ATTACHMENT 2

APPENDIX 2

EXCERPT FROM D.97-02-014 REGARDING MARKET TRANSFORMATION, PROGRAM ADMINISTRATION, AND SHAREHOLDER INCENTIVES[1]

"Any consideration of administrative options must begin with a clear understanding of what we intend to accomplish. Much of the debate over the future role of utilities in energy efficiency administration stems from a more fundamental debate over our vision for energy efficiency services in a restructured electric industry. The comments in this phase of the proceeding along with the recent passage of AB 1890 have helped us further clarify that vision.

"In our policy decision, we articulated our general views which bear repeating:

> 'The focus of publicly funded energy efficiency programs should shift to those programs with market transformation effects and education efforts that would not otherwise be provided by the competitive market." (D.95-12-063. Conclusion of Law 82. See also Conclusion of Law 84.)
>
> 'It may also be appropriate to continue to provide financial incentives for energy efficiency products and services. Any such financial incentives should be focused on transforming the market for energy efficient products and services; some examples of these activities are the Super-Efficient Refrigeration Program, and manufacturer rebates for compact fluorescent light bulbs and high-efficiency motors. We expect that public funding would be needed only for specified and limited periods of time, to cause the market to be transformed.' (*Ibid.*, pp. 156-157.)

[1] 70 CPUC 2d, 774 at 790-792.

"Today, we reaffirm our commitment to ratepayer funding for energy efficiency as a *transitional* step towards the development of a fully competitive market in energy efficiency services. In our view, the mission

of market transformation is to ultimately privatize the provision of cost-effective energy efficiency services so that customers seek and obtain these services in the private, competitive market.

"This will require a two-pronged approach. First, we need to promote a vibrant energy efficiency services private industry that can stand on its own. This will require programs that encourage direct interaction and negotiation between private energy efficiency service providers and customers, building lasting relationships that will extend into the future. Second, we need to promote effective programs that will simultaneously transform the "upstream" market (e.g., manufacturers and retailers) so that energy efficient products and services are available and advertised by private vendors and builders.

"The Legislature has mandated only a limited lime period, commencing January 1, 1998 through December 31, 200l, during which ratepayer funds are earmarked for energy efficiency activities [footnote omitted.] After this four-year period, continued funding of these programs in not guaranteed. It would be up to future policy makers, at both this Commission and in the Legislature, to determine the future existence and form of these programs, along with appropriate funding levels. As described above, energy efficiency programs will be designed to transform the marketplace in order to reduce and eventually eliminate barriers to energy efficient solutions being adopted by providers and consumers of energy. Over the next four years, substantial money will be in support of this market transformation process. If these programs are successful in eliminating market barriers, they will no longer be needed. We choose to leave further Commissions the determination as to whether market barriers remain, whether continued efforts to transform the market are required and whether continued ratepayer funding is warranted. Today, we establish the policies that will govern these programs for the four years beginning January 1, 1998.

"With this vision as our starting point, we turn to the specific administration proposals. SoCal and Coalition members agree that utility administration is the most effective and efficient approach to meeting our objectives, based on the record to date of utility accomplishments.

"We do not dispute the fact that utilities have been very successful in deferring and replacing some of their most costly supply-side options

over the last few years through energy efficiency. However, we do not believe that these accomplishments make them, de facto, the most qualified to facilitate the privatization of energy efficiency services.

"In fact, as ORA, DGS, Sierra Club, and SESCO point out, electric utilities are entering a period where there interest in increasing sales volumes (as opposed to decreasing them via energy efficiency) has never been greater. As a result of the rate cap and competition transition charge (CTC) provisions of AB 1890, customer actions that reduce electrical usage will threaten utility profits by reducing the revenues collected to pay for the transition costs (e.g., uneconomic generating assets). Conversely, customer actions that increase electric usage will accelerate or facilitate the full recovery of transition costs during the transition cost recovery period. [footnote omitted.]

"This environment does not give utilities any motivation, and in fact provides greater disincentives than in the past, to develop an independent industry which will directly compete with the electricity services they provide. With the enactment of AB 1890, utilities are motivated to promote their own relationship with customers, rather than most of their competitors in the private market. In view of these structural conflicts, we disagree with SoCal and Coalition members that utilities are the clear choice for energy efficiency administrators of the future.

"Coalition members and SoCal argue that these disincentives can be addressed by continuing shareholder incentives with some form of sales adjustment mechanism. This argument presumes that we are willing to assume our past regulatory role. Since 1990, we have been willing to experiment with various incentive mechanisms in order to achieve the benefits of avoiding more costly utility supply-side investments. This experimentation has required considerable regulatory oversight, the expenditure of significant public and private resources, and ongoing administrative fine-tuning. As NRDC and others point out, the benefits to this approach have warranted such efforts. Instead of investing solely in supply-side options, utilities have diversified their resource base by encouraging cost-effective energy efficiency, thereby saving ratepayers millions of dollars in avoided costs.

"However, our goals for future energy efficiency activities in California are now quite different. No longer is our primary focus to

influence utility decisionmakers, as monopoly providers of generation services. Rather, we now seek to transform the market so that individual customers and suppliers in the competitive generation market will be making rational energy service choices. In our view, continuation of an administrative structure dependent upon utility shareholder incentives is incompatible with these objectives, particularly when we have the option of vesting responsibility for these programs in entities that can embrace our articulated mission without conflict. [footnote omitted.]

"Moreover, with the rate freeze and rate decrease provisions of AB 1890, the future funding of such shareholder incentives is called into question. Funding would either need to come from the funds dedicated to energy efficient programs, as SoCal recommends, or else from 'other sources' outside the dedicated energy efficiency fund established in the bill, as the Coalition proposes. The former approach would significantly diminish the funds available for the program. The latter approach would take funds away from utility transition cost recovery. As the CEC points out, this poses a conflict that provides no gain or incentive to shareholders. (Reporter's Transcript (RT) Volume 36, pp. 343-44.)

"For the above reasons, we will not adopt any administrative structure that automatically continues a utility monopoly over the administration of energy efficiency programs. On the other hand, we will not, as ORA and others propose, prevent utilities from competitively bidding for administrative functions. Completely precluding utilities from bidding for these functions would, in our view, inappropriately preclude the Board from even considering utilities as potentially competent and efficient providers of administrative services. As described further below, the Board will contract our administrative functions via competitive bidding. As part of that process, the Board will contract out administrative functions via competitive bidding. As part of that process, the Board will establish appropriate safeguards regarding potential conflicts of interest, market power abuse, and self-dealing for all potential bidders, including any regulated utility that submits a bid.

"At the same time, we will not authorize shareholder incentives for any winning utility holder. It is up to the utility to assess the value of bidding for energy efficiency administrative functions, in light of its competitive interests in a restructured industry. Any future refinements or wholesale changes to sales adjustment mechanisms that we consider in

our restructuring or performance-based ratemaking proceedings should reflect this changing role of utilities in energy efficiency."

(END OF APPENDIX 2 OF ATTACHMENT 2)

ATTACHMENT 2
APPENDIX 3

THE ROLE OF M&E STUDIES IN THE PROGRAM YEARS 1995-97 SHARED SAVINGS EARNINGS CLAIMS

For 1995-1997 programs with a shared savings earnings mechanism, utility shareholder earnings are 30% of the performance earnings basis (PEB). The role of the M&E Studies is to update the values utilized to calculate the annual energy savings produced by the programs and to measure the effective useful lives, which would impact the lifecycle energy savings. This, in turn, updates the PEB and utility shareholder earnings claims to reflect program results.

CALCULATING LIFECYCLE ENERGY SAVINGS

Lifecycle energy savings for each measure is:

Annual Energy Savings x Effective Useful Life of the Measure x Degradation Ratio

The studies that change the lifecycle energy savings estimates are:

1. *first-year impact evaluations*: studies using ex post data to estimate the actual annual savings achieved by the measures installed;
2. *retention studies*: studies that monitor what fraction of the measures remain in place and operable after various numbers of years. These studies are used to develop revised estimates of the effective useful life (EUL) of measures. (EUL is defined as the age at which half of the measures are no longer in place and operable);
3. *technical degradation studies*: studies that assess whether the annual energy savings of installed measures remain constant over the years or decline because the energy efficient equipment becomes relatively less efficient with age or use compared to the base equipment.

Persistence is the combined effect of measure retention and technical degradation in limiting the total energy savings produced by a measure.

The timing, definition, and use of these studies is contained in the *Protocols and Procedures for the Verification of Costs, Benefits, and Shareholder Earnings From Demand-Side Management Programs Tables 8A, 8B, 9A and 9B*, as adopted in the AEAP Decisions.

CALCULATING EARNINGS FOR EACH OF THE 4 EARNINGS CLAIMS

The utilities make their earnings claims in 4 installments (in the 1st, 2nd, 4th, and 9th year after the program year). The schedule for the various claims are how they are calculated are in Table 10 of the M&E Protocols. Each time, a new lifecycle savings estimate is produced to use in calculating the PEB, and the utility is paid an amount that will bring its shared savings earnings up to the appropriate cumulative share of the newly calculated shared savings amount. The new component of the lifecycle savings estimate is underlined for the 2nd, 3rd, and 4th claims described below.

1. 1st Claim: Payment of 1/4 of the total shared savings earnings claim amount based upon the 30% utility earnings share of the estimated PEB.

   The estimated lifecycle energy savings used in computing the performance earnings basis is calculated using:

   a) Annual savings for every program measure derived from the verified annual savings estimates produced from program tracking systems and ex ante measure savings estimates;

   b) These are multiplied by the expected useful lifetime of all the measures, using Appendix F of the Protocols, the ex ante useful lifetime estimates;

   c) Actual program costs for the program year replace the estimated program costs.

2. 2nd Claim: Payment of 1/2 of the total shared savings earnings claim amount based on a newly revised estimate of the PEB, minus the earnings received in the first earnings claim. (This trues up the payment to the newer estimate of shared savings. The revision to the PEB is a revision of the estimate of lifecycle savings. That estimate now uses the:

   a) <u>Annual savings derived from the first-year impact evaluation studies;</u>

   b) Multiplied by the expected useful lifetime of all the measures, using Appendix F of the Protocols, the ex ante useful lifetime estimates.

3. 3rd Claim: Payment of 3/4 of the total shared savings earnings claim amount based on a newly revised estimate of the PEB, minus earnings received in the 1st and 2nd Claims. Again, the revision to the PEB is a revision of the estimate of lifecycle savings. That estimate now uses the:

   a) Annual savings derived from the first-year impact evaluation studies;

   b) Multiplied by the <u>revised expected useful lifetime of all the measures</u>, using the <u>3rd or 4th year (depending on the program) studies of the retention of measures</u>, plus <u>the statewide studies of measure degradation</u>.

4. 4th Claim: Payment of 100% of the shared savings earnings claim amount based on a newly revised estimate of the PEB, minus the earnings already received from the 1st, 2nd, and 3rd Claims. Again, the revision to the PEB is a revision of the estimate of lifecycle savings. That estimate now uses the:

   a) Annual savings derived from the first-year impact evaluation studies;

b) Multiplied by the revised expected useful lifetime of all the measures, using the 6th or 9th year (depending on the program) studies of the retention of measures, plus the statewide studies of measure degradation.

Note that if the orginal, pre-program estimates had been completely accurate, the amounts awarded at each claim would have been 25% of the total. Variations from this pattern arise because of the succesive true-ups based on (1) actual costs and installations (from the program tracking databases), (2) first-year impact studies, (3) first true-up of persistence, and (4) final true-up of persistence.

(END OF APPENDIX 3 OF ATTACHMENT 2
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