ratepayers, utilities, and third parties.

30. Funding authorizations for utility DSM programs are currently determined in each utility's general rate case proceeding.

31. Utilities currently have flexibility to modify Commission expenditure levels and program designs in order to accommodate market changes.

32. Utilities currently have flexibility to subcontract with third parties to deliver DSM services.

33. The utility Advisory Committee process was established to enable parties to informally resolve concerns about utility DSM program implementation.

34. California is one of the only states to have initiated replacement bidding, and the only one that has chosen to conduct pilot bidding experiments on alternative bid designs.

35. By targeting specific sectors, bidding pilots can clearly identify the capabilities of ESCOs to replace utility activities and to exceed the utilities' savings penetration in specific markets.

36. Sector-specific bidding is particularly appropriate to the residential sector, since this sector is often overlooked by bidders when they can bid across all markets.

37. Limiting pilot bidding to specific geographic regions, while the utility conducts its in-house program in other regions, provides a useful controlled experiment of DSM bidding.

38. Soliciting bids in separate customer markets allows one to compare the results of different bid evaluation designs, e.g., alternative approaches for averting lost opportunities.

39. Sector-specific approaches to DSM bidding have distinct research advantages for evaluating alternative bid designs and bid selection methods for replacement bids.

40. PG&E's pilot, which allows bidding across all market sectors, will provide information on how competitive bidding might affect the distribution of ESCO- versus utility-delivered services across all DSM markets.

41. Other states' experiences with DSM competitive bidding will not provide sufficient information about large nonresidential markets, since California is one of the only states testing replacement bidding.

42. Introducing competitive bidding into SDG&E's commercial programs at this time would be disruptive to current competitive bidding efforts in the design and delivery of DSM lighting services.

43. Introducing competitive bidding into SoCal's nonresidential DSM sectors would be inconsistent with the intent of PU Code § 747(c) because it would put SoCal at risk for loss of revenues.

44. As currently proposed, SCE's pilot represents only 6% of its 1992 DSM resource budget and 8% of 1992 resource savings goals.

45. SCE is the logical candidate for testing replacement bidding in large nonresidential markets.

46. Given its relative size and unique characteristics, SCE's proposed schools solicitation will not adequately test program design features that can be applied more broadly.

47. Including fuel substitution programs into the 1993 bidding pilots would be premature, given the fact that we are currently in the process of developing a framework for assessing the utility's own fuel substitution programs.

48. Without making major changes to the design and purpose of the pilots, SCE's small offices solicitation and SDG&E's and SoCal's residential pilots are not designed to solicit and evaluate electric load management technologies.

49. SCE's industrial and large commercial solicitation, using the bid evaluation criteria proposed in Exh. 114, is well suited to both attract and evaluate electric load management technologies.

50. SoCal's current achievements in the multi-family sector represent approximately 1.4 percent of its total DSM resource goals for 1992. Only the weatherization and appliance efficiency components of SoCal's multi-family programs pass the total resource test of cost-effectiveness.

51. SoCal's current expenditures in the multi-family sector represent less than 3% of its total DSM resource program expenditures.

52. Expanding SoCal's pilot to include the non-low income single-family sector would test replacement bidding in sectors that have demonstrable potential for cost-effective savings penetration, while still maintaining the program at a pilot scale.

53. Adding the single-family sector to SoCal's pilot will not pose insurmountable implementation problems.

54. Including single-family residences in SoCal's pilot will serve to reduce duplication of utility administrative costs.

55. Including the single-family sector in SoCal's pilot may dilute the interest of third parties to bid in the multi-family sector; however, this dilution can be mitigated by giving bidders a bonus in the bid evaluation process if they target DSM activities to SoCal's multi-family sector.

56. Direct assistance programs are not resource programs; rather, they are conducted for equity reasons and are not cost-effective.

57. SoCal's home energy audit program is not a resource program; rather, it is designed to provide energy efficiency information to residential customers.

58. By continuing to provide home energy audits in-house, SoCal can make sure that all residential customers have an opportunity to avail themselves of mail-in or on-site energy audits.

59. Paying winning bidders for electric or gas savings in gas-heated homes will encourage bidders to propose and implement comprehensive energy efficiency treatment at each site.

60. SDG&E has selected a program and sector for its replacement bid that is large and successful enough to provide useful information about the potential benefits from DSM bidding.

61. Including direct rebate programs in the bid solicitation will enable us to assess whether ESCOs can either administer those rebates more cost-effectively than the utilities, or can develop alternative cost-effective methods for motivating customer investments in DSM.

62. The specific sectors adopted for replacement bidding in today's order are large and successful enough to provide meaningful information on the ability of this form of bidding to reduce the cost of DSM resources.

63. The adopted pilots, in combination with PG&E's, will provide information on examples of different bidding forms (replacement and partnership) different selection methods and different contractual terms.

64. The pilot programs authorized in today's order represent replacement bids on the order of 20-30% of each utility's 1992 DSM resource budget (6-15% of the overall DSM budget), with estimated savings between 12-30% of each utility's DSM resource goals.

65. For the purpose of calculating total resource and utility costs, there is no conceptual difference between earnings that accrue to utility shareholders and earnings that accrue to winning

bidders. Both types of earnings are paid for by ratepayers as a real economic cost of DSM.

66. Considering only measure costs in evaluating bid proposals would ignore real economic costs to all ratepayers, e.g., bidders' profits and administration costs for which the bidder is being compensated in the bid price.

67. Use of DRA's interpretation of the SPM can result in bidders with identical resource benefits out-scoring the utility program even if the bidder's total costs are higher than those of the utility.

68. DRA's interpretation of the SPM does not properly distinguish between bid proposals that have identical net measure costs, but where bidders are asking for different levels of total payments to cover rebates, administration, and bidder costs.

69. One does not need the specific breakdown of bidders' profit and administrative costs to adopt a definition of total resource costs that includes them; rather, the TRC test can be calculated with information on the total payment to bidders (or the utility payment to customers) and customer contributions.

70. It is inappropriate to require bidders to reveal their estimated profit margin as part of the RFP.

71. The SPM definition of TRC test treats all utility payments to customers as transfers, even when they exceed the net measure cost.

72. In D.91-12-076, we raised the issue of whether the treatment of all utility payments to customers as transfers is appropriate, and directed that the TRC formula be revisited in this proceeding.

73. The SPM considers two bids equally desirable from a total resource perspective, even if one gives customer rebates in excess of measure costs (all other things being equal).

74. The SPM treatment of utility payments to customers ignores a portion of costs (i.e., the excess of customer payments

over measure costs) that all ratepayers incur in implementing a particular DSM measure.

75. Treating the excess of utility or bidder payments to customers over measure costs as a real economic cost (and not as a transfer payment) will yield more consistent, conceptually sound results in a bidding environment than the alternatives presented in this proceeding.

76. On the demand-side, a bidder may be able to achieve the same level of total resource net benefits with different levels of utility costs (e.g., different levels of rebates or corresponding customer contributions).

77. On the demand-side, individual customers that participate in DSM resource programs realize direct bill savings and are therefore generally willing to fund a greater percentage of the investment than non-participating customers.

78. On the demand-side, bidders may be able to leverage participating customers' private funds to the benefit of all ratepayers.

79. For replacement bids, where the utility DSM program has already been found cost-effective from a total resource perspective, it is appropriate to encourage bidders to maximize the efficiency with which they achieve total resource benefits with utility program expenditures.

80. SCE's proposal to consider only utility costs in evaluating small office bids is inconsistent with the policy established in D.92-02-075.

81. For a given level of savings, SCE's approach would always select the bid with the lowest revenue requirement impact, regardless of the impact of the program on total resource costs.

82. SCE's approach would lead to the inefficient allocation of resources and would inappropriately bias resource planning decisions in favor of DSM.

83. The weighted average approaches proposed by DRA and SDG&E could result in a preference for projects with relatively lower total resource net benefits over those with relatively higher utility costs in both DSM-only and integrated bidding arenas, without any apparent rationale for such preferences.

84. A weighted average approach can result in a preference for projects with relatively lower total resource net benefits per dollar of utility expenditure.

85. DRA's and SDG&E's weighted average formulas, when spelled out mathematically, do not make any intuitive sense.

86. The selection of DSM programs that expand or augment current utility DSM activities under a partnership bid is an integral part of the resource planning process, i.e., the process that selects utility resource additions based on total resource costs and benefits.

87. A replacement bid starts at the acquisition stage where the DSM program to be replaced has already been identified as cost-effective from a total resource perspective.

88. In a replacement bid, bidders attempt to achieve a predetermined level of energy and/or capacity savings as defined by the utility program to be replaced. Hence, the number of possible savings/costs combinations that can result in a tie are relatively limited.

89. The tie-breaker approach is less likely to motivate bidders to keep both total resource costs and utility costs as low as possible in a replacement bid.

90. When used in the context of replacement bidding, and with the definition of total resource costs adopted in today's order, the ratio of total resource net benefits to utility costs has several advantages over other cost-effectiveness criteria.

91. Using the ratio of total resource net benefits to utility costs identifies which bidders can maximize total resource net

benefits in a manner that achieves the "biggest bang for the buck" with program funds.

92. The "bang for the buck" approach explicitly assesses whether the incremental increase in resource benefits attributable to higher customer rebates or more intensive marketing approaches is the most efficient use of additional ratepayer funds.

93. The "bang for the buck" approach encourages program designers (whether utility or third party bidders) to propose projects with increasing rates of return to all ratepayers (in the form of total resource net benefits) per dollar of revenue requirement.

94. Unlike weighted average approaches, the "bang for the buck" criterion is explicit in making the tradeoff between the TRC and UC tests: a project wins the bid if it yields the highest level of total resource net benefits per dollar of utility expenditure.

95. Utility-sponsored DSM resource programs should, by definition, pass the TRC test.

96. In an integrated resource planning environment, DSM programs are added to the resource plan in the order in which they lower total resource costs.

97. If winning bidders can have lower TRC results than the utility resource program(s) being replaced, then the optimal timing and/or selection of DSM resources in the planning process could be compromised.

98. If the TRC threshold is not tied to the performance of the utility program being replaced, then the bidding pilot becomes a form of partnership bid, where bidders are competing to augment utility DSM activities and savings, rather than replace specific utility programs.

99. Replacement bidding is an alternative method of acquiring DSM resources, once cost-effective utility DSM programs are identified in our planning and funding process.

100. Requiring bid proposals to exceed the bang-for-the-buck ratio of the utility's in-house programs could exclude from further consideration proposals for innovative DSM delivery approaches and measures that require relatively higher utility expenditures than the programs being replaced.

101. We currently lack a consistent methodology for characterizing and comparing utility programs and bidder proposals in terms of comprehensiveness or savings intensity.

102. Evaluating bid proposals based on an average cost per kWh or kW tends to favor a bidder that pursues only the most cost-effective measures in each building or site, which could result in the creation of lost opportunities.

103. SDG&E's pilot and SCE's industrial and large commercial (formally schools) RFP currently lack any consideration of relative project comprehensiveness or savings intensity.

104. Tiered pricing does not lend itself to all types of bidding situations, e.g., where a program is designed to replace a limited number of appliances at each site.

105. Requiring tiered pricing for all bidding pilots will not provide a test of a variety of approaches for capturing comprehensiveness and savings intensity.

106. SoCal's penetration factor and SCE's tiered pricing approach for the small offices solicitation need to be modified to be consistent with our determinations on cost-effectiveness criteria.

107. Ranking bids on the basis of (1) net total resource benefits to total utility costs divided by (2) SCE's tiered price score is consistent with our determinations on cost-effectiveness criteria, and will also ensure that bidders are given credit for achieving greater site penetration.

108. Bidder qualifications is assigned a 10% weight in PG&E's pilot, and a 14% weight in SDG&E's proposed pilot. As currently

proposed, SCE assigns that criterion a 20% weight for its industrial and large commercial (formerly schools) solicitation.

109. PU Code § 701.1(c) directs this Commission to include a value for any costs and benefits to the environment in calculating the cost-effectiveness of energy resources, including conservation and load management.

110. In our adopted Rules, we direct respondents to use avoided costs and non-price (e.g., environmental) values that are consistent with the values developed in the Update.

111. As currently structured, SoCal's bid evaluation method provides little guidance to potential bidders on how they will be evaluated for threshold requirements.

112. An allegation that a particular company has breached a contract provision does not make that company unreliable.

113. Requiring that the bidder is appropriately licensed in California prior to submitting a bid will discourage out-of-state firms from participating.

114. In order for SDG&E to select a final mix of bidders that can replace its existing residential program in a cohesive and comprehensive manner, SDG&E needs to have some flexibility in making final determinations during the negotiation stage.

115. SDG&E has established no criteria for evaluating customer value or awarding up to 50 points for this attribute.

116. Allowing bidders to receive payments based on prespecified savings would establish a measurement and verification approach that we are moving away from for utility-sponsored DSM.

117. Requiring third parties to develop ex post measurement plans as part of these pilots should yield useful information on alternative approaches for both ESCO- and utility-sponsored programs in the future.

118. Subjecting winning bidders' contracts to change, based on our adopted ex post measurement protocols for utility programs,

would introduce an unacceptably high level of uncertainty into the payment provisions of the contracts.

119. As proposed, all non-price aspects of the sample contracts are negotiable, and subject to change.

120. The Commission does not unconditionally approve payments under standard offer contracts (or even negotiated contracts that are preapproved) if the terms of those contracts are not prudently administered by the utility.

121. The utilities currently have flexibility to shift funds among in-house resource programs, and some can also exceed authorized funding levels, in order to maximize the ratepayer benefits of their DSM programs.

122. The utilities need to retain flexibility to allocate ratepayer funds to other resource programs that are equally or more cost-effective than the programs being replaced by these pilots.

123. At its proposed funding level, SCE's small offices solicitation is cost-effective from a total resource perspective.

124. Current funding for the industrial and large commercial portions of SCE's energy management hardware rebate program is approximately $5.4 million per year (in 1993$).

125. Since SCE will be implementing its pilot within the funding levels authorized in its recent general rate case, our determinations today have no impact on incremental funding, revenue allocation, or rates for SCE.

126. SoCal's master meter conversion program is not cost-effective from a total resource perspective.

127. Authorized funding for SoCal's weatherization and appliance efficiency programs, for both single- and multi-family residences, is currently $4,444,960 per year (in 1993$).

128. By ALJ ruling dated April 2, 1992 (in A.91-11-024 et al.), the issue of funding authorizations for SDG&E's 1993 residential appliance efficiency incentives program was transferred to this proceeding.

129. At the requested funding level, SDG&E's residential appliance efficiency incentives program is cost-effective from a total resource perspective, with the exception of the high efficiency air conditioning program component.

130. If bid proposals can cost-effectively replace SDG&E's high efficiency refrigerator program, then it is to ratepayers' advantage to fund those proposals.

131. Year-by-year payments to winning bidders will be uncertain, particularly with the requirement to base payments on ex post measured savings.

132. The utilities may need to continue certain aspects of their in-house programs, based on bidder response to the bidding pilots.

133. The pilot programs may yield more cost-effective savings than originally estimated.

134. Some bidders may require longer leadtimes than others to implement their DSM programs.

135. Our current complaint procedures are available to all ESCOs, as they have been to QFs for resolving bid selection or negotiation disputes.

136. The discussion in SESCO's brief of RFPs currently issued by Portland General Electric Company and by Pacific Power and Light Company refers to matters not presented in the record.

137. Attachment A of DRA's brief represents a compilation of numbers and calculations readily available from the record in this proceeding.

Conclusions of Law

1. It would be premature to adopt DRA's proposed definition of replacement bidding at this time.

2. The implementation timeframe for DRA's proposed two-stage bidding pilot is unworkable

3. SDG&E, SoCal, and SCE should include in their RFPs the size and load characteristic information outlined in lines 1-3 of

Exh. 120, Appendix B for planned program activities, and for major program sub-categories.

4. The broader regulatory issues raised by DRA in its testimony should be addressed in later phases of this proceeding and in our incentives investigation, I.90-08-006.

5. For the limited purpose of these bidding pilots, it is reasonable for utilities to be eligible for shareholder earnings on third-party delivered DSM.

6. In calculating shareholder earnings under the pilots, utilities should use the most currently adopted shareholder incentive mechanism that is applicable to the program(s) being replaced. Any future modifications to these mechanisms should be applied prospectively in calculating earnings, regardless of when pilots are contracted for, paid for, or reviewed for ratemaking purposes.

7. For their DSM programs in general, utilities are not immune under the state-action doctrine from antitrust violations in the DSM market.

8. Utilities should use their DSM program management discretion and funding flexibility in ways that foster a competitive market in DSM.

9. Utilities should subcontract with third parties in ways that maximize program effectiveness and efficiency.

10. Based on the evidence presented in this proceeding, we cannot conclude that utilities are using their access to DSM program funds in a manner that is anticompetitive and detrimental to ratepayers.

11. The evidence presented in this proceeding does not support Transphase's contention that the utilities conspired to restrain trade in their development of proposed bidding pilots.

12. The state-action doctrine applies to our decision to limit the size and scope of bidding pilots and to utility actions

to carry out pilots which, by definition, limit the access of third parties to ratepayer-funded DSM.

13. Proceeding with DSM competitive bidding on a pilot scale, before considering full implementation, serves the public interest by allowing us to carefully assess the potential benefits of such bidding arrangements, and to make sure that those arrangements properly allocate risks and rewards among ratepayers, utilities, and third parties.

14. Given the mandate of Chapter 984, utility involvement in the DSM market must regularly be reassessed to ensure that it fosters, rather than impedes, private market developments.

15. The potential impact of planned utility DSM activities on competition should be evaluated in proceedings where we consider DSM funding requests, e.g., general rate cases.

16. In all future funding proceedings, utilities should present testimony on how their proposed DSM programs interface with private market activities and foster competition in DSM markets.

17. Instances where the utility is using management discretion and funding flexibility in a manner inconsistent with our policies should be brought to our attention via our complaint procedures, or by special motion.

18. Actions based on a failure to comply with state or federal antitrust statutes should be heard by the courts, not this Commission.

19. The issue of utility interface with DSM private markets should also be considered during our reexamination of DSM shareholder incentives in a later phase of this proceeding.

20. Our evaluation of DSM bidding pilots should also assess how best to structure the relationship between utilities and third parties in a competitive bidding environment.

21. Through the Advisory Committee clearinghouse, SCE, SoCal, SDG&E, and PG&E should schedule joint Advisory Committee meetings to address inter-utility issues, including potential conflicts

between their program activities and competitive private market developments.

22. It is reasonable to adopt sector-specific approaches to bidding for these replacement bidding pilots.

23. For the purpose of these pilots, it is reasonable to limit replacement bidding to utility DSM resource programs, and to not solicit bids to replace in-house informational or equity programs.

24. SCE's proposal to target a solicitation to small offices is reasonable, and should be adopted. However, SCE's proposed schools solicitation should be substituted with a solicitation in the industrial and large commercial sectors, as described in this order.

25. SCE should modify its sample contract to allow payments on either a per kW or per kWh basis to winning bidders of its industrial and large commercial solicitation.

26. SoCal's proposed pilot should be expanded to include the non-low income single-family market, as described in this order.

27. SoCal should apply a multi-family target factor of +10% (in addition to its proposed penetration factor) to bids that target the multi-family sector.

28. SoCal should continue to offer its home energy audit program in-house, for both multi- and single-family residences.

29. The appropriate funding level for SoCal's home energy audit program should be determined in SoCal's 1994 general rate case proceeding.

30. Winning bidders under SoCal's pilot should be paid for electric savings achieved in gas-heated homes.

31. SDG&E's proposal to target the non-low income residential sector for its replacement pilot is reasonable and should be adopted.

32. The total bid price, which includes bidders' administrative costs and earnings, should be included in the

calculation of total resource costs for the purpose of evaluating bid proposals.

33. SCE, SoCal, and SDG&E should include estimates of shareholder incentive payments in developing total resource and utility costs for bid proposals and the in-house DSM programs being replaced by the pilot.

34. SDG&E should modify Conservation Evaluation Form 6 of their RFP such that bidders are not required to reveal their estimated profit margin.

35. SoCal's, SCE's, and SDG&E's contributions to bidder payments should be reduced commensurately if actual customer contributions exceed the estimates presented in the bid proposal.

36. For the purpose of evaluating bid proposals under these pilots, total resource costs should be defined as the sum of utility payments to bidders or customers, customer contributions, utility administration costs, and the ratepayer cost of shareholder incentives.

37. SoCal, SCE, and SDG&E should evaluate the relative cost-effectiveness of replacement bid proposals using the ratio between total resource net benefits and utility costs, once threshold cost-effectiveness criteria are met.

38. Respondents and interested parties should address the issue of whether the NTG ratio should be applied to total resource calculations for these bidding pilots, and if so, how.

39. All bid proposals should be cost-effective from a total resource perspective, even if the primary purpose of the proposal is to enhance savings intensity or site penetration.

40. As a minimum threshold requirement, bid proposals under a replacement bid should have TRC benefit/cost ratios that exceed 1.0 or the utility's program TRC (as defined in this order), whichever is greater.

41. Since there are no comparable existing TRCs for the type of coordinated residential program we have authorized for SoCal and SCE in today's order, the threshold TRC should be 1.0.

42. Bid proposals should be compared with the TRC benefit/cost ratio of the most closely comparable utility program component (e.g., for weatherization proposals, SDG&E should use the TRC for its appliance efficiency options program, rather than for its overall program).

43. In their RFPs, the utilities should provide TRC information on the overall program and program components being replaced by the pilot.

44. Bid proposals should not be required to exceed the utility program in terms of the "bang for the buck" ratio we have adopted. Rather, that ratio should be used in conjunction with savings intensity/comprehensiveness criteria to rank and select among bidders that have met the minimum threshold requirements.

45. Tiered pricing should not be required for all of the pilots.

46. SoCal should apply its proposed penetration factor to the ratio of total resource net benefits to utility costs, as defined in this order.

47. SDG&E should develop a self-scoring comprehensiveness attribute and assign it a maximum of 50 points. This attribute should replace the customer value attribute currently contained in SDG&E's proposed RFP.

48. SCE should add a comprehensiveness criterion to its evaluation of industrial and large commercial (formerly schools) bids, and give it a 5% weight in the evaluation process. SCE should commensurately reduce the weighting factor for its experience criteria from 20% to 15%.

49. Bidders that bid prices in a tiered system should be given favorable consideration in assigning points/relative scores within SDG&E's and SCE's comprehensiveness attributes.

50. SCE's tiered pricing approach for its small offices solicitation should be modified as follows: (1) bidders should bid tiered prices based on the total resource costs of their proposals, as defined in this order; (2) the resulting tiered price score should be divided into the ratio of total resource net benefits to total utility costs, and (3) bidders should be ranked based on the results of (2) above, with the highest ranking bidder being the one with the highest score.

51. SoCal, SCE, and SDG&E should modify their RFPs to conform to the determinations made in D.92-03-038 regarding NTG ratios and utility administrative costs.

52. In their compliance filings, SoCal, SCE, and SDG&E should provide estimates of updated avoided costs. In particular, the utilities should incorporate the findings of D.92-03-045 in their avoided cost updates.

53. SoCal should modify its RFP by (1) describing threshold requirements more fully (e.g., what type of information is required to demonstrate acceptable experience), and (2) assigning relative weights to the non-price threshold considerations (e.g., qualifications, marketing plan, and selected measures.)

54. SoCal should delete from its threshold requirements any reference to the existence of litigation claiming default and the requirement that every bidder be fully licensed in California prior to submitting a bid.

55. SDG&E should make available to all short-listed bidders the reasons why the winning bidders contributed most effectively to overall program cohesiveness/comprehensiveness.

56. SDG&E, SCE, and SoCal should make available summaries of project proposals and a final score or ranking under each evaluation criterion to all bidders and anyone else requesting a copy. This information should be available at the time the utilities announce their short list of bid proposals for negotiation.

57. SDG&E should remove the consideration of customer value (i.e., Form 13) from its RFP.

58. All bidders should be required to propose ex post measurement and verification plans, and all payments to winning bidders should be based on ex post measurements of savings.

59. The baseline reference for calculating energy savings should be the minimum standards equipment, not existing equipment.

60. The utilities should negotiate with short-listed bidders in good faith, and work with bidders to develop a package of price and non-price contract terms that appropriately allocate the risks and benefits of the agreement among affected parties, including ratepayers.

61. SDG&E should delete the work "unconditionally" in Section 33 of its sample contract.

62. The utilities should include provisions in their sample contracts to pay for up to 125% of estimated savings (based on bid amounts).

63. The utilities should include arbitration provisions in their sample contract.

64. The utilities' RFP should clearly state that proposed changes to the sample contract will not be considered in the bid evaluation process, up to the selection of the short list.

65. The utilities' evaluation process should consider only the criteria described in their RFPs, as modified by this order.

66. Utilities should have the same degree of flexibility in shifting funds to these pilots, or exceeding authorized funding levels, as they do for other resource programs.

67. Utilities should have authority to carry over unexpended DSM bidding pilot funding from year-to-year, as long as the total funding level does not exceed authorized levels, including any flexibility the utility has now or in the future to exceed those amounts.

68. To implement its small offices and industrial/large commercial solicitations, SCE should redirect authorized funding for its energy hardware rebate programs in the total amount of $35,398,080 (in 1993$) as described in this order.

69. SCE should be authorized to redirect current funding from its residential resources programs to pay for electric savings achieved by winning bidders working for SoCal, under SoCal's residential bidding pilot.

70. To implement its pilot, SoCal should redirect a total of $13,334,880 (in 1993$) of authorized funding for its residential weatherization and appliance efficiency programs over the pilot program period.

71. SoCal should be authorized an additional $324,000 over the pilot program period to conduct supplemental measurement studies. Determinations on revenue allocation and rate design for this funding should be made in SoCal's 1993 biennial cost allocation proceeding.

72. To implement its residential bidding pilot, SDG&E should be authorized to recover in rates a total of $19,599,159 (in 1993$) for its residential appliance efficiency incentives program and associated measurement activities over the pilot program period.

73. SDG&E should not be authorized to fund its proposed high efficiency air conditioning program.

74. Determinations on revenue allocation and rate design for SDG&E's pilot will be made either in SDG&E's current general rate case proceeding or in another appropriate forum.

75. SDG&E and SCE should be authorized to continue their in-house programs into 1993 if the bid solicitation, review, and selection process cannot be completed by the end of 1992. Similarly, SoCal should be authorized to continue its in-house residential weatherization and appliance efficiency programs into 1994.

76. The utilities should be authorized to continue certain aspects of their in-house programs, based on bidder response, within the pilot program funding limits authorized today.

77. Expenditures for the utilities' bidding pilots should be included in the existing balancing accounts for other DSM resource programs.

78. The Commission should review the reasonableness of negotiated contracts, and associated payments, between the utilities and winning bidders either: 1) in ECAC reasonableness reviews or 2) upon application by SoCal, SCE, or SDG&E for contract preapproval.

79. Should SoCal, SCE, or SDG&E decide to submit some or all of the contracts for preapproval, they should submit most or all of them at the same time, rather than one-by-one as they are signed, and provide the cost and comparative information described in this order.

80. A separate appeals or dispute resolution process for these pilot bidding programs is unnecessary.

81. In their compliance filings, SoCal, SDG&E, and SCE should describe how and when they will incorporate minimum performance goals for these pilots into the goals for their DSM resource programs.

82. The last three sentences on page 9 of SESCO's Opening Brief should be stricken.

83. In order to proceed as expeditiously as possible with SoCal's, SCE's, and SDG&E's bidding pilots, this order should be effective today.

INTERIM ORDER

IT IS ORDERED that:

1. Southern California Edison Company (SCE), San Diego Gas and Electric Company (SDG&E), and Southern California Gas Company (SoCal) are authorized to conduct their proposed demand-side management (DSM) pilot bidding programs, as modified by this order.

2. In all future DSM funding proceedings (e.g., general rate cases), respondents shall present testimony on how their proposed DSM programs interface with private market activities and foster competition in DSM markets.

3. Through the Advisory Committee clearinghouse, respondents to these proceedings shall schedule joint meetings of their Advisory Committees to address inter-utility issues, including potential conflicts between utility program activities and competitive private market developments.

4. To implement its bidding pilot, SCE shall redirect authorized funding for its energy hardware rebate programs in the total amount of $35,398,080 (in 1993$) as described in this order.

5. SCE shall also redirect authorized funding from its residential resources program to pay for electric savings achieved by winning bidders working for SoCal, under SoCal's residential bidding pilot.

6. SCE shall redirect authorized funding for the measurement and evaluation of its in-house programs to measure and verify savings from its pilot bidding programs, as appropriate.

7. To implement its bidding pilot, SoCal shall redirect a total of $13,334,880 (in 1993$) of authorized funding for its residential weatherization and appliance efficiency programs as described in this order.

8. SoCal is authorized a total of $324,000 in funding over the pilot program period to conduct supplemental measurement

studies. Determinations on revenue allocation and rate design for this funding shall be made in SoCal's 1993 biennial cost allocation proceeding.

9. To implement its bidding pilot, SDG&E is authorized to recover in rates a total of $19,599,159 (in 1993$) for its residential appliance efficiency incentives program and associated measurement activities, as decribed in this order. Determinations on revenue allocation and rate design for this funding shall be made in either SDG&E's current general rate case proceeding or in another appropriate forum.

10. SCE and SDG&E are authorized to commence their bidding pilots in 1993. SoCal is authorized to commence its pilot in 1994. Expenditures for these bidding pilots shall be included in the existing balancing accounts for other DSM resource programs. SDG&E and SCE are authorized to continue their in-house programs into 1993 (and SoCal into 1994) if the bid solicitation, review, and selection process cannot be completed by the end of 1992 (1993 for SoCal).

11. SCE, SoCal, and SDG&E are authorized to shift funds between these pilots and the in-house DSM resource programs being replaced, or exceed authorized funding levels, to the same extent that they are authorized to do so for other DSM resource programs.

12. SCE, SoCal, and SDG&E are authorized to carry over unexpended bidding pilot funding from year-to-year without further Commission action, as long as the total funding level does not exceed the authorized levels, including any flexibility the utility has now, or is authorized in the future, to exceed those amounts.

13. The reasonableness of contract payments made under SCE's, SoCal's, and SDG&E's DSM bidding pilots shall be determined in either subsequent reasonableness reviews or upon application for Commission preapproval.

14. Should SCE, SoCal, and SDG&E decide to submit some or all of the individual contracts for Commission approval, they shall:

- o Request preapproval of the contract payments by application, with service on all parties to this proceeding.
- o Submit all of the contracts for preapproval at the same time, or, of a selected number of contracts require more time for negotiations, in two groupings.
- o As part of its application for preapproval, provide information on the cost impacts of each negotiated contract (i.e., by comparing year-by-year total project costs under the contract with long-run avoided costs) and provide a comparison of the similarities and differences among the negotiated contracts, with respect to specific contract provisions.

15. Within 60 days from the effective date of this order, SCE and SDG&E shall file a revised request for proposals, including appendices, response package, and sample contract in conformance with the modifications made by this order. Within 120 days from the effective date of this order, SoCal and SCE shall jointly file revisions to SoCal's bid solicitation material, in conformance with the modifications made by this order. As described in Section 6.6 of this order, the utilities should include in their compliance filings a description of how and when they will incorporate minimum performance goals for these pilot into the goals for their DSM resource programs affected by these pilots. Comments on the utilities' compliance filings shall be filed within 30 days from the filing date. Compliance filings and interested parties' comments shall be filed with the Commission's Docket Office and served on all appearances and the state service list in these proceedings.

16. Within 30 days from the effective date of this order, respondents and interested parties shall file comments on the issue

of whether the net-to-gross ratio should be applied to total resource cost calculations for DSM-only bidding pilots, and if so, how. Reply comments shall be filed within 45 days from the effective date of this order. All comments shall be filed at the Commission's Docket Office, and served on all appearances and the state service list in these proceedings.

17. Within 90 days from the effective date of this order, respondents and interested parties shall file comments on the issue of treating rebates as transfer payments in the total resource cost test for utility DSM programs that are not subject to bidding. After receiving these comments, the assigned administrative law judge will identify the appropriate forum for resolving this and other outstanding Standard Practice Manual issues. Comments shall be filed at the Commission's Docket Office and served on all appearances and the state service list in these proceedings.

18. SDG&E's motion to strike portions of SESCO's Opening Brief is granted, in part, as described in today's order.

19. SDG&E's motion to strike Attachment A of the Division of Ratepayer Advocates' Opening Brief is denied.

This order is effective today.

Dated September 16, 1992, at San Francisco, California.

DANIEL Wm. FESSLER
President
JOHN B. OHANIAN
PATRICIA M. ECKERT
NORMAN D. SHUMWAY
Commissioners

I CERTIFY THAT THIS DECISION WAS APPROVED BY THE ABOVE COMMISSIONERS TODAY

NEAL J. SHULMAN, Executive Director

TABLE 1

Proposed Pilot Program Costs

(1993$ and NPV)

SOCALGAS — 1993 $000

Annual Program Cost	1993	1994	1995	1996
Administration*	0	216	216	216
Payment to Bidders*	0	1840	1840	1840
M&E*	0	108	108	108
Total 1993 $000	0	2164	2164	2164

1993 Net Present Value

NPV without incentives**=	5704
NPV with incentives**=	6504
NPV of incentives**=	799

* Exhibit 104, page 2
** Exhibit 104, Attachment 1, through 1996

To convert 1993$ into nominal, multiply by 4% inflation rate
To convert nominal dollars into PV1993$, use 11% discount rate

SDG&E — 1993 $000

Annual Program Cost	1993	1994	1995	1996
Administration*	280	717	717	
Payment to Bidders*	3056	5956	5956	
M&E*	158	146	72	
Total	3495	6819	6745	

1993 Net Present Value

NPV w/out incentives**=	17163
NPV with incentives**=	17841
NPV of incentives**=	678

* Exhibit 108, Table 1-A revised 4/15, values in table represent midpoint of the ranges presented in Table 1-A
** Exhibit 108, Table1-B(4/15), through 2000, values represent midpoint of ranges in Table 1-B for Bid Payments and Admin

To convert 1993$ into nominal, multiply by 5% inflation rate
To convert nominal dollars into PV1993$, use 11.6% discount rate

EDISON — 1993 $000

Annual Program Cost	1993	1994	1995	1996	1997 to 2002
Administration*	800	829	823	400	2403
Payment to Bidders*	0	507	1788	1928	11579
M&E*	0	819	922	400	2400
Total	800	2155	3533	2727	16382

1993 Net Present Value

NPV w/out incentives**=	19776
NPV with incentives**=	22370
NPV of incentives**=	2594

* Exhibit 116, Table 1, values represent 10GWh contract based on the ranges presented in Table 1 multiplied by 4, converted from PV
** Exhibit 116, Table 1, through 2002, values represent 10GWh contract presented in Table 1 multiplied by 4

To convert 1993$ into nominal, multiply by 5% inflation rate
To convert nominal dollars into PV1993$, use 11% discount rate

TABLE 2
Size and Scope Comparison of Proposed/Adopted Pilots

	Sectors/Programs Included	Annual Program Funding	% 1992 Total DSM Budget	% 1992 Resource Budget 1/	Annual Expected Savings		% 1992 DSM Savings Goals	% 1992 Resource Savings Goals
1. SDG&E Pilot as proposed by:	/ /							
a)SDG&E	/ Non low-income Residential Appliance Efficiency Incentives Program (AEIP)	$6,831,010	15.24%	30.47%	12,300,000	kWh	14.22%	17.28%
					2.90	MW	7.87%	9.57%
					902,800	therms	73.04%	188.08%
b)ORA	/ Same as SDG&E w/o high efficiency air conditioning	$6,565,834	14.65%	29.25%	12,200,000	kWh	14.10%	17.13%
					2.70	MW	7.42%	8.91%
					902,800	therms	73.04%	188.08%
c)SESCO	/ Non low-income and low-income residential (AEIP and Direct Assistance)	$12,173,448	27.15%	55.58%	13,800,000	kWh	15.72%	19.10%
					3.40	MW	9.34%	11.22%
					1,733,900	therms	140.28%	361.21%
d)UCAN	/ Same as SDG&E but reduced size (half)	$3,415,505	7.62%	15.59%	8,150,000	kWh	7.11%	8.64%
					1.45	MW	3.98%	4.79%
					451,400	therms	36.52%	94.04%
e)Transphase	/ 100 % of Annual DSM funds	$47,071,500	105.00%	214.91%	86,500,000	kWh	100.00%	121.46%
					36.40	MW	100.00%	120.13%
					1,236,000	therms	100.00%	257.50%
f) Adopted	/ Same as SDG&E w/o high efficiency air conditioning	$6,565,834	14.65%	29.25%	12,200,000	kWh	14.10%	17.13%
					2.70	MW	7.42%	8.91%
					902,800	therms	73.04%	188.08%
	SDG&E net of incentives in 1993, Ex.108,Table2-A,savings Ex108,Table2-B							
	ORA:SDG&E value minus 265,178 for A/C(Ex108,page 2-8);savings Ex108,Table2-B minus A/C impacts							
	SESCO:SDG&E value plus 1993 requested DAP Ex125,savings Ex108,Table2-B plus 1992DAP goal(AnRpt1992,Pt8-Tb2.2)							
	Transphase 1992 Authorized Funding escalated by 5% to represent 1993$							
2. Edison Pilot as proposed by:	/ /							
a) Edison	/ Small Offices (<200kW) In Southern & San Gabriel	$2,133,120	1.51%	3.79%	30,000,000	kWh	3.21%	7.70%
					N/A	MW	N/A	N/A
	Schools (K-12) In Southern & San Gabriel	$711,040	0.50%	1.26%	10,000,000	kWh	1.07%	2.57%
					N/A	MW	N/A	N/A
	Total	$2,844,160	2.02%	5.05%	40,000,000	kWh	4.28%	10.27%
					N/A	MW	N/A	N/A
b)ORA	/ CA/A customized rebates In all regions	$8,875,000	7.08%	24.76%	171,472,000	kWh	18.35%	44.01%
					78.30	MW	18.13%	68.86%
c)Transphase	/ 100 % of Annual DSM funds	$147,868,300	105.00%	367.14%	934,500,000	kWh	100.00%	239.86%
					420.30	MW	100.00%	379.33%
d)Adopted	/ Small Offices (<200kW) In Southern & San Gabriel	$2,133,120	1.51%	3.79%	30,000,000	kWh	3.21%	7.70%
					N/A	MW	N/A	N/A
	Industrial&Large Commercial In Southern & San Gabriel	$5,444,058	3.87%	13.52%	83,724,745	kWh	8.96%	21.49%
					14.35	MW	3.41%	12.95%
	Subtotal	$7,577,178	5.38%	17.31%	113,724,745	kWh	12.17%	29.18%
	Coordinated Effort with SoCal	N/A	N/A	N/A	N/A	MW	N/A	N/A
	Total	N/A	N/A	N/A	N/A		N/A	N/A
	Edison net of incentives, average annual payment to bidders 1993-2002(1993$); savings small offices-3*10GWh,schools-1*10GWh							
	ORA:Ex120, Table8-2							
	Transphase:1992 Authorized Funding escalated by 5% to represent 1993$							
	Adopted:Large Commercial Funding&Goals based on 1992 levels multiplied by 31% (approximate % represented by two regions compared to total sales to LrgCom) plus Industrial Funding&Goals based on 1992 levels multiplied by 49%(approx.% represented by two regions compared to total sales to Ind)							
3. SoCal Pilot as proposed by:	/ /							
a)SoCal	/ Multi-fam portion of existing Residential Programs	$2,164,000	3.05%	14.78%	1,000,000	therms	3.80%	8.43%
b)ORA	/ Single & Multi-fam Retrofit Residential Weatherization	$2,710,000	3.82%	18.49%	1,170,000	therms	4.45%	9.86%
c)SESCO	/ Single and Multi-fam existing Residential Programs	$43,044,560	60.71%	309.49%	8,958,800	therms	34.05%	75.51%
d)Transphase	/ 100 % of Annual DSM funds	$73,741,200	104.00%	530.21%	26,307,000	therms	100.00%	221.78%
e)Adopted	/ Single & Multi-fam Retrofit Residential Weatherization&Appliance Efficiency	$4,552,960	6.42%	31.98%	1,399,800	therms	5.32%	11.80%
	SoCal net of incentives for 1994 (1993$),incremental funds,savings goal							
	ORA:Ex120, Table8-1, savings based on 1992 goal							
	SESCO:AnRpt 1992 Table2.1 Res Conservation Subtotal escalated by 4% inflation factor,Savings Table2.2							
	Adopted:AnRpt1992 Weatherization and Appliance Efficiency Incentives Table2.1 multiplied by 4% inflation,Savings Table2.2							

Footnotes: 1/ % 1992 Resource Budget does not include requested M&E funds

ATTACHMENT 1

PUBLIC UTILITIES CODE § 747

747. (a) In addition to the incentives program required by Section 746, the commission shall require one or more electric utilities to implement pilot projects to accomplish the following:

(1) On or before June 30, 1991, begin to test separately from any generation resource bidding system the ability of demand side bidding to deliver benefits to utility customers.

(2) At the earliest practicable time, test the feasibility of an integrated bidding system that includes both generation resources and demand side programs.

(b) The commission shall establish a pilot program for gas utilities which tests a program of competitive bidding auctions for demand side services which deliver benefits to utility customers. However, a pilot program shall not apply to customer classes for which the gas utility is at risk for loss of sales or revenues due to the lack of a sales adjustment mechanism.

(c) On or before January 1, 1993, the commission, in consultation with the State Energy Resources Conservation and Development Commission, shall report the results of the pilot projects required by subdivisions (a) and (b) to the Legislature. The report shall assess the feasibility and implications of implementing the tested bidding systems and shall include recommendations on whether or not the state should adopt either, or both, of the following:

(1) An integrated bidding system that allows demand side services to compete with generation resources to fulfill future electric utility resource needs, or program of separate bidding auctions for demand side services which deliver benefits to electric utility customers.

(2) A program of separate bidding auctions for demand side services which deliver benefits to natural gas utility customers.

(Added by Stats. 1990, Ch. 1369, Sec. 3.)

(END OF ATTACHMENT 1)

SUMMARY OF BID EVALUATION CRITERIA FOR DSM-ONLY PILOT BID PROPOSALS

A. Southern California Edison (SCE)

SCE is proposing to conduct two solicitations: One for small office buildings and one for school buildings. Differences in bid evaluation criteria between the two solicitations are indicated below.

1. Threshold requirements. Each proposal must meet the minimum requirements outlined below in order to be eligible to bid.

a) Eligibility

- Bidders must not be SCE affiliates;
- Key staff members must have a minimum of five years of experience in applying efficiency technologies;
- Eligible customer sites are small office buildings (under 200 kW of demand) or school buildings (K-12) and related electric loads located within one of the eligible market regions.[1]
- An eligible energy efficiency measure must be a commercially available system, piece of equipment or material that improves the efficiency of an existing and ongoing electricity end use. Fuel switching, cogeneration and self-generation projects are not eligible. Eligible measures may include (but are not limited to) the following:

  --Package air conditioners; heat pumps; heat pump water heaters; indoor lighting system replacement; lighting efficiency modifications; window treatment; daylighting controls; roof/wall insulation; electronic adj. speed drives; evaporative coolers; electric motors; electric chillers.

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[1]The eligible market regions are identified as regions within SCE's San Gabriel Valley and Southern customer service areas.

b) Insurance

- General liability insurance must be maintained with a minimum ocoverage of $1,000,000 per occurrence.

c) Cost-Effectiveness Test

- The proposed program as a whole and each customer site must pass the Total Resource Costs (TRC) test.

d) Project Size

- An eligible energy efficiency program must have a committed electricity savings of at least 5 million kWh of electricity savings during each calendar year of the performance period.

e) Project Definition

- Bidder must provide a statement of project definition that includes (at least): program design and engineering summary, description of development team, program management plan, statement of references, financing plan, marketing plan, operation and maintenance plan and measurement and verification support plan

f) Milestone Schedule

- Bidder must provide a preliminary milestone schedule that includes (at least): projected schedule for equipment purchasing and financing, espected year and month of commencement of installation of energy efficiency measures, schedule of implementing plans to measure savings upon installation and to verify savings over the life of the contract, dates for submitting project development reports for SCE approval.

2. Selection of Short List. After reviewing bids for completeness, and verifying the required cost-effectiveness tests, SCE will develop a short list of bid proposals for negotiation, as follows:

a) For the small office buildings solicitation, bidders passing the threshold requirements will be ranked based on their proposed weighted average price/kwh of energy savings, using a three-tiered pricing system. The bid scores are calculated by bidders in their RFP, and verified by SCE. Bidders with the lowest bid scores will be named to the short list.

b) For the school building solicitation, bidders passing the threshold requirements will be evaluated using the following criteria and approximate percentage weights:

• Cost-Effectiveness	
--Utility Cost Test	20%
--TRC Test	20%
• Experience	20%
• Management Plan	10%
• Development Team	5%
• Marketing Plan	5%
• Financing Plan	15%
• Operation/Maint. Plan	5%

SCE will use a panel (which includes regulators) to determine, based on these criteria, the three best qualifying proposals. These proposals will be named to the short list.

3. Negotiations. SCE will begin negotiations with all bidders on the short list. SCE will award one contract for school buildings, and up to three contracts for small office buildings. Bid price will not be negotiable; however, all other aspects of the bid may be the subject of discussion and negotiation.

B. Southern California Gas Company (SoCal)

SoCal plans to solicit bids for energy efficiency improvements in its non low-income multi-family sector.

1. Minimum Requirements. To be considered, each proposal must meet the following minimum requirements:

a) Eligibility

- Bidders must not be a SoCal subsidiary or affiliate.
- Eligible measures must achieve energy savings by means of an efficiency improvement and not through curtailment of use or a reduction in standards of service or comfort.
- Fuel switching/substitution programs or measures are not eligible.
- Eligible buildings are all existing residential buildings in SoCal's service territory with two or more units, whether owner-occupied or rental.

b) Minimum Annual Savings

- Bidders must demonstrate ability to achieve penetration and measure installations sufficient to deliver at least 10,000 therms of annual savings.

2. Threshold Requirements/Non-Price Criteria. Each proposal meeting the minimum requirements will be evaluated as acceptable/unacceptable in meeting the following threshold requirements for non-price criteria:

a) Bidders Qualifications

- Proposed personnel must have demonstrable experience delivering programs of a size and scope similar to that being proposed.
- Bidder/bidder's representative must be properly licensed to install proposed measures/appliances in California.
- Bidder must affirm availability of proposed personnel.

- Bidder must supply complete list of references of firms with which it has done buisness during past 2 years, and with which it is presently doing business.

- Bidder must show adequate working capital or cash flow to continue operations through term of project.

b) Marketing Plan

- Bidder must set forth marketing strategies and resources committed to secure customer participation; demonstrate that proposed marketing strategies have been used successfully and are in customers' interest/likely to lead to customer satisfaction.

c) Proposed Measures

- Bidder's proposal must include both water heating and space heating measures. Measures may include (but are not limited to) the following:

  --Efficient water heater (83+%), efficient furnace (78+%), thermal efficiency central water heater (80+%), ceiling insulation, groundwork, caulking, weatherstripping, water heater wrap, supplemental outlet gaskets, supplemental faucet aerators, supplemental pipe wrap, duct wrap/insulation, supplemental evaporative cooler cover, storm windows, low flow showerheads, master meter conversion.

- Proposed measures must be commercially available, have a track record of successful installation and satisfy all applicable codes and ordinances.

3. Selection of Short List. Bidders who have been determined to meet the above standards for non-price criteria will be named to the short list. Short-listed bids will be ranked according to their bid total resource benefit/cost ratio, or TRC test. The utility benefit/cost ratio (or UC test) will be used as a "tie breaker" for bids with the same TRC ratios. TRC scores will be adjusted by a "penetration factor" for the purposes of ranking.

4. Negotiations. SoCal will negotiate with short-listed bidders, beginning with the highest ranking bidders and continuing until the program budget is committed.

C. San Diego Gas & Electric (SDG&E)

SDG&E is planning to replace its Appliance Efficiency Incentives Program in the residential sector. The entire existing residential customer market is open to bid, subject to avoiding conflict with SDG&E's other programs for existing residential customers.[2]

1. Threshold requirements. Each proposal must meet the minimum requirements outlined below in order to be eligible to bid.

a) Eligibility

- Bidders must not be SDG&E subsidiaries/affiliates;
- Program may include some or all of the existing residential customer market, or stand-alone appliance market in new homes. Program may not include additions or renovations that require compliance with California's Title 24 energy efficiency standards. Programs should complement, and may not conflict with, SDG&E's other programs for existing customers.
- Both electric and gas energy efficiency measures are eligible, provided that they are documented as commercially available. Eligible measures may be either prescriptive (specific identified technology) or performance measures (percentage energy savings goals). For performance measures, the average energy savings per customer site must be at least 5%. A customer site may have prescriptive or performance measures, but not both.

  Excluded measures: Built-in appliances in new homes; measures that rely solely on customer behavior, result in fuel switching or require the provision of new electric or gas rate designs. Direct load

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[2] These programs are: Direct Assistance (for low-income customers), Residential Information, Residential Energy Management Services (energy audits) and Residential Load Management (load control and time-of-use rates). Also SDG&E will address new construction through its Residential New Construction Program.

control programs; proposals that bypass the purchase of power from SDG&E (e.g., qualifying facilities).

b) Project Size

- Committed lifetime energy savings must equal or exceed 50 million kWh (net of free riders);
- Summer peak demand savings must equal or exceed 1.0 MW.

c) Program Security. In their response package, bidders must document their ability to meet the following security requirements:

- Each winning bidder will be required to post an irrevocable letter of credit for a program cost-effectiveness security of $.001 per kWh of committed lifetime energy savings.
- Each winning bidder will be required to post a program persistence security between 20% and 50% of the overall bid cost.
- Program security funds will be due no later than 90 days after noification by SDG&E that the CPUC has approved the contract.

d) Insurance

- All winning bidders are required to maintain worker's compensation insurance, commercial general liability and professional liability insurance of at least (for each) $1,000,000 per occurance. Additional insurance shall be required for programs that involve direct installation of measures.

e) Cost Effectiveness Test

- A program must meet or exceed the total TRC and UC cost-effectiveness score of the SDG&E plan.

f) Personnel Qualifications

- Bidder must document qualifications of key personnel assigned, or qualifications being sought.

g) Financing Plan

- Bidder must submit a financing plan with monthly cash flow estimates and potential sources of financing identified. The plan must include a written statement from a reputable financial institution indicating the opinion that the program canbe finances.

h) Milestone Schedule

- Bidder must provide a milestone schedule that includes 1) completion of hiring all key personnel, 2) finalization of all operating procedures, 3) obtaining final commitment for 100% of required capital, 4) completion of setting up and staffing any required office, 5) completion of promotional materials, 6) initiating of customer contacts, 7) beginning the installation of measures, 8) dates at which installations supporting lifetime energy savings of 10%, 30%, 50%, 70%, and 100% will be complete.

i) Marketing and Customer Service Plan

- Bidder must explain its marketing plan and describe how SDG&E may aid in marketing efforts.

j) Evaluation and Product Support Plan

- Bidder must outline a suggested impact evaluation plan for SDG&E to monitor the effectiveness of the program (e.g., indicate the types of supporting data and records available).

- Bidder must submit a plan to asure adequate rpoduct support, including product warranties, where applicable.

2. Selection of Short List. After reviewing bids for completeness and verifying the minimum requirements, SDG&E will develop a short list of bid proposals for negotiations, based on the following criteria:

Cost Effectiveness	
Total Resource Cost Test (TRC)	300
Utility Cost Test (UC)	300
	600
Experience	
DSM Planning	50
DSM Operation	50
Marketing	50
	150
Commitment	
Financing	50
Staff Support	50
Marketing Plan	50
Persistence Security	50
	200
Customer Service	
Quality Control	40
Coordination with SDG&E	40
Emerging Business Enterprises	20
Customer Value	50
	150
TOTAL	1100

With the exception of customer value, all of the above attributes are self-scored by the bidder. The point score for cost-effectiveness is based on a calculation of the difference between SDG&E's TRC and UC test results, and those of the bidder. The other self-scored attributes are based on a series of questions, each of which is assigned a score. The score for customer value is derived by SDG&E following review of the customer value forms supplied by bidder. The three bidders scoring the highest on the scoring system, along with any bidders who score within 15% of the highest scoring bidder, will be selected to the short list.

3. Negotiations. In the negotiation process, the initial ranking of projects become less important; selected target markets or program designs will be examined to develop an overall program that is cohesive and comprehensive. SDG&E will negotiate simulataneously with all bidders, and will allow up to 3 winning bidders. All aspects of proposals are subject to negotiations; however, price will be negotiable only if accompanied by a related change in a proposed program.

(END OF ATTACHMENT 2)

CHAPTER 984, STATUTES OF 1983

An act relating to public utilities.

[Approved by Governor September 21, 1983. Filed with Secretary of State September 22, 1983.]

LEGISLATIVE COUNSEL'S DIGEST

SB 848, Montoya. Public utilities: energy conservation development.

Under existing law, public utilities, including electrical and gas corporations, are subject to the jurisdiction of the Public Utilities Commission. Existing law does not regulate the extent to which an electrical or gas corporation may engage in energy conservation development.

This bill would declare the intent of the Legislature that the commission be given a clear and explicit mandate to regulate the involvement of electrical and gas corporations in energy conservation development, without substantive provisions.

The people of the State of California do enact as follows:

SECTION 1. The Legislature finds and declares it is in the best interest of the state to ensure competition in the energy conservation industry because of the innovation, price competition, aggressive marketing, and freedom of entry which characterize competitive industries, and that the energy conservation industry, because its decentralized nature, has the potential to be truly competitive.

The Legislature further finds and declares that the current uncertainty with regard to the role of electrical and gas corporations subject to regulation as public utilities by the Public Utilities Commission with regard to energy conservation development hinders the full-scale development of the energy conservation industry, and therefore requires legislative clarification.

The Legislature further finds and declares that there may be an inherent conflict for a public utility which furnishes gas and electricity on the one hand and installs energy conservation materials or devices on the other hand, and that it would

be detrimental to the energy industry and to the state if privately-owned public utilities used their status as monopolies to dominate the energy conservation industry or exercise unfair market power.

The Legislature further finds and declares that the basis for regulation of public utilities extends to their participation in energy conservation development as well as in the production and delivery of forms of energy derived from conventional sources.

It is, therefore, the intent of the Legislature that the Public Utilities Commission be given a clear and explicit mandate to regulate the involvement of electrical and gas corporations in energy conservation development, and to ensure that the energy conservation industry develops in a manner which is competitive and free from the potential dominance of regulated electrical and gas corporations.

(END OF ATTACHMENT 3)

ATTACHMENT 4

Table of Acronyms and Abbreviations

A.	- Application
ALJ	- Administrative Law Judge
CEC	- California Energy Commission
CEERT	- Coalition for Energy Efficiency and Renewable Technologies
C-I-A	- commercial, industrial, and agricultural
CPUC	- California Public Utilities Commission
D.	- Decision
DRA	- Division of Ratepayer Advocates
DSM	- demand-side management
ESCOs	- energy service companies
Exh.	- Exhibit
gWh	- gigawatt hour
kW	- kilowatt
kWh	- kilowatt hour
M&V	- measurement and verification
MW	- megawatt
NPV	- net present value
NTG	- net-to-gross
I.	- Investigation
OII	- Order Instituting Investigation
OIR	- Order Instituting Rulemaking

PG&E	- Pacific Gas & Electric Company
PU	- Public Utilities
PURPA	- Public Utility Regulatory Policies Act
QFs	- Qualifying Facilities
Ref. Item	- Reference Item
RFP	- Request for Proposal
SCE	- Southern California Edison Company
SDG&E	- San Diego Gas & Electric Company
SESCO	- SESCO, Inc.
SoCal	- Southern California Gas Company
SPM	- Standard Practice Manual
TR	- Reporters' Transcript
Transphase	- Transphase Systems, Inc.
TRC	- total resource cost
UC	- utility cost
UCAN	- Utility Consumers' Action Network

(END OF ATTACHMENT 4)

ATTACHMENT 5

List of Appearances

Respondents: David R. Clark, J. F. Walsh, Jeffrey M. Parrott, Attorneys at Law, and Y. A. Whiting, for San Diego Gas & Electric Company; Robert B. Keeler and Lisa Urick, Attorneys at Law, for Southern California Gas Company; Robert B. McLennan, Attorney at Law, for Pacific Gas and Electric Company; and Stephen E. Pickett, Frank J. Cooley, and Gene E. Rodrigues, Attorneys at Law, for Southern California Edison Company.

Interested Parties: C. Hayden Ames, Attorney at Law, for Chickering & Gregory; Barbara Barkovich, for Barkovich and Yap; Ralph Cavanagh, Attorney at Law, for Natural Resource Defense Counsel; Steven F. Greenwald and Andrea B. Colace, Attorneys at Law, for Skadden, Arps, Slate, Meagher & Flom; Norman J. Furuta, Attorney at Law, for Federal Executive Agencies; Grueneich, Ellison & Schneider, by Dian M. Grueneich, Attorney at Law, for California Department of General Services and South Coast Air Quality Management District; James Hodges, for The East Los Angeles Community Union; Jonathan Blees, Attorney at Law, for California Energy Commission; Lon W. House, for Henwood Energy Services; Randolph Wu, for El Paso Natural Gas Company; Douglas K. Kerner, Attorney at Law, for Roberts & Kerner; Audrie Krause, K. Justin Reidhead, Michel Peter Florio, and Joel R. Singer, Attorneys at Law, and Eugene Coyle, for Toward Utility Rate Normalization (TURN); Martin A. Mattes and Diane I. Fellman, Attorneys at Law, for Graham & James; Daniel Meek, Attorney at Law, for SESCO, Inc.; Andrew Brown, for Barakat & Chamberlin; David L. Modisette, for Edson & Modisette; Sara Steck Myers, Attorney at Law, for Coalition for Energy Efficiency and Renewable Technologies; Bronson, Bronson & Mc Kinnon, by Scott W. Pink, Attorney at Law, for Transphase Systems, Inc.; John D. Quinley, for Cogeneration Service Bureau; John W. Witt, City Attorney, by Peter V. Allen and Deborah Berger, Deputy City Attorneys, for the City of San Diego; Andrew Brown and Jan Smutny-Jones, Attorney at Law, for Independent Energy Producers Association; Jackson, Tufts, Cole & Black, by William H. Booth, Joseph Faber and Allan Thompson, Attorneys at Law, for California Large Energy Consumers Association; James Adams, for Energy & Resource Associates; Robert I. Burt, for California Manufacturers Association; Adam Pan, for Sierra Energy and Risk Assessment; Richard Shaw, for California-Nevada Community Action Association/ASCEP; Downey, Brand, Seymour & Rohwer, by Philip A. Stohr and Ronald Leibert, Attorneys at Law, for Industrial Users; D. Stephen Williams, for California Energy Commission; Lee Riggan, for Southern California Energy Programs

(ASCEP); Thomas R. Sheets and John Walley, Attorneys at Law, for Southwest Gas Corporation; Terry E. Singer, for the National Association of Energy Service Companies; Abdullah Y. Ahmed, for Occidental Analytical Group; Joel Singer, for Awad & Singer; Richard Miller and Brad Davids, for Proven Alternatives; Frank J. Mazanec, for EUA/Onsite, L.P.; Larry Goldberg, for Energy & Resource Advocates; and Charles Goldman and Patrick L. Splitt, for themselves.

Division of Ratepayer Advocates: Irene K. Moosen, Attorney at Law, and Don Schultz.

Commission Advisory and Compliance Division: Randi Greenspan and Michelle Cooke.

(END OF ATTACHMENT 5)