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DEC 9 1987

ORIGINAL

Decision

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of Pacific Gas and  
Electric Company for Commission  
order finding that PG&E's gas and  
electric operations during the  
reasonableness review period from  
February 1, 1986, to January 31,  
1987, were prudent.

Application 87-04-005  
(Filed April 7, 1987)

(U 39 M)

Application of Pacific Gas and  
Electric Company for authority  
to adjust its electric rates  
effective August 1, 1987.

Application 87-04-035  
(Filed April 21, 1987)

(See Appendix A for appearances.)

INTERIM OPINIONPhase 2 - Rate Design and  
Incremental Energy Rate

This decision adopts an electric revenue allocation procedure and rate design for Pacific Gas and Electric Company (PG&E). The Commission is at this time separately considering PG&E's Energy Cost Adjustment Clause (ECAC), Annual Energy Rate (AER), Electric Revenue Adjustment Mechanism (ERAM), and Attrition Case. These have the potential for a total \$140 million (or 2.9%) increase in annualized revenue. The actual revenue increase granted by the Commission could be less. Accordingly, this decision sets forth the procedure for translating the net revenue increase into new rates to become effective on January 1, 1988.

Background Information

This phase involves the issue of whether the Commission should use the Equal Percent of Marginal Cost (EPMC) or System Average Percentage Change (SAPC) methodology to allocate interclass revenues. In PG&E's last consolidated ECAC/general rate case the Commission endorsed the importance of EPMC for revenue allocation and rate design. Also, the Commission decided that marginal cost pricing and use of EPMC as the method for implementing marginal cost pricing are the preferred way to achieve fair and equitable rates (Decision (D.) 86-08-083, p. 62; Conclusions of Law 26-27, p. 78). However, in the same proceeding, the Commission did not rule out the use of SAPC to allocate interclass revenues in offset cases (D.86-12-091, p. 115).

This year in the Electric OII D.87-05-071, the Commission addressed the problems facing the state's electric utility industry, including the problems created by rate structures that do not reflect the relative economic costs of serving different customer classes under today's conditions. As one way to resolve those problems, the Commission again found that EPMC is a fair, appropriate methodology for reducing interclass subsidies present in existing rates and for responding to potential bypass with the economic signals that can prevent uneconomic bypass (D.87-05-071, pp. 4-6; Findings of Fact 13-14, p. 23). The Commission further found that it should follow a policy of continuing to move towards full EPMC (D.87-05-071, Conclusions of Law, 3-5, p. 24).

The scope of the rate design issues in this phase was decided by the Commission in D.87-07-091. PG&E and PSD were ordered to submit separate exhibits using the SAPC and EPMC methods for revenue allocation. That decision also instructed the parties that in this phase the Commission would consider the appropriate level of rate caps and PG&E's proposed modification of Schedule E-7 off-peak rates. The decision further noted that existing relationships would be maintained among the rate components of rate

schedules, including demand and energy charges and rate limiters. Other rate design issues were deferreded to a separate phase of this proceeding scheduled for 1988.

Four days of evidentiary hearings were held on rate design issues during the week of September 21, 1987. One day of public participation hearing was held on September 8, 1987.

Testimony was presented by PG&E, Public Staff Division (PSD), California Large Energy Consumers Association and Homestake Mining Company (CLECA and Homestake), and Industrial Users (IU).

Concurrent briefs were filed on October 15, 1987 by PG&E, PSD, and CLECA and Homestake, IU, California Hotel and Motel Association (CH&MA), Association of California Water Agencies (ACWA), and Toward Utility Rate Normalization (TURN).

At the outset of these hearings the exhibits were based on a revenue increase of \$216 million. During the course of the hearings exhibits were submitted based on a hypothetical increase of \$100 million. At the close of the hearings it was established that the revenue increase would be \$140 million maximum and exhibits were prepared to reflect this level of increase too. A comparison of each party's showing based on these three revenue increase amounts is set forth in Appendix B.

#### Position of PG&E

##### SAPC

PG&E opposes the use of SAPC for interclass revenue allocation in this proceeding because it will impede the transition to full EPMC revenue allocation begun last year.

PG&E agrees with PSD that the SAPC method prevents the solution of problems caused by existing rate relationships because it maintains existing rate relationships between customer classes.

Also, PG&E agrees with CLECA and Homestake regarding the importance of moving to cost based ratemaking, including EPMC based allocation and unbundling of rates based on costs. PG&E shares the CLECA and Homestake concern that using SAPC in this case would tell

customers that the Commission is not serious about moving towards cost based rates and would encourage the bypass alternative.

EPMC

PG&E emphasizes that moving towards a full EPMC revenue allocation without interclass subsidies is especially crucial now. PG&E notes that in D.87-05-071, the Commission announced its intention of removing certain large light and power customer groups from the ERAM and attrition calculations. PG&E contends that as a result, it will be exposed to whatever benefits and burdens result from the rate structures, sales levels and revenues for these customers. Consequently, the utility must be allowed to implement a rate structure with minimal, if any, inter-class subsidies in order to allow competitive, economically efficient rates for the customer classes involved. To progress towards this goal in time for the anticipated change in ERAM and attrition, PG&E submits that EPMC must be used to allocate revenues among classes now.

The main feature of PG&E's EPMC proposal is that no customer class receives a decrease in this case, even if the class is entitled to one under an EPMC interclass revenue allocation. PG&E adopted this rate change limit for this case only due to several reasons. First, unlike last year's ECAC/general rate case, this case involves an overall increase in revenue requirements. Second, the Commission has not yet fully determined the method and timetable for reaching full EPMC revenue allocations. That issue will be addressed later in Phase 4, pursuant to the Commission's directive in D.87-07-091. Given those two factors, PG&E recommends that classes which otherwise would have received a decrease with EPMC should not actually receive a rate decrease in this phase.

PG&E recommended ceilings of 5% and 2.5% over the system average percentage change as the amount by which the residential and agricultural classes' rates can be increased using EPMC. According to PG&E witness Schaub, these caps were chosen by PG&E to provide continuity of the Commission's policy to move towards full

EPMC and to demonstrate to customers the Commission's commitment to continue moving toward the goal at a constant pace.

PG&E states that the relative levels of the caps are also important because they reflect other considerations raised by the Commission's movement toward full EPMC. Thus, the cap of 5% over the system average percentage change on residential rates not only serves to move that class towards EPMC but also helps to ensure that the rate change will not over-shoot EPMC. With respect to agricultural customers, PG&E believes that selection of the lower cap of 2.5% over system average percentage change recognizes that many of these customers will be facing increases in their bills as a result of shifting from the PA schedules to the new AG schedules adopted in D.87-04-028.

#### Nonfirm E-20 Rates

PG&E notes that the method for setting nonfirm time-of-use (TOU) interruptible/curtailable rates proved to be one of the most complex rate design issues in this case, as well as one of the most disputed. Both PSD and PG&E had the same general objective: maintaining the rate relationships established in last year's consolidated ECAC/general rate case rate design decisions. However, PG&E and PSD chose very different ways to try and maintain those relationships, even to the point of interpreting the relationship in different ways. PG&E sets out its differences with PSD in its brief and takes strong exception to PSD's proposals.

PG&E maintains that any change in nonfirm E-20 rates in this case should be made using PG&E's method. At the same time, PG&E observes that use of the Administrative Law Judge's (ALJ) alternative, which is discussed later, to spread a \$140 million net electric revenue requirement increase will eliminate this issue because rates for all classes except residential and agricultural would not change. So, according to PG&E, the ALJ alternative would keep the E-20 rate unchanged and this issue would be mooted.

### Rate Limiters

PG&E notes that in D.86-08-083 and D.87-04-028, the Commission adopted rate limiters to prevent bills for E-20 and agricultural users under the new rate structures from deviating too sharply from their bills under the previous structure. In order to maintain the same relationship between the limiters and the rate schedules involved, PG&E has increased the limiters by the same percentage as the increase to the corresponding average rates. Under the ALJ alternative with a \$140 million net electric revenue increase, Schedule E-20 would remain unchanged so there would be no need to change the E-20 limiters, although the agricultural limiters would still require adjustment.

### Special Contracts

PG&E notes that one last area of disagreement between PG&E and PSD involves the estimate of revenue at present rates for special contracts. These are special electric contracts already approved by the Commission at rates different from standard tariff rates. For purposes of estimating revenue at present rates, PG&E has used the actual rates in the special contracts as approved by the Commission. In contrast, according to PG&E, PSD has elected to ignore the actual approved rates. Instead, PSD has used the otherwise applicable regular tariff rates for estimating revenue at present rates. Since those rates are higher than the special rates, PG&E argues that the PSD approach automatically builds in a deficit.

PSD bases its approach on the Electric OII D.87-05-071 which indicates that shortfalls between regular rates and special contract rates should flow into ERAM. PG&E argues that D.87-05-071 was addressing accounting for revenue streams actually occurring. According to PG&E, nothing in that decision or any other speaks to how forecasts of revenues should be done. Even with the ERAM available to pick up shortfalls, PG&E maintains that the deliberate use of rates known to be higher than actual rates for forecasting

special contract revenues at present rates is ill advised and will simply create the potential for increasing problems in the future. Therefore, PG&E submits that the Commission should reject PSD's calculation of revenues at present rates and instead adopt PG&E's use of actual rates to develop revenues at present rates.

Summary

PG&E strongly supports continued progress towards full EPMC revenue allocation through use of the ALJ alternative to recover the net revenue requirement resulting from its ECAC, AER, and ERAM increase from this proceeding and its 1988 electric attrition filing.

ALJ Alternative

Because of wide disparity in the revenue allocation proposals presented by the parties, the ALJ requested that an alternative revenue allocation proposal be prepared whereby there would be no change to the rates of the industrial classes. The proposal was presented at the outset of the hearings and the witnesses had the opportunity to comment on it. For ease of reference we will refer to it as the ALJ alternative.

The ALJ alternative is based on PG&E's proposal except that there would be no decreases or increases to the Small, Medium, and Large Light and Power, Streetlighting and Railway classes. In other words, there would be no change to present rates for these classes.

The ALJ alternative was proposed when the revenue increase being considered was \$216 million. In order to provide no rate change to the classes mentioned above, any revenue increase over \$170.7 million had to be carried in the ERAM account. However, at the close of the hearings, it became apparent that the actual revenue increase to be effective on January 1, 1988, would be no more than \$140 million. Therefore, the \$170.7 million limitation was no longer an issue.

It should be noted that for a \$140 million (or \$100 million) revenue increase, the ALJ alternative and PG&E proposal have the same result. The increase would be limited to the Residential and Agricultural classes. Rates for all other classes would not change.

PSD's Position

SAPC

PSD opposes the use of SAPC for interclass revenue allocation for the same reasons set forth by PG&E.

EPMC

PSD and PG&E are in agreement that the capped EPMC allocation method adopted in D.86-08-083 be adopted in this case. PSD and PG&E agree that the adopted caps of 5% and 2.5% over system average percentage change be maintained to moderate residential and agricultural bill increases respectively.

However, PSD and PG&E then disagree on the method for allocating revenues after the capped residential and agricultural class allocations have been made.

PSD proposes that in offset cases, after the capped allocations are made, the residual revenue requirement should be allocated using EPMC, as adopted by this Commission in D.86-08-083. PSD proposes one modification to the adopted methodology by subjecting it to a floor on decreases of 5% below the system average change, in addition to the current 5% cap above it. According to PSD, this would help prevent rate instability between major rate cases.

Unlike the PG&E and the ALJ alternatives, PSD has no other constraint (other than the cap and the floor) on decreases in revenue allocation to the Light and Power, Streetlighting, and Railway Classes. Accordingly, depending on whether the revenue increase is \$216, \$140 or \$100 million, these classes receive increases or decreases.

PSD argues that its proposed modification results from a legitimate concern for rate stability. PSD notes that the parties are currently developing a rate design in the context of an offset



case. Consequently, PSD believes that the billing determinants used in revenue allocation are not being scrutinized to the extent that they would be in a general rate case. If some misestimates of billing parameters occurred in an offset case resulting in a substantial decrease to some class without a floor applied, and subsequently a cap were used to bring the class back up to its EPMC rates once the misestimate was discovered, PSD contends that it could take years to correct for the misestimate. By imposing a floor, PSD keeps the effects of misestimates to a range where they could be corrected for within a year. According to PSD, it has attempted to maintain a methodology as was used in D.86-08-083 which will work in any circumstance.

PSD notes that the fact that last year all classes received a decrease and this year some classes would receive a decrease and others an increase is irrelevant to PSD's proposal of using a floor this year. PSD notes that witness Price responded to this line of questioning as follows:

"That would not influence my judgment on that. My reason for using the floor is, as I mentioned, to minimize the effects of misestimates of billing parameters that might occur in an offset case and to continue movement at a moderate pace, hopefully one that won't take too long to get to the EPMC targets for significant customer classes that will get us to our goal of full EPMC."

Essentially, PSD agrees that classes that deserve rate reductions as a result of EPMC should not be deprived of that benefit within the extent of the caps and the floors.

PSD, commenting on the showing of Industrial Users (IU), which is discussed later, notes that, for a revenue increase of \$216 million, IU propose a 14% increase to the Residential and Agricultural classes. PSD finds a 14% increase to constitute rate shock. Furthermore, according to witness Price, a 14% increase in residential rates risks overshooting the EPMC target.

PSD, commenting on the ALJ alternative, notes that this proposal would hold all noncapped classes to no change in revenue, i.e., there would be no decreases in rates as well as no increases. PSD does not feel totally comfortable with the ALJ alternative because it would result in no movement toward EPMC except for residential and agricultural classes.

Nonfirm E-20 Rates

PSD proposes to adjust rates for E-20 nonfirm options. Because D.86-12-091 established the level of incentive discounts provided for E-20 interruptible and curtailable options on a \$/KW/year basis, relative to firm service rates, PSD recommends explicitly maintaining these incentive levels in revenue allocations to these rate options.

PSD notes that for this phase, PG&E proposes to retain the percentage relationships between current rates. PSD believes that the adjustment is necessary for compliance with D.86-12-091.

PSD and PG&E, as discussed previously under PG&E's position, have major differences on how these adjustments should be accomplished. These differences are described in the briefs, and are moot under the ALJ alternative.

Special Contracts

PSD calculated the revenue requirement for the special contracts category using the same methodology as used for the Schedule E-20 revenue requirement, essentially treating special contracts as a tariff schedule within the Large Light and Power class. This means that the ERAM balancing account will continue to record a shortfall from special contracts.

PSD notes that PG&E calculated revenue for special contract sales using the rate specified in the contracts. The result is that other rates will be set so that the ERAM balancing account will not record a shortfall. Consequently, no amortization of an additional ERAM undercollection due to special contracts will be required on April 1, 1988.

PSD argues that its methodology is consistent with D.87-05-071. The Commission authorized recovery, through ERAM, of revenue shortfalls from special contracts entered into prior to April 1, 1988. PSD notes that the Commission concluded that "Revenue shortfalls occurring as a result of special contracts should be recovered in ERAM." (D.87-05-071, p. 25.) Precisely because of the Commission's directive, PSD prefers that the shortfall be recovered through amortization of an ERAM undercollection after April 1, 1988, rather than through higher rates for other customers on the effective date of a rate decision in this case.

#### Adjustment to Rate Components

PSD notes that for this phase of the proceeding, PG&E agreed to use PSD's method for adjusting TOU energy charges, peak demand charges, maximum demand charges, and standby charges.

Also, PSD notes that IU propose to apply any E-20 increases, prior to the next general rate case, to demand charges and any decrease to energy charges. The IU further stated that:

"...because of the extent to which energy charges are presently loaded with demand costs, there is absolutely no danger of moving too far before the next general rate case." (Ex. 37, p. 12.)

PSD disagrees with IU's statement and urges adoption of PSD's proposal that changes in revenue requirements between general rate cases should consist of equal percentage changes in all energy charges and TOU demand charges.

#### Summary

PSD states that its recommendations comply with previous and current Commission directives. PSD pursues the Commission's goal of establishing EPMC, and it attempts to maintain the rate relationships established by the Commission.

**Position of California Large Energy  
Consumers Association (CLECA) and  
Homestake Mining Company (Homestake)**

**EPMC**

CLECA and Homestake strongly support the Commission's policy of implementing a full EPMC-based revenue allocation, as stated in its decision in last year's PG&E ECAC case. (D.86-08-083, p. 62.) They point out that a full EPMC-based allocation will eliminate the subsidization of other customer classes which has been imposed on large light and power customers under rate designs in recent years. They contend that the unnecessarily high rates which have resulted have created considerable hardship for industrial customers like Homestake and the cement industry members of CLECA who operate in highly competitive international markets. While willing to pay utilities the cost of providing them with electric service, CLECA and Homestake submit that these industries should not and cannot afford to continue to subsidize other customers.

CLECA and Homestake note that the Commission made major strides in moving toward an EPMC allocation in last year's PG&E ECAC case, but it has farther to go. They believe the allocation of the revenue requirement resulting from this ECAC/AER/ERAM proceeding provides the opportunity to take the next step toward a full EPMC allocation.

CLECA and Homestake witness Barkovitch testified that unless dramatic changes in revenue requirement arise, the achievement of a full EPMC allocation for all customer classes (with the possible exception of agriculture) is feasible through rates implemented in this case and in next year's 1988 ECAC/AER/ERAM proceeding, i.e., before the next PG&E general rate case. According to CLECA and Homestake, this should be the Commission's goal.

Essentially, the CLECA and Homestake position is that the Commission should adopt a revenue allocation that produces no increases for customers who would receive a decrease under a full EPMC allocation. They contend that the Commission should adopt a revenue allocation in which rate changes are consistent with the direction they would move under a full EPMC allocation. All classes except residential and agriculture would receive rate decreases under a full EPMC allocation. Therefore, absent such a large increase as to render this impossible, CLECA and Homestake submit that no other class besides these two should see an increase in this case.

Under the originally-proposed \$216 million revenue requirement increase, CLECA and Homestake support the ALJ's proposed allocation because it (1) results in no increases except for the residential and agricultural classes and (2) realistically keeps those increases to less than 10%. While this allocation does result in an ERAM undercollection, CLECA and Homestake suggest that part of this could be reduced by raising the agricultural cap to the level of the residential cap.

Based on an illustrative \$100 million revenue requirement increase, CLECA and Homestake support the revenue allocation proposal sponsored by IU witness Chalfant. According to CLECA and Homestake, with this lower revenue requirement, there is no reason not to have a decrease for those customer classes which would receive a decrease under a full EPMC allocation. CLECA and Homestake note that this can be accomplished while keeping residential and agricultural increases below 10%. CLECA and Homestake believe that such an allocation would be very strong statement of support for full EPMC.

With regard to the allocation for an increase of \$140 million, CLECA and Homestake suggest some guidelines. The adopted allocation (1) should result in no increase to any class other than residential and agriculture, (2) should result in no

increase for these two classes greater than 10%, and (3) should provide for decreases for as many classes as possible who would otherwise receive decreases under a full EPMC allocation. The general form of those decreases should follow those proposed by IU witness Chalfant (i.e., proportional to the degree of distance from full EPMC), as modified by a 10% cap for residential and agricultural customers.

#### Nonfirm E-20 Rates

CLECA and Homestake find logic in both PSD's and PG&E's proposals for adjusting nonfirm E-20 rates for changes in the revenue requirement. According to CLECA and Homestake, each proposal represents an attempt at consistency with the Commission's 1986 decisions for PG&E (D.86-08-083 and D.86-12-091): PSD strives to maintain the level of the interruptible or curtailable credit whereas PG&E's focus is on maintaining the rate relationships among the various sub-schedules.

Upon considerable reflection, CLECA and Homestake endorse PG&E's proposal. According to CLECA and Homestake, there is substantial merit in maintaining the rate relationships among the various options which resulted from last years's decisions. These relationships formed the basis of the selection of a particular option by individual customers. Furthermore, the implementation difficulties encountered by PSD (though valiantly approached) result in rate changes for customers on individual sub-schedules which differ significantly at times from the overall proposed class rate change. CLECA and Homestake conclude that PG&E's method results in sub-schedule changes which more closely mirror those in the overall class. This will be easier for customers to understand.

#### PSD Floor for Revenue Allocation

In the interest of maintaining a commitment to an EPMC-based allocation over time, as marginal costs change, CLECA and Homestake express concern over PSD's proposal for a floor for

revenue allocation changes in offset cases. Although PSD's stated reason for such a floor is the inability to sufficiently review billing determinants in such offset cases (i.e., outside of general rate cases), CLECA and Homestake contend that the inability to make larger adjustments, where appropriate, could perpetuate inequities for considerable periods of time. For example, under such a floor, the large decreases deservedly received by large light and power customers in last year's August ECAC decision (D.86-08-083) would not have been possible if the ECAC and general rate case revenue requirement decisions had not been concurrent. While this concern is somewhat relieved by PSD witness Price's acknowledgement that in a "dramatic change in circumstances" flexibility would be important, CLECA and Homestake remain unconvinced that such a floor constraint is necessary.

#### Summary

CLECA and Homestake submit that the revenue allocation in this proceeding can be accomplished with no increase (and even a rate decrease under a lower assumed \$100 million revenue requirement increase) for classes which would receive a decrease under full EPMC while limiting residential and agricultural increases to 10%.

#### Position of Industrial Users (IU)

##### EPMC

IU support the capped EPMC approach. Taking a cue from the Commission's recent statements concerning the importance of continuing the movement to full EPMC, IU take the position that revenue decreases, however modest they may have to be in this phase are essential if the affected large electricity consumers are to be persuaded to forego their bypass alternatives in favor of continuing their purchases from the electric utility.

IU takes exception to PG&E's position that no customer class should receive a revenue decrease in the context of an overall revenue increase, whether in the range of the \$216 million

originally considered or the revenue range of \$100 to \$140 million. Also, IU notes that PSD does not share PG&E's "no decrease" position. However, IU takes exception to PSD's inflexible position that the Commission should apply precisely the same caps that were adopted in last year's D.86-08-083, despite the Commission's invitation in D.87-07-091 to do otherwise.

To support its position that revenue decreases are essential in this phase, IU bases its position on three basic points.

1. A further reduction in the revenue allocated to PG&E's light and power customers is essential if those customers are to receive a clear message that the Commission remains fully committed to attainment of full EPMC at the earliest practical date;
2. The Commission has made clear its openness to changes in the D.86-08-083 revenue caps in light of the unique circumstances of subsequent cases, and the way is therefore open to structure caps in this proceeding so as to effect revenue decreases for those customers whose revenues still substantially exceed the levels justified under a full EPMC allocation; and
3. Failure to effect revenue decrease for such customers in this proceeding is tantamount to denial of such relief until late 1988 for want of any other proceeding involving actual rate changes.

IU notes that witness Chalfant addressed the first of these points, i.e., the imperative need for a further decrease in the revenues allocated to PG&E's light and power customers is dramatically apparent in the continuing large subsidies encompassed in the revenues paid by PG&E's industrial customers. The extent of those subsidies is set forth in Schedule 1 of IU witness Chalfant's Exhibit 37. PG&E's residential and agricultural customers presently receive subsidies of approximately \$200 million and



\$77 million, respectively, from the utility's other customer classes. The lion's share of those subsidies--approximately \$270 million--is funded by the Light and Power class customers. Moreover, IU notes that PG&E's Large Light and Power class customers pay nearly \$107 million of that total figure.

According to IU, its proposal does incorporate one very important constraint: the need to assure no unreasonable revenue increases for those classes--PG&E's residential and agricultural customers--whose present revenues fall far short of the levels indicated by a full marginal cost allocation. IU notes that witness Chalfant described as follows the task of assuring maximum further movement towards full EPMC without unacceptable customer impact:

"The maximum movement is a function of the percentage increases that any class could be expected to bear as a result of one rate case. This percentage, in turn, depends on the overall revenue increase or decrease in the utility's rate levels." (Exhibit 37, p. 5.)

According to IU, witness Chalfant's proposal for allocation of different revenue requirements in this phase reflects the application of the foregoing principle.

Turning to PSD's proposal, IU points out that while PSD does not adopt PG&E's no decrease constraint, PSD ends up recommending increases for the Medium and Large Light and Power and Streetlighting classes, when under EPMC, these classes are clearly entitled to decreases. IU blames PSD's use of the caps of 5% and 2.5% over system average percentage change for this result. In short, according to IU, the PG&E and PSD proposals fail to award even modest decreases to all of the classes ultimately entitled to substantial decreases upon attainment of the Commission's goal of full EPMC.

Summary

IU submits that the Commission must go beyond PG&E's "no decrease" position if the EPMC phase-in is to continue apace and if the proper signals are to be transmitted to PG&E's Light and Power customers. Further, to the extent that decreases are to be implemented, even on a token basis, they should extend to all customer classes ultimately entitled to decreases under a full EPMC allocation, rather than to selected classes, as proposed by the PSD.

Position of California Hotel  
and Motel Association (CH&MA)

CH&MA notes that depending upon their scale of operations, CH&MA members may fall within either the Small, Medium, or Large Light and Power customer classes. Therefore, CH&MA's interest is in having the Commission achieve a fair balance in the rates for all Light and Power customers, at levels consistent with the cost of serving such customers.

Of the various revenue allocation proposals on the record, CH&MA prefers the recommendation of IU. CH&MA believes that the IU proposal, among all the proposals, is the one most consistent with the EPMC principle which has been adopted by this Commission and is consistent with sound economics. CH&MA notes that the IU revenue allocation would result in at least a very modest reduction in revenues allocated to each of the Light and Power classes in the event of an increase in authorized annual revenues anywhere within the range of \$100 to \$216 million. CH&MA contends that as the record in this proceeding and in PG&E's 1986 rate design proceeding (A.86-04-012) demonstrates, current revenue allocations to all the Light and Power classes are excessive when judged by the EPMC standard. So CH&MA contends that the revenue allocation proposed by IU for this proceeding is the most appropriate one.

CH&MA submits that should the Commission be reluctant to move swiftly in the direction of EPMC and feel compelled to shield residential and agricultural customers from the impact of a cost-based revenue allocation, the Commission should at least ensure that such protection to these customer classes does not result in increased rates for any members of the Light and Power classes.

CH&MA points out that as witness Barkovitch testified, all the Light and Power classes now bear revenue allocations in excess of the EPMC standard, so an approach which avoids any increase in revenue allocation to these classes is appropriate.

While CH&MA prefers the revenue allocation proposal of IU, it would not be averse to the ALJ alternative method of revenue allocation, which would result in no increases for any Light and Power class. CH&MA notes that no significant opposition was expressed to the ALJ revenue allocation alternative and PG&E witness Shaub testified that the concepts underlying the ALJ alternative were sound. Also, CH&MA notes that in the case of a revenue increase of \$100 million, PG&E's approach produces the same result as the ALJ alternative: zero revenue change for all customer classes except residential and agricultural, which would bear modest increases.

CH&MA notes that the combination of pending PG&E electric matters is likely to produce a total increase in annual revenues in the range of \$140 million. On this basis, CH&MA believes that the ALJ alternative produces a fair revenue allocation, avoiding any increase in the burden to any of the Light and Power classes.

#### Summary

CH&MA favors the IU's proposal of a revenue allocation formula which closely follows the EPMC principle, and would benefit all Light and Power classes. As an alternative, CH&MA supports the ALJ's approach, "which at least avoids an increase in the revenue allocation to the above-cost rates of Light and Power customers."

CH&MA submits that in no event should the allocation of revenues to any Light and Power class be increased in this proceeding.

Position of California Farm  
Bureau Federation (CFBF)

SAPC

CFBF points out that in D.86-08-083 issued on August 20, 1986, the Commission stated that until a triggering mechanism can be proposed and approved, base rate and fuel offset rate changes will be allocated by SAPC. Specifically, CFBF notes that the Commission stated on pages 68 and 69 of D.86-08-083 that:

"This subject [a trigger mechanism which would annually adjust cost and rate relationships] may be considered in PG&E's next ECAC proceeding ... Given the considerable movement we have made towards marginal cost based rates and PG&E's and PSD's desire to implement an adjustment mechanism for EPMC between GRCs, we will use SAPC for future offsets and maintain TOU differentials." (Emphasis added.)

It is CFBF's position that the Commission's decision is absolutely clear, that until an adjustment mechanism is approved by the Commission and implemented, any change in rates must be allocated on the basis of SAPC.

CFBF argues that in this proceeding the approval and adoption of any mechanism which will update and calculate marginal costs has not yet taken place. Further, CFBF points out that this issue will not even be examined and testimony taken until after the beginning of 1988. According to CFBF, to have the Commission attempt to allocate an increase in rates by EPMC in the face of the language in D.86-08-083 and without parties having ever addressed the appropriateness of any future proposed trigger mechanism deprives such parties of their rights. As such, CFBF submits that the Commission has no choice but to allocate any increase in rates using SAPC.

Summary

CFBF submits that the Commission should allocate any increase on the basis of SAPC. If the Commission chooses to allocate such an increase on the basis of EPMC, no class of service should receive a decrease in rates.

Position of Association of California Water Agencies (ACWA)

ACWA supports SAPC and recommends that each rate's energy component be adjusted by the same percent necessary to recover PG&E's authorized revenues.

ACWA believes that EPMC should not be used in offset proceedings because the marginal cost forming the basis of an EPMC revenue allocation is not sufficiently accurate, and fast paced offset proceeding do not give the parties sufficient time to analyze the complex and changing marginal cost data in order to prepare a showing.

As an alternative, if the Commission decides to use EPMC, then ACWA supports the ALJ alternative under which no class would receive a decrease.

Position of TURN

SAPC

TURN notes that under the original revenue allocation proposals based on a \$216 million revenue increase, the company's proposal would assign about \$165 million out of a total \$216 million rate increase to the residential class (over 75% of the entire increase). While overall rates would go up by 4.5%, residential users would experience 9.5% higher rates and agricultural customers about 7%.

Also, based on a hypothetical \$100 million or . 2.1% increase considered during the course of the hearings, TURN notes that the utility would increase residential rates by 5.3% (\$92 million), and agricultural rates by 4.6%. TURN notes that IU

would hike residential rates even higher, while actually decreasing the rates for certain other classes.

It is TURN's basic position that ECAC cases are an inappropriate forum for consideration of complex and controversial rate design and revenue allocation issues normally reserved for the general rate case, and until recently this Commission had consistently agreed with that conclusion. Now, according to TURN, for the second year in a row, PG&E's "expedited" ECAC proceeding has been expanded to encompass revenue allocation. TURN believes that ECAC proceedings have been so narrowly circumscribed that parties have been denied any realistic opportunity to present a comprehensive showing. According to TURN, this unorthodox procedure can only help to foster the impression that the Commission had made up its mind what to do before any evidence was ever taken.

TURN points out that just last year, in D.86-08-083, the Commission decided that PG&E should use the SAPC method of allocation in future offset proceedings. (P. 69.)

Then the Commission changed its mind in D.87-07-091 and directed that evidence be presented on the EPMC method. At the same time, parties were barred from raising any issues regarding marginal costs upon which the EPMC method is founded, even though D.86-08-083 had recognized a number of areas where further study was needed (e.g., p. 49a-49b, 65). TURN submits that an EPMC allocation is nothing more than a shot in the dark when the marginal costs that underlies that allocation is outdated and methodologically questionable.

TURN notes that the rationale stated by the Commission in D.87-07-091 for receiving evidence on EPMC in this offset proceeding is:

"We note that the Commission is faced with spreading a possible \$200 million ERAM increase and a 1988 attrition increase which has not yet been filed, both of which may require a rate change effective January 1, 1988. The

potential increase is significant and the application of SAPC could result in serious distortions of the rate relationships that were established in PG&E's most recent rate design decision." (P. 4.)

TURN points out that it is clear that the expected \$200 million plus revenue increase has not materialized.

TURN argues that now, however, it appears that the net rate change on January 1, 1988 will be no more than \$140 million and perhaps as little as \$100 million. According to TURN, these amounts represent only a 2 to 3% increase in PG&E's electric revenues, hardly enough to result in "serious distortions of the rate relationships" if the much simpler and less controversial SAPC method were employed. Indeed, TURN contends that no one could honestly state that the marginal costs underlying the EPMC method are accurate to within 2 to 3%. TURN submits that SAPC (a simple equal percentage increase for each customer class) should be used for revenue allocation in this case.

#### **EPMC**

TURN submits that if an EPMC allocation is to be employed--and TURN contends that it should ~~not~~ be, absent a consistent and reliable set of marginal costs--the Commission should move very cautiously and apply a very tight "cap" on deviations from the system average increase for any customer class. Since the overall system increase will be only 2 to 3%, no class should receive a percentage increase more than twice that amount, and no class should be granted a decrease when overall rates are increasing.

TURN urges the Commission to be practical and look at the larger picture. TURN asks: Is it socially and politically acceptable to increase residential and agricultural rates by a significant percentage just to permit a tiny decrease for industry? Will such a small decrease have any impact at all on "the bypass problem," given the large reductions that industrial customers have

already received in the last year? Is it fair in any sense to impose disproportionate increases on residents and farmers based on someone's version of cost, while denying them any opportunity to challenge the accuracy of those alleged costs? TURN submits that each of these questions must be answered in the negative. TURN believes that any application of EPMC in this case must be tempered with reality in the form of very tight caps and a bar on decreases for any class.

#### SUMMARY

TURN opposes the concept of reworking rate design and revenue allocation in ECAC proceedings, and advocates the use of simplified standard methods such as SAPC or equal cents per kilowatt-hour. If EPMC is employed in spite of TURN's objections, at minimum no class should enjoy a rate decrease and no class should bear an increase more than twice the system average.

#### Discussion

We conclude that further movement towards a full EPMC revenue allocation must be made now. Our policy is set forth in D.87-05-071. It has been extensively quoted by the parties to this proceeding and we need not repeat it.

Our decision not to use SAPC in this offset proceeding reflects our concern that we must maintain the momentum achieved so far in moving towards our EPMC goals. SAPC is a viable alternative and we do not rule out the use of SAPC in future offset proceedings. The reason we reject SAPC for this proceeding is that SAPC maintains existing rate relationships and does not move rates toward a full EPMC revenue allocation. And because of the bypass problem, we cannot afford to allow rates to stagnate at present levels relative to each other.

With regard to a timetable for achieving our full EPMC allocation goal, we are pleased to note from the testimony of



CLECA and Homestake witness Barkovitch that unless dramatic changes in revenue requirement arise, the achievement of a full EPMC allocation for all customer classes (with the possible exception of agriculture) is feasible before the next PG&E general rate case.

With regard to where we are now in relation to full EPMC, we set forth IU witness Chalfant's assessment based on a comparison of PG&E's present revenues and the marginal costs adopted in D.86-08-083.

COMPARISON OF PRESENT REVENUES AND MARGINAL COST

<u>Customer Class</u>	<u>Excess or Deficiency (-) (Percent)</u>
Residential	-11.40%
Light & Power	
Small	7.06
Medium	12.48
Large	8.51
Agricultural	-44.06
Streetlighting	7.89
Railway	15.04

Source: IU Exhibit 37.

The above table shows that present rates for residential and agricultural do not cover the cost of serving these classes, and rates for all other classes are in excess of the cost of providing service. Therefore, we conclude that if there has to be a revenue increase, the increase must first be applied to the residential and agricultural classes to the extent practicable.

While we refrain from attributing any precision to the above percentages, we conclude that they provide a reasonable

measure of the relative positions of the various classes in relation to their marginal costs.

With regard to the TURN and ACWA arguments related to the accuracy of the marginal costs adopted in D.86-08-083, which are used in the EPMC, we reviewed these concerns in a separate proceeding. But we are satisfied that the alleged inaccuracies identified on the record do not impact the EPMC allocation in this proceeding. Thus, there is no reason to lay EPMC aside for SAPC in this case.

Following conclusion of the hearings in this proceeding, we issued D.87-11-047. Therefore, the 1986 ECAC decision marginal costs, as modified by the TURN/PSD stipulated marginal costs adopted in D.87-11-047 are the appropriate ones to use for rate design purposes in this proceeding.

At the outset of this proceeding, we did consider a revenue increase of \$216 million for revenue allocation exhibits. At the close of these hearings, it was established that the revenue increase would be \$140 million maximum. Also, during the course of the hearings, the parties presented exhibits based on a hypothetical increase of \$100 million. We will focus on the \$140 million and \$100 million scenarios, since these best relate to the actual net amount of revenue increase for which rates will need to be designed.

Also, we should note that we are confronted with a situation which is quite different to what we had in PG&E's 1986 ECAC and general rate cases. There, we were in the happy situation of deciding how much of a decrease each class should receive. This time, unfortunately, we are faced with an increase in the order of 2 or 3%.

Since we have decided to proceed toward EPMC, the positions of the parties can be broadly summarized as follows:

PG&E, CFBF, ACWA, and TURN - no decreases to any class.

PSD, CLECA, and Homestake, I.U., and CH&MA - decreases should be extended to classes entitled to a decrease under EPMC.

And in a nutshell, the issue is: when imposing an increase on the the residential and agricultural classes, should we give the industrial classes decreases to which they are entitled under EPMC.

Appendix B sets forth the PG&E, PSD, IU, and ALJ proposals for a \$216 million, \$140 million and \$100 million revenue increase. We will comment on the proposals starting with IU, since the IU proposal is the only one recommending a change to the residential and agricultural caps.

The impact of the IU proposal on residential and agricultural classes may be summarized as follows:

<u>Revenue Increase Millions of Dollars</u>	<u>System Average Increase</u>	<u>Residential and Agricultural Increase</u>
\$216	4.6%	14%
140	2.9	10
100	2.0	9

The above table shows that the residential and agricultural classes receive increases at least 3 times more than the system average increase, so that industrial customers may receive decreases that they would be entitled to under EPMC.

Essentially, the IU proposal requires that the caps of 5% and 2.5% over system average percentage change for the residential and agricultural customers be changed in order to give a decrease to all classes who would be entitled to a decrease under EPMC. Theoretically, the IU rationale is valid and it provides the quickest path to our goal of full EPMC.

On the other hand, the Commission must balance its goal of achieving rates based on full EPMC against the impact the rate changes will have on the affected customer groups; in this instance we find that under the IU proposal the residential and agricultural classes are severely impacted. While the Commission is anxious to achieve full EPMC, it does not intend to abandon the concerns of PG&E's 3.3 million residential and agricultural customers in order to achieve these goals. Accordingly, while IU witness Chalfant has

offered a proposal which is consistent with EPMC, we decline to adopt the proposal because it is too harsh.

Turning to the proposals of PG&E witness Schaub and PSD witness Price, we will adopt their recommendation that the residential and agricultural caps of 5% and 2.5% over system average percentage change remain unchanged. The basis for our decision is that these caps provide continuity of the Commission's policy to move towards full EPMC and demonstrate to customers the Commission's commitment to continue moving towards our goal at a constant pace. Also, the lower agricultural cap of 2.5% over system average percentage change recognizes that many of these customers will be facing increases in their bills as a result of shifting from the PA schedules to the new AG schedules adopted in D.87-04-028.

Staying with the \$140 million and \$100 million scenarios, we find the PSD proposal for the industrial classes is unnecessarily complicated and burdensome given the 2% to 3% revenue increase involved. The PSD proposal distributes small decreases and increases to the industrial classes and involves much controversy with regard to E-20 rates. It involves redoing all the rate schedules for the industrial classes and we are not convinced that the end result justifies the effort. Accordingly, for purposes of this phase, we will not adopt the PSD proposal.

On the other hand, the ALJ alternative which is set forth on the following table leaves all the industrial schedules unchanged. As it turns out, the ALJ alternative has the same result as PG&E's proposal for the \$140 million and \$100 million scenarios. The only rate change will be an increase for the residential and agricultural classes. And as pointed out previously, if there has to be an increase, these classes should receive the increase because their present rates are significantly below the cost of providing service. While we recognize that the ALJ alternative does not provide any decrease to the industrial

classes that would otherwise be entitled to a decrease under EPMC, we conclude that it is a reasonable compromise and should be adopted.

Pacific Gas and Electric Company  
**ALJ Alternative**  
 \$100.0 Million Increase Due to ECAC, ERAM, AER, & Attrition Adjustments 1/

A.87-04-035

Based on Capped EPMC Revenue Allocation

Class of Service	Sales 2/ kwh (000s)	Present Revenues (7/1/87 Rates)		Percent Change From Present Rev. Assuming EPMC Allocation	Adopted Revenue Allocation 1,3/		
		Effective (000s)	Ave. Rate c/kwh		Effective (000s)	Ave. Rate c/kwh	Percent Change From Present Revenues
Residential	22,020,841	\$1,742,009	7.91	13.21%	\$1,833,983	8.33	5.28%
Small Light & Power	7,171,756	\$685,356	9.56	-5.43%	\$685,356	9.56	.00%
Med. Light & Power	10,890,673	\$934,025	8.58	-9.53%	\$934,025	8.58	.00%
Large Light & Power	20,023,321	\$1,267,909	6.33	-6.57%	\$1,267,909	6.33	.00%
Agriculture	2,637,372	\$176,326	6.69	46.83%	\$184,352	6.99	4.55%
Railway	249,000	\$17,727	7.12	-14.96%	\$17,727	7.12	.00%
Streetlight	280,880	\$36,374	12.95	-1.73%	\$36,374	12.95	.00%
Other Revenue		\$22,177			\$22,177		
Total	63,273,843	\$4,881,902	7.72	2.05%	\$4,981,902	7.87	2.05%

1/ This table reflects an illustrative \$100.0 million increase from system revenues at present rates of \$4,880 million, due to ECAC, ERAM, AER, and attrition adjustments. No changes are assumed in revenue from meter charges for optional TOU schedules, submeter discounts, streetlight facilities charges, load management adjustments, or other operating revenues. Revenues from meter charges, submeter discounts, streetlight facilities charges, and load management adjustments are included in customer class revenues shown in this table.

2/ Based on adjusted residential sales.

3/ The proposed revenues reflect the 5% cap over system average percentage change (SAPC) for residential and 2.5% cap over SAPC for agriculture.

A.87-04-035, A.87-04-035 /ALJ/BOF/vd1

As stated above, the ALJ alternative makes the E-20 rate controversy moot. However, with regard to PG&E's argument related to special contracts, we agree with PSD that: "Revenue shortfalls occurring as a result of special contracts should be recovered in ERAM." (D.87-05-071, p. 25.) PG&E's position is not adopted.

Lastly, we adopt for residential and agricultural customers the rate design agreed on by PSD and PG&E. The baseline residential rate continues to be set at 85% of system average rate. We adopt a floor for the off-peak residential time-of-use (E-7) baseline rate, to ensure that it is no lower than marginal cost (marginal energy costs and marginal coincident capacity costs for generation, transmission, and primary distribution - Exhibit 31, p. 6). Energy and time-related demand charges for agricultural customers are increased by equal percentages within each schedule. The maximum demand charge for agricultural customers is increased by the same percentage as the agricultural class' average rate. For illustrative purposes, we attach Appendix D which sets forth the various demand charges and energy charges based on a revenue increase of \$100 million. The tariff sheets that PG&E files should be prepared on the same basis and should reflect the net increase granted by the Commission in the ECAC/AER/ERAM and Attrition Case decisions which are being considered separately.

#### Incremental Energy Rates (IER)

During the week of September 28, 1987, three days of evidentiary hearings were held on IER issues. Following these hearings, PG&E, PSD, California Cogeneration Council and Henwood Energy Services, Inc., reached a stipulation. A copy of the stipulation dated October 8, 1987 is attached as Appendix C.

The stipulation resolved all outstanding IER issues. The parties agreed on an annual IER figure of 9182 British Thermal Units per Kilowatt Hour. The IERs will become effective for the Qualifying Facility payment periods February 1, 1988 and May 1, 1988. The May 1988 IER will remain in effect for the payment

period starting August 1, 1988 if an update has not been performed by that time.

A copy of the stipulation was served on all parties to this proceeding. Parties were given 10 days to file objections. No objections were received.

We conclude that the stipulation, as set forth in Appendix C, is reasonable in light of the record and should be adopted.

Comments on the Proposed Decision of the ALJ

The proposed decision of the ALJ was served on the parties. Comments were received from PG&E, PSD, and CFBF. The technical corrections noted by PG&E and PSD are reflected in this decision. We are not persuaded by PG&E's additional argument related to special contract revenues. Likewise, we are not persuaded by CFBF's additional argument related to SAPC. Our reasons for using EPMC in this offset proceeding are set forth.

Findings of Fact

1. EPMC revenue allocation of interclass revenues should be used in this offset phase since PG&E needs to continue further movement towards a full EPMC revenue allocation without interclass subsidies.

2. Based on present revenues, rates of the residential and agricultural classes are significantly below the level necessary to collect the cost of serving those classes.

3. The present rates of all classes, other than residential and agriculture, generate revenues above the level necessary to collect the cost of serving those classes.

4. In this phase of PG&E's offset proceeding, it is not appropriate to provide rate reductions to the classes that would be entitled to rate reductions, and, at the same time, impose significant rate increases on the residential and agricultural classes. The impact on these classes would be too harsh.



5. In order to approach an EPMC revenue allocation as rapidly as is realistically possible, the present ceilings of 5% and 2.5% over system average percentage change, by which residential and agricultural classes rates can be increased above the overall system increase, should remain unchanged.

6. The ALJ alternative revenue allocation provides a reasonable balance of the competing interests of the various parties.

7. Under the ALJ alternative revenue allocation, there will be no change in rate schedules, other than to the schedules of the residential and agricultural classes.

8. Under the ALJ alternative revenue allocation, if the net revenue increase is \$140 million, residential rates will increase 7.6% and agricultural rates 5.4%; if the net revenue increase is \$100 million, the increases will be 5.3% and 4.6%, respectively. There will be no change to all other rate schedules.

9. Since the Commission is separately considering PG&E's ECAC, AER, ERAM, and Attrition case, the net amount of revenue increase is not known at this time. Based on the outcome of those decisions, PG&E should file new rates for the residential and agricultural classes based on the ALJ alternative revenue allocation. As agreed upon by PG&E and PSD, a capped EPMC intraclass revenue allocation should be used for the residential class. However, agricultural rate schedules for the whole class should be increased by the same percentage. The various demand changes and energy changes should comport with the schedules set forth in Appendix D.

10. The stipulation on IER issues set forth in Appendix C is reasonable in light of the record in this proceeding.

#### Conclusions of Law

1. For purposes of this phase, the ALJ alternative revenue allocation proposal should be adopted.

2. The stipulation on IER issues set forth in Appendix C should be adopted.

3. PG&E should be authorized to file new electric rates for the residential and agricultural classes which may become effective no sooner than January 1, 1988. The new rates should reflect the net amount of the increase granted by the Commission in PG&E's ECAC, AER, ERAM, and Attrition Case. The new rates should be based on the ALJ alternative revenue allocation and comport with the schedules set forth in Appendix D.

4. PG&E should be authorized to file new IERs based on the stipulation set forth in Appendix C.

5. Since the ALJ's Proposed Decision was sent to all parties for comment and the new rates should be in effect on January 1, 1988, this decision should be effective on the date of signature.

#### INTERIM ORDER

##### IT IS ORDERED that:

1. Pacific Gas & Electric Company (PG&E) is authorized to file with this Commission on or after the effective date of this order, revised tariff schedules for electric rates which are in accordance with this decision.

2. The revised tariff schedules shall become effective 3 days after the date of filing but not earlier than January 1, 1988, and shall comply with General Order 96-A. The tariffs shall apply to service rendered on or after their effective date.

3. This proceeding shall remain open for the purpose of receiving evidence in Phase 4 - Further Rate Design issues.

This order is effective today.

Dated DEC 9 - 1987, at San Francisco, California.

STANLEY W. HULETT  
President

DONALD VIAL  
FREDERICK R. DUDA  
G. MITCHELL WILK  
JOHN B. OHANIAN  
Commissioners

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

  
Victor Weiss, Executive Director

*pb*

APPENDIX A  
Page 1

List of Appearances

Applicant: Shirley A. Woo, Roger J. Peters, and Mark R. Huffman,  
Attorneys at Law, for Pacific Gas and Electric Company.

Interested Parties: C. Hayden Ames, Attorney at Law, for  
Chickering & Gregory; Morrison & Foerster, by Jerry R. Bloom and  
John S. Caragozian, Attorneys at Law, for California  
Cogeneration Council; David R. Branchcomb and Mark Henwood, for  
Henwood Energy Services, Inc., Santa Fe Geothermal, Inc., Union  
Oil Company of California, and Independent Energy Producers  
Association; Robert E. Burt, for California Manufacturers  
Association; Karen K. Edson, for KKE and Associates; Eric  
Eisenman, for Transwestern Pipeline, Inc.; Michel Peter Florio,  
Attorney at Law, and Sylvia M. Siegel, for Toward Utility Rate  
Normalization; Steven A. Geringer, Attorney at Law, for  
California Farm Bureau Federation; Graham & James, by Martin A.  
Mattes, and David S. Marchant, Attorneys at Law, for Amerada  
Hess Corporation; William B. Marcus, for JBS Energy, Inc.;  
Morse, Richard, Weisenmiller & Associates, by Sarah Nickerson,  
for Bob Weisenmiller; Kenneth Pickett, for Independent Power  
Corporation; John D. Quinley, for Cogeneration Service Bureau;  
Frank J. Cooley and Bruce Reed, Attorneys at Law, for Southern  
California Edison Company; Donald G. Salow, for Association of  
California Water Agencies; Chris Siemens, for Power Users  
Protection Council; Gary D. Simon, for El Paso Natural Gas;  
Thomas R. Sparks, for Unocal Corporation; James Squeri and David  
Simpson, Attorneys at Law, for Armour, St. John, Wilcox, Goodin  
& Schlotz; Downey, Brand, Seymour & Rohwer, by Philip A. Stohr  
and Christopher Ellison, Attorneys at Law, for Industrial Users;  
John K. Van de Kamp, Attorney General of the State of  
California, Andrea Sheridan Ordin, Chief Assistant Attorney  
General, Michael J. Strumwasser, Special Counsel to the Attorney  
General, by Mark J. Urban, Deputy Attorney General, for State of  
California; John R. Vickland, Attorney at Law, for San Francisco  
Bay Area Rapid Transit District; Harry K. Winters, for  
University of California; Matthew Brady and Dian Grueneich,  
Attorneys at Law, for California Department of General Services;  
Messrs. Biddle & Hamilton, by Richard L. Hamilton, Attorney at  
Law, for Western Mobilehome Association; Sara Hoffman, for  
Contra Costa County; Reed V. Schmidt, for California Street  
Light Association; Hart, Neil & Weigler, by Michael P. Alcantar  
and Clyde E. Hirschfeld, Attorneys at Law, and Drazen-Brubaker &  
Associates, Inc., by Donald W. Schoenbeck, for Cogenerators of

APPENDIX A  
Page 2

List of Appearances

Southern California; Hanna and Morton, by Douglas K. Kerner, Attorney at Law, for Santa Fe Geothermal, Inc., Union Oil Company of California, and Independent Energy Producers Association; and Barbara Barkovich, for self; interested parties.

Public Staff Division: Ira Alderson, Javier Plasencia, Attorneys at Law, and Mahendra Jhala.

(END OF APPENDIX A)

APPENDIX B  
Page 1PACIFIC GAS AND ELECTRIC COMPANY  
COMPARISON OF CLASS REVENUE ALLOCATION PROPOSALS  
IN APPLICATION NO. 87-04-035  
(\$000)  
ASSUMING A \$216 MILLION INCREASE

PG&E/PSD Joint Exhibit												Line No.
Line No.	Class	Sales (mm)	Revenue at 4-1-87 Rates (a)	SAPC Allocation (b)	PG&E Full EPMC	PG&E Proposed	PG&E Using PSD/TURN Mar. Costs (c)	PSD Proposed (a),(d)	Industrial Users (e)	ALJ Alternative (f)	Line No.	
1	RESIDENTIAL	22,020,841	\$1,732,045	\$1,810,202	\$2,008,203	\$1,897,491	\$1,897,491	\$1,897,374	\$1,974,337	\$1,897,491	1	
2	Percent Change			4.51	15.94	9.55	9.55	9.55	14.00	9.55	2	
3	LIGHT AND POWER:											
4	SMALL	7,171,756	\$681,750	\$712,264	\$660,067	\$699,925	\$697,801	\$702,650	\$681,711	\$681,750	4	
5	Percent Change			4.48	-3.18	2.67	2.35	3.07	-0.01	.00	5	
6	MEDIUM	10,890,672	\$928,591	\$970,158	\$857,965	\$928,591	\$928,591	\$923,667	\$891,840	\$928,591	6	
7	Percent Change			4.48	-7.61	.00	.00	-0.53	-3.96	.00	7	
8	LARGE	20,023,317	\$1,258,418	\$1,314,570	\$1,205,409	\$1,277,963	\$1,280,132	\$1,282,181	\$1,250,071	\$1,258,418	8	
9	Percent Change			4.46	-9.21	1.55	1.73	1.89	-0.67	.00	9	
10	TOTAL LAP	38,085,745	\$2,868,759	\$2,996,992	\$2,723,441	\$2,906,479	\$2,906,524	\$2,908,496	\$2,823,572	\$2,868,759	10	
11	Percent Change			4.47	-5.07	1.31	1.32	1.39	-1.58	.00	11	
12	AGRICULTURE	2,637,377	\$175,805	\$183,664	\$263,610	\$188,052	\$188,052	\$188,043	\$200,421	\$188,052	12	
13	Percent Change			4.47	49.94	6.97	6.97	6.96	14.00	6.97	13	
14	STREETLIGHTING	280,879	\$36,373	\$37,308	\$35,701	\$36,922	\$36,876	\$37,527	\$36,394	\$36,373	14	
15	Percent Change			2.57	-1.85	1.51	1.38	3.17	.06	.00	15	
16	RAILWAY	249,000	\$17,629	\$18,406	\$15,619	\$17,629	\$17,629	\$17,536	\$15,908	\$17,629	16	
17	Percent Change			4.41	-11.40	.00	.00	-0.53	-9.76	.00	17	
18	ERAM SHORTFALL	N/A	N/A	N/A	N/A	N/A	N/A	\$1,853	N/A	\$38,268	18	
19	SYSTEM TOTAL	63,273,842	\$4,830,611	\$5,046,572	\$5,046,572	\$5,046,572	\$5,046,572	\$5,050,833	\$5,050,833	\$5,046,572	19	
20	Percent Change			4.47	4.47	4.47	4.47	4.56	4.56	4.47	20	

All allocations assume a \$216 million increase over revenues in effect April 1, 1987.

(a) PG&E's revenue at 4-1-87 rates as shown in the PG&E/PSD joint exhibit. PSD's revenue at present rates differs from PG&E's in the joint exhibit. Because of this difference, PSD total revenues are slightly higher than PG&E's, and PSD percent changes differ slightly from the percent changes shown in the joint exhibit.

(b) Association of California Water Agencies (ACWA) prefers SAPC. Although TURN has not submitted a specific revenue allocation proposal, a preference for SAPC was stated at the prehearing conference.

(c) Using PSD's marginal customer and capacity costs in the PSD/TURN joint exhibit.

(d) PSD's class revenue allocation is preferred by California Large Energy Consumers Association (CLECA) and Hemetone Mining.

(e) Industrial Users have proposed that Residential and Agricultural revenues are capped at 14 percent, with EPMC to remaining classes, provided there are no increases to uncapped classes. Because Industrial Users' revenue at present rates differs from PG&E's, their total proposed revenues are slightly higher than PG&E's.

(f) ALJ alternative is based on PG&E's proposed capped EPMC allocation. All uncapped classes are held to no change in revenues, and the shortfall is shown in the "ERAM shortfall" adjustment.

# APPENDIX B Page 2

## PACIFIC GAS AND ELECTRIC COMPANY COMPARISON OF CLASS REVENUE ALLOCATION PROPOSALS ASSUMING A \$140 MILLION INCREASE IN REVENUE IN APPLICATION NO. 87-04-035 (3000)

Line No.	Class	Sales (MM)	Revenue at 4-1-87 Rates(a)	SAPC Allocation	PG&E Full EPMC	PG&E Proposed	PG&E Proposed Using PSD/TURN Mar. Costs(b)	PSD Proposed(c)	Industrial Users(c)	ALJ Alternative(d)	Line No.
1	RESIDENTIAL	22,020,841	\$1,732,045	\$1,782,800	\$1,977,826	\$1,862,798	\$1,862,798	\$1,870,104	\$1,906,622	\$1,862,798	1
2	Percent Change			2.93	14.19	7.33	7.33	7.97	10.08	7.33	2
3	LIGHT AND POWER										
4	SMALL	7,171,736	\$681,750	\$701,366	\$630,153	\$681,750	\$681,750	\$691,914	\$681,750	\$681,750	4
5	Percent Change			2.91	-4.63	.00	.00	1.49	.00	.00	5
6	MEDIUM	10,890,672	\$928,391	\$953,584	\$845,078	\$928,391	\$928,391	\$909,164	\$888,467	\$928,391	6
7	Percent Change			2.91	-8.99	.00	.00	-2.09	-4.32	.00	7
8	LARGE	20,023,317	\$1,258,418	\$1,294,883	\$1,187,362	\$1,258,418	\$1,258,418	\$1,262,653	\$1,248,121	\$1,258,418	8
9	Percent Change			2.90	-5.63	.00	.00	.34	-1.82	.00	9
10	AGRICULTURE	2,637,377	\$175,805	\$180,908	\$239,453	\$185,297	\$185,297	\$185,301	\$193,158	\$185,297	10
11	Percent Change			2.90	47.69	3.40	3.40	3.40	9.98	3.40	11
12	STREETLIGHTING	280,879	\$36,373	\$36,980	\$35,397	\$36,373	\$36,373	\$37,198	\$36,373	\$36,373	12
13	Percent Change			1.67	-2.68	.00	.00	2.27	.00	.00	13
14	RAILWAY	249,000	\$17,629	\$18,134	\$15,388	\$17,629	\$17,629	\$17,261	\$16,144	\$17,629	14
15	Percent Change			2.86	-12.71	.00	.00	-2.09	-6.31	.00	15
16	ERAM Shortfall	N/A	N/A	N/A	N/A	N/A	N/A	\$1,734(e)	N/A	N/A	16
17	SYSTEM TOTAL	63,273,842	\$4,830,611	\$4,970,856	\$4,970,856	\$4,970,856	\$4,970,856	\$4,975,350	\$4,970,856	\$4,970,856	17
18	Percent Change			2.90	2.90	2.90	2.90	2.99	2.90	2.90	18

All allocations assume a \$140 million increase over revenues in effect April 1, 1987.

(a) PG&E's revenue at 4-1-87 rates as shown in the PG&E/PSD joint exhibit. PSD's revenue at present rates differs from PG&E's. Because of this difference, PSD total revenues are slightly higher than PG&E's, and PSD proposed percent changes differ slightly from the percent changes shown in PSD's proposal.

(b) Using PSD's marginal customer and capacity costs in the PSD/TURN joint exhibit.

(c) Revenue allocated to approximate method proposed by Industrial Users in their October 21, 1987 letter to ALJ Patrick. The figures in this column assume PG&E's estimate of revenue at present rates. Residential and Agricultural revenues are capped at 10 percent, with EPMC to remaining classes, provided there are no increases to noncapped classes.

(d) ALJ alternative is based on PG&E's proposed capped EPMC allocation.

(e) "ERAM Shortfall" is the difference between actual and E-20 revenues for Large Light and Power customers on special negotiated contracts.

APPENDIX B  
Page 3PACIFIC GAS AND ELECTRIC COMPANY  
COMPARISON OF CLASS REVENUE ALLOCATION PROPOSALS  
ASSUMING A \$100 MILLION INCREASE IN REVENUE  
IN APPLICATION NO. 87-04-035  
(2000)

Line No.	Class	Sales (Mwh)	Revenue at Ant-87 Rates (a)	SAPC Allocation	PG&E Full EPIC	PG&E Proposed	PG&E Proposed Using PSO/TURM Non-Costs (b)	PSO Proposed (c)	Industrial Users (d)	ALJ Alternative (e)	Line No.
1	RESIDENTIAL	22,020,861	\$1,732,045	\$1,761,235	\$1,961,680	\$1,824,018	\$1,824,018	\$1,855,466	\$1,849,145	\$1,824,018	1
2	Percent Change			2.09	13.26	5.31	5.31	7.13	9.07	5.31	2
3	LIGHT AND POWER										
4	SMALL	7,177,756	\$681,750	\$695,879	\$644,883	\$687,750	\$681,750	\$686,152	\$678,055	\$681,750	4
5	Percent Change			2.07	-9.41	.00	.00	0.63	-0.34	.00	5
6	MEDIUM	10,890,872	\$928,391	\$947,838	\$838,277	\$928,391	\$928,391	\$901,379	\$881,348	\$928,391	6
7	Percent Change			2.07	-9.73	.00	.00	-2.93	-5.09	.00	7
8	LARGE	20,023,217	\$1,238,618	\$1,284,619	\$1,177,749	\$1,258,618	\$1,258,618	\$1,232,174	\$1,238,152	\$1,238,618	8
9	Percent Change			2.07	-6.61	.00	.00	-0.30	-1.61	.00	9
10	AGRICULTURE	2,637,277	\$175,805	\$179,444	\$137,331	\$183,832	\$183,832	\$183,829	\$191,603	\$183,832	10
11	Percent Change			2.07	-16.30	4.37	4.37	0.34	8.99	0.37	11
12	STREETLIGHTING	280,879	\$34,373	\$36,806	\$35,235	\$34,373	\$34,373	\$37,022	\$36,252	\$34,373	12
13	Percent Change			1.19	-3.13	.00	.00	1.78	-0.33	.00	13
14	RAILWAY	249,000	\$17,629	\$17,989	\$15,265	\$17,629	\$17,629	\$17,113	\$16,037	\$17,629	14
15	Percent Change			2.04	-13.41	.00	.00	-2.93	-9.03	.00	15
16	GRAN Shortfall*	N/A	N/A	N/A	N/A	N/A	N/A	\$1,700 (e)	N/A	N/A	16
17	SYSTEM TOTAL	63,275,842	\$4,930,611	\$4,930,611	\$4,930,611	\$4,930,611	\$4,930,611	\$4,934,833	\$4,930,611	\$4,930,611	17
18	Percent Change			2.07	2.07	2.07	2.07	2.16	2.07	2.07	18

All allocations assume a \$100 million increase over revenue in effect April 1, 1987.

(a) PG&E's revenue at ant-87 rates as shown in the PG&E/PSO joint exhibit. PSO's revenue at present rates differs from PG&E's. Because of this difference, PSO total revenues are slightly higher than PG&E's, and PSO proposed percent changes differ slightly from the percent changes shown in PSO's proposal.

(b) Using PSO's marginal customer and capacity costs in the PSO/TURM joint exhibit.

(c) Revenue allocated to customers based on proposal by Industrial Users in their October 21, 1987 letter to ALJ Parties. The figures in this column assume PG&E's estimate of revenue at present rates. Residential and Agricultural revenues are capped at 5 percent, with EPIC to remaining increase, provided there are no increases to noncapped classes.

(d) Alternative to based on PG&E's proposed capped EPIC allocation.

(e) "GRAN Shortfall" is the difference between actual and E-20 revenues for Large Light and Power customers on special negotiated contracts.

(END OF APPENDIX B)



PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102



APPENDIX C

Page 1

October 8, 1987

Bertram D. Patrick  
Administrative Law Judge  
California Public Utilities Commission  
505 Van Ness Avenue  
San Francisco, California 94102

Dear Judge Patrick:

Re: PG&E's ECAC/AER A. 87-04-035; Phase II -  
Stipulation on Incremental Energy Rates

On October 6, 1987 Pacific Gas and Electric Co. (PG&E), the California Cogeneration Council (CCC), Henwood Energy Services, Inc. (HESI) and the Public Staff Division (PSD) reached a stipulation on Incremental Energy Rates (IER) in this proceeding. PSD was asked to communicate this agreement among the parties to the ALJ. It is PSD's understanding that the following stipulation mutually and accurately represents the agreement reached by the aforementioned parties in this proceeding.

It was agreed that an annual IER figure of 9182 (BTU/KWH) is a reasonable measure for establishing prices to Qualifying Facilities (QFs). Furthermore, it was agreed that using marginal energy cost relationships was a reasonable method of establishing seasonal and Time Of Use (TOU) IERs. The stipulated figures are shown in Table 1. Capacity prices were not at issue and current prices remain in effect.

The stipulated IERs are not intended to endorse any single method proposed by the aforementioned parties. The IERs have been established for an interim basis, pending decisions on short-run IER methodology in OIR-2.

The IERs will become effective, for the QF payment periods, February 1, 1988 and May 1, 1988. The May 1, 1988 IER will remain in effect for the payment period starting August 1, 1988 if an update has not been performed by that time.

This stipulation resolves all outstanding IER issues in this proceeding. Consequently, the parties have agreed that it is not necessary to brief any IER issues for Phase II of this proceeding.

It is PSD's understanding that the above-participating parties will forward a confirmation letter to the ALJ regarding the stipulation after receipt of this letter.

A.87-04-005, A.87-04-035 ALJ/BDP/tcg

ALJ Patrick  
October 8, 1987  
Page 2

APPENDIX C  
Page 2

If there are any questions or apparent misunderstandings, I urge prompt notification.

Very truly yours,



F. Javier Plasencia  
Staff Counsel

FJP:lkw

Attachment

cc: All parties of record

## APPENDIX C

Page 3

TABLE 1

A. 87-04-035

## STIPULATED IERs BY COSTING PERIOD &lt;1&gt;

	MARGINAL COST <2> MILLS/KWH	% OF ANNUAL	IERs	HOURS <3>
<u>SUMMER</u>				
PEAK	26.977	108.98%	10007	768
MID PEAK	25.823	104.32%	9579	896
OFF PEAK	24.095	97.34%	8938	2016
SUPER OFF PEAK	21.440	86.61%	7953	736
— SEASONAL —	24.504	98.99%	9090	4416
<u>WINTER</u>				
MID PEAK	26.992	109.04%	10012	1638
OFF PEAK	25.103	101.41%	9312	2002
SUPER OFF PEAK	20.265	81.87%	7517	728
— SEASONAL —	25.005	101.02%	9275	4368
— ANNUAL —	24.753	100.00%	9182	8784

&lt;1&gt; COSTING PERIODS AS ADOPTED IN D.86-12-091

&lt;2&gt; MARGINAL COST CALCULATED FROM PSD QF-IN PRODUCTION COST SIMULATION

&lt;3&gt; FEBRUARY 1, 1988 TO JANUARY 31, 1989

(END OF APPENDIX C)

## APPENDIX D

Page 1

ADOPTED

INTRA-CLASS REVENUE ALLOCATION  
TO TARIFF SCHEDULES

Pacific Gas and Electric Company, A.87-04-035

Based on Capped EPNC Revenue Allocation  
and Assumed Illustrative \$100 Million Increase

CUSTOMER CLASS	AVG. RATE	TARIFF SCHEDULE	SALES (MkWh)	ADOPTED REVENUE(\$000s)	ADOPTED AVG. RATE/KWh	CHANGE FROM PRESENT RATES
Residential	\$0.08328	Schedule E-1	21,711,462	\$1,826,904	\$0.08414	5.18%
		Schedule E-7	309,379	\$20,807	\$0.06725	10.24%
Small Light & Power	\$0.09556	Schedule A-1	6,977,282	\$667,327	\$0.09564	.00%
		Schedule A-6	100,870	\$9,387	\$0.09306	.00%
		Schedule A-15	2,064	\$262	\$0.12704	.00%
		Schedule TC-1	91,540	\$8,216	\$0.08975	.00%
Medium Light & Power	\$0.08576	Schedule A-10	9,525,673	\$822,187	\$0.08631	.00%
		Schedule A-11	1,365,000	\$111,628	\$0.08178	.00%
		Schedule S		\$84	n/a	.00%
Large Light & Power	\$0.06332	Schedule E-20-T	1,559,414	\$73,390	\$0.04706	.00%
		Schedule E-20-P	9,177,936	\$544,426	\$0.05932	.00%
		Schedule E-20-S	8,998,436	\$633,545	\$0.07041	.00%
		Schedule A-RTP	184,372	\$10,123	\$0.05491	.00%
		Schedule S		\$120	n/a	.00%
		Spec'l Contracts	103,163	\$6,550	\$0.06349	.00%
Agriculture	\$0.06990	Schedule PA-1	1,022,030	\$87,685	\$0.08580	4.56%
		Schedule AG-1A	21,300	\$2,719	\$0.12763	4.56%
		Schedule AG-RA	11,420	\$935	\$0.08190	4.56%
		Schedule AG-VA	11,420	\$880	\$0.07702	4.56%
		Schedule AG-4A	25,340	\$1,396	\$0.07481	4.56%
		Schedule AG-5A	36,420	\$2,284	\$0.06272	4.56%
		Schedule AG-6A	181,640	\$11,573	\$0.06371	4.56%
		Schedule AG-1B	37,660	\$4,038	\$0.10722	4.56%
		Schedule AG-RB	25,690	\$2,261	\$0.08801	4.56%
		Schedule AG-VB	25,340	\$2,062	\$0.08139	4.56%
		Schedule AG-4B	37,110	\$2,893	\$0.07795	4.56%
		Schedule AG-5B	224,692	\$11,128	\$0.04953	4.56%
		Schedule AG-6B	977,310	\$53,726	\$0.05497	4.56%
Railway	\$0.07119					
Streetlight Energy	\$0.07296					

1/ Revenue excludes optional TOU meter charges, submeter discounts, and streetlight facilities charges.

## APPENDIX D

Page 2

ADOPTED RATES FOR  
PACIFIC GAS & ELECTRIC COMPANY  
A.87-04-035.

Based on Capped EPMC Revenue Allocation  
and Assumed Illustrative \$100 Million Revenue Increase

Rate Component	PRESENT RATES (as of 7/1/87)		ADOPTED RATES	
	SUMMER	WINTER	SUMMER	WINTER
(\$/KWH, \$/KW, \$/CUSTOMER MONTH)				
<hr/>				
<u>RESIDENTIAL</u>				
E-1				
Tier 1 Energy	\$ .06465	\$ .06465	\$ .06622	\$ .06622
Tier 2 Energy	\$ .10396	\$ .10396	\$ .11223	\$ .11223
Minimum Charge	\$5.00	\$5.00	\$5.00	\$5.00
E-7				
On-Peak Energy	\$ .21992	\$ .10119	\$ .16685	\$ .11397
Off-Peak Energy	\$ .05278	\$ .06577	\$ .07319	\$ .07434
Baseline Credit	\$ .03930	\$ .03930	\$ .04601	\$ .04601
Minimum Energy Charge	\$5.00	\$5.00	\$5.00	\$5.00
Meter Charge	\$4.50	\$4.50	\$4.50	\$4.50
<u>AGRICULTURAL</u> 1/				
AG-1-A				
Energy Charge	\$ .08925	\$ .08925	\$ .09376	\$ .09376
Demand Charge	\$1.25	\$1.25	\$1.30	\$1.30
Customer Charge	\$7.50	\$7.50	\$7.50	\$7.50
AG-R-A				
On-Peak Energy	\$ .12122		\$ .12728	
Partial-Peak Energy		\$ .04994		\$ .05244
Off-Peak Energy	\$ .04849	\$ .03830	\$ .05091	\$ .04021
Demand Charge	\$2.50	\$2.50	\$2.60	\$2.60
Customer Charge	\$7.50	\$7.50	\$7.50	\$7.50
Meter Charge	\$11.30	\$11.30	\$11.30	\$11.30

1/ The rate limiter applicable to the "AG" rate series will be \$0.69866/kWh.

## APPENDIX D

Page 3

ADOPTED RATES FOR  
PACIFIC GAS & ELECTRIC COMPANY  
A.87-04-035

Based on Capped EPMC Revenue Allocation  
and Assumed Illustrative \$100 Million Revenue Increase

Rate Component	PRESENT RATES (as of 7/1/87)		ADOPTED RATES	
	SUMMER	WINTER	SUMMER	WINTER
(\$/KWH, \$/KW, \$/CUSTOMER MONTH)				
-----				
AG-V-A				
On-Peak Energy	\$ .11919		\$ .12497	
Partial-Peak Energy		\$ .04911		\$ .05149
Off-Peak Energy	\$ .04768	\$ .03767	\$ .04999	\$ .03950
Demand Charge	\$2.50	\$2.50	\$2.60	\$2.60
Customer Charge	\$7.50	\$7.50	\$7.50	\$7.50
Meter Charge	\$7.00	\$7.00	\$7.00	\$7.00
AG-4-A				
On-Peak Energy	\$ .11827		\$ .12355	
Partial-Peak Energy		\$ .04873		\$ .05091
Off-Peak Energy	\$ .04731	\$ .03737	\$ .04942	\$ .03904
Demand Charge	\$2.50	\$2.50	\$2.60	\$2.60
Customer Charge	\$7.50	\$7.50	\$7.50	\$7.50
Meter Charge	\$7.00	\$7.00	\$7.00	\$7.00
AG-5-A				
On-Peak Energy	\$ .10411		\$ .10896	
Partial-Peak Energy		\$ .04289		\$ .04489
Off-Peak Energy	\$ .04164	\$ .03290	\$ .04358	\$ .03443
Demand Charge	\$3.25	\$3.25	\$3.40	\$3.40
Customer Charge	\$7.50	\$7.50	\$7.50	\$7.50
Meter Charge	\$7.00	\$7.00	\$7.00	\$7.00
AG-6-A				
Energy Charge	\$ .05398	\$ .03689	\$ .05652	\$ .03863
Demand Charge	\$3.25	\$3.25	\$3.40	\$3.40
Customer Charge	\$7.50	\$7.50	\$7.50	\$7.50
AG-1-B				
Energy Charge	\$ .07804	\$ .07804	\$ .08190	\$ .08190
Demand Charge	\$1.50	\$1.00	\$1.55	\$1.05
Customer Charge	\$7.50	\$7.50	\$7.50	\$7.50

ADOPTED RATES FOR  
PACIFIC GAS & ELECTRIC COMPANY  
A.87-04-035

Based on Capped EPMC Revenue Allocation  
and Assumed Illustrative \$100 Million Revenue Increase

Rate Component	PRESENT RATES (as of 7/1/87)		ADOPTED RATES	
	SUMMER	WINTER	SUMMER	WINTER
(\$/KWH, \$/KW, \$/CUSTOMER MONTH)				
-----				
AG-R-B				
On-Peak Energy	\$ .06908		\$ .07224	
On-Peak Demand	\$1.20		\$1.25	
Partial-Peak Energy		\$ .05693		\$ .05942
Off-Peak Energy	\$ .05527	\$ .04366	\$ .05769	\$ .04557
Maximum Demand	\$3.00	\$2.00	\$3.15	\$2.10
Customer Charge	\$7.50	\$7.50	\$7.50	\$7.50
Meter Charge	\$8.40	\$8.40	\$8.40	\$8.40
AG-V-B				
On-Peak Energy	\$ .06638		\$ .06962	
On-Peak Demand	\$1.20		\$1.25	
Partial-Peak Energy		\$ .05469		\$ .05718
Off-Peak Energy	\$ .05310	\$ .04195	\$ .05552	\$ .04386
Maximum Demand	\$3.00	\$2.00	\$3.15	\$2.10
Customer Charge	\$7.50	\$7.50	\$7.50	\$7.50
Meter Charge	\$6.00	\$6.00	\$6.00	\$6.00
AG-4-B				
On-Peak Energy	\$ .06512		\$ .06812	
On-Peak Demand	\$1.20		\$1.25	
Partial-Peak Energy		\$ .05366		\$ .05606
Off-Peak Energy	\$ .05210	\$ .04116	\$ .05443	\$ .04300
Maximum Demand	\$3.00	\$2.00	\$3.15	\$2.10
Customer Charge	\$7.50	\$7.50	\$7.50	\$7.50
Meter Charge	\$6.00	\$6.00	\$6.00	\$6.00

## APPENDIX D

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ADOPTED RATES FOR  
PACIFIC GAS & ELECTRIC COMPANY  
A.87-04-035

Based on Capped EPMC Revenue Allocation  
and Assumed Illustrative \$100 Million Revenue Increase

Rate Component	PRESENT RATES (as of 7/1/87)		ADOPTED RATES	
	SUMMER	WINTER	SUMMER	WINTER
(\$/KWH, \$/KW, \$/CUSTOMER MONTH)				
-----				
AG-4-C				
On-Peak Energy	\$ .06512		\$ .06812	
On-Peak Demand	\$1.20		\$1.25	
Partial-Peak Energy	\$ .06380	\$ .05366	\$ .06665	\$ .05606
Off-Peak Energy	\$ .04785	\$ .04116	\$ .04999	\$ .04300
Maximum Demand	\$3.00	\$2.00	\$3.15	\$2.10
Customer Charge	\$7.50	\$7.50	\$7.50	\$7.50
Meter Charge	\$6.00	\$6.00	\$6.00	\$6.00
AG-5-B				
On-Peak Energy	\$ .04035		\$ .04144	
On-Peak Demand	\$2.20		\$2.25	
Partial-Peak Energy		\$ .03325		\$ .03409
Off-Peak Energy	\$ .03228	\$ .02937	\$ .03309	\$ .03011
Maximum Demand	\$4.50	\$3.00	\$4.50	\$3.00
Customer Charge	\$7.50	\$7.50	\$7.50	\$7.50
Meter Charge	\$6.00	\$6.00	\$6.00	\$6.00
AG-5-C				
On-Peak Energy	\$ .04035		\$ .04144	
On-Peak Demand	\$2.20		\$2.25	
Partial-Peak Energy	\$ .03949	\$ .03325	\$ .04048	\$ .03409
Off-Peak Energy	\$ .02962	\$ .02937	\$ .03037	\$ .03011
Maximum Demand	\$4.50	\$3.00	\$4.50	\$3.00
Customer Charge	\$7.50	\$7.50	\$7.50	\$7.50
Meter Charge	\$6.00	\$6.00	\$6.00	\$6.00
AG-6-B				
Energy Charge	\$ .03779	\$ .03091	\$ .04029	\$ .03296
Demand Charge	\$4.50	\$3.00	\$4.50	\$3.00
Customer Charge	\$7.50	\$7.50	\$7.50	\$7.50



## APPENDIX D

Page 6

ADOPTED RATES FOR  
PACIFIC GAS & ELECTRIC COMPANY  
A.87-04-035

Based on Capped EPMC Revenue Allocation  
and Assumed Illustrative \$100 Million Revenue Increase

Rate Component	PRESENT RATES (as of 7/1/87)		ADOPTED RATES	
	SUMMER	WINTER	SUMMER	WINTER
(\$/KWH, \$/KW, \$/CUSTOMER MONTH)				
PA-1				
Energy Charge	\$.07635	\$.07635	\$.07983	\$.07983
Demand Charge	\$.60	\$.60	\$.63	\$.63
PA-2				
On-Peak Energy	\$.12701	\$.10346	\$.13280	\$.10818
Partial-Peak Energy	\$.07617	\$.07617	\$.07964	\$.07964
Off-Peak Energy	\$.06552	\$.06552	\$.06851	\$.06851
Demand Charge	\$.80	\$.80	\$.84	\$.84
Meter Charge	\$10.00	\$10.00	\$10.00	\$10.00
On-Peak Energy	\$.12171	\$.12171	\$.12726	\$.12726
Off-Peak Energy	\$.07091	\$.07091	\$.07414	\$.07414
Meter Charge	\$3.75	\$3.75	\$3.75	\$3.75
PA-4A				
On-Peak Energy	\$.21485	\$.18885	\$.22464	\$.19746
Off-Peak Energy	\$.04595	\$.04595	\$.04804	\$.04804
Demand Charge	\$.60	\$.60	\$.63	\$.63
Meter Charge	\$6.50	\$6.50	\$6.50	\$6.50
PA-4B				
On-Peak Energy	\$.25759	\$.24323	\$.26933	\$.25432
On-Peak Demand	\$.80	\$.80	\$.84	\$.84
Partial-Peak Energy	\$.05908	\$.05908	\$.06177	\$.06177
Off-Peak Energy	\$.04022	\$.04022	\$.04205	\$.04205
Maximum Demand	\$.60	\$.60	\$.63	\$.63
Meter Charge	\$6.79	\$6.79	\$6.79	\$6.79
PA-R				
Restricted-Peak Energy	\$.18728	\$.17075	\$.19582	\$.17853
On-Peak Energy	\$.10605	\$.09391	\$.11088	\$.09819
Off-Peak Energy	\$.06386	\$.06385	\$.06677	\$.06676
Meter Charge	\$10.00	\$10.00	\$10.00	\$10.00

(END OF APPENDIX D)

It should be noted that for a \$140 million (or \$100 million) revenue increase, the ALJ alternative and PG&E proposal have the same result. The increase would be limited to the Residential and Agricultural classes. Rates for all other classes would not change.

PSD's Position

SAPC

PSD opposes the use of SAPC for interclass revenue allocation for the same reasons set forth by PG&E.

EPMC

PSD and PG&E are in agreement that the capped EPMC allocation method adopted in D.86-08-083 be adopted in this case. PSD and PG&E agree that the adopted caps of 5% and 2.5% over system average percentage change be maintained to moderate residential and agricultural bill increases respectively.

However, PSD and PG&E then disagree on the method for allocating revenues after the capped residential and agricultural class allocations have been made.

PSD proposes one modification to the methodology adopted by the Commission in D.86-08-083. PSD proposes that in offset cases, after the capped allocations are made, the residual revenue requirement should be allocated using EPMC, subject to a floor on decreases of 5% below the system average change, in addition to the cap 5% above it. According to PSD, this would help prevent rate instability between major rate cases.

Unlike the PG&E and the ALJ alternatives, PSD has no constraints or formula with regard to revenue allocation to the Light and Power, Streetlighting, and Railway classes. Accordingly, depending on whether the revenue increase is \$216, \$140 or \$100 million, these classes receive increases or decreases.

PSD argues that its proposed modification results from a legitimate concern for rate stability. PSD notes that the parties are currently developing a rate design in the context of an offset

IU submits that should the Commission be reluctant to move swiftly in the direction of EPMC and feel compelled to shield residential and agricultural customers from the impact of a cost-based revenue allocation, the Commission should at least ensure that such protection to these customer classes does not result in increased rates for any members of the Light and Power classes.

IU points out that as witness Barkovitch testified, all the Light and Power classes now bear revenue allocations in excess of the EPMC standard, so an approach which avoids any increase in revenue allocation to these classes is appropriate.

While CH&MA prefers the revenue allocation proposal of IU, it would not be averse to the ALJ alternative method of revenue allocation, which would result in no increases for any Light and Power class. CH&MA notes that no significant opposition was expressed to the ALJ revenue allocation alternative and PG&E witness Shaub testified that the concepts underlying the ALJ alternative were sound. Also, CH&MA notes that in the case of a revenue increase of \$100 million, PG&E's approach produces the same result as the ALJ alternative: zero revenue change for all customer classes except residential and agricultural, which would bear modest increases.

CH&MA notes that the combination of pending PG&E electric matters is likely to produce a total increase in annual revenues in the range of \$140 million. On this basis, CH&MA believes that the ALJ alternative produces a fair revenue allocation, avoiding any increase in the burden to any of the Light and Power classes.

Summary

CH&MA favors the IU's proposal of a revenue allocation formula which closely follows the EPMC principle, and would benefit all Light and Power classes. As an alternative, CH&MA supports the ALJ's approach, "which at least avoids an increase in the revenue allocation to the above-cost rates of Light and Power customers."

already received in the last year? Is it fair in any sense to impose disproportionate increases on residents and farmers based on someone's version of cost, while denying them any opportunity to challenge the accuracy of those alleged costs? TURN submits that each of these questions must be answered in the negative. TURN believes that any application of EPMC in this case must be tempered with reality in the form of very tight caps and a bar on decreases for any class.

#### Summary

TURN opposes the concept of reworking rate design and revenue allocation in ECAC proceedings, and advocates the use of simplified standard methods such as SAPC or equal cents per kilowatt-hour. If EPMC is employed in spite of TURN's objections, at minimum no class should enjoy a rate decrease and no class should bear an increase more than twice the system average.

#### Discussion

We conclude that further movement towards a full EPMC revenue allocation must be made now. Our policy is set forth in D.87-05-071. It has been extensively quoted by the parties to this proceeding and we need not repeat it.

Our decision not to use SAPC in this offset proceeding reflects our concern that we must maintain the momentum achieved so far in moving towards our EPMC goals. SAPC is a viable alternative and we do not rule out the use of SAPC in future offset proceedings. The reason we reject SAPC for this proceeding is that SAPC maintains existing rate relationships and does not move rates toward a full EPMC revenue allocation. And because of the bypass problem, we cannot afford to allow rates to stagnate at present levels relative to each other.

With regard to a timetable for achieving our full EPMC allocation goal, we hope to establish the method and timetable for reaching full EPMC revenue allocations in phase 4 of this proceeding. Also, we are pleased to note from the testimony of

measure of the relative positions of the various classes in relation to their marginal costs.

With regard to the TURN and ACWA arguments related to the accuracy of the marginal costs adopted in D.86-08-083, which are used in the EPMC, we are reviewing these concerns in a separate proceeding. But we are satisfied that the alleged inaccuracies identified on the record do not impact the EPMC allocation in this proceeding. Thus, there is no reason to lay EPMC aside for SAPC in this case.

At the outset of this proceeding, we did consider a revenue increase of \$216 million for revenue allocation exhibits. At the close of these hearings, it was established that the revenue increase would be \$140 million maximum. Also, during the course of the hearings, the parties presented exhibits based on a hypothetical increase of \$100 million. We will focus on the \$140 million and \$100 million scenarios, since these best relate to the actual net amount of revenue increase for which rates will need to be designed.

Also, we should note that we are confronted with a situation which is quite different to what we had in PG&E's 1986 ECAC and general rate cases. There, we were in the happy situation of deciding how much of a decrease each class should receive. This time, unfortunately, we are faced with an increase in the order of 2 or 3%.

Since we have decided to proceed toward EPMC, the positions of the parties can be broadly summarized as follows:

PG&E, CFBF, ACWA, and TURN - no decreases to any class.

PSD, CLECA, and Homestake, I.U., and CH&MA - decreases should be extended to classes entitled to a decrease under EPMC.

Pacific Gas and Electric Company  
**ALJ Alternative**  
(\$100.0 Million Increase Due to ERAM, AER, & Attrition Adjustments) 1/

A.87-04-035

Based on Capped EPHC Revenue Allocation

A.87-04-005, A.87-04-035 /ALJ/BOP/vd1

Class of Service	Sales 2/ kWh (000s)	Present Revenues (7/1/87 Rates)		Percent Change From Present Rev. Assuming EPHC Allocation	Recommended Revenues 1,3/ Percent Change		
		Effective (000s)	Ave. Rate c/kWh		Effective (000s)	Ave. Rate c/kWh	From Present Revenues
Residential	22,020,841	\$1,742,010	7.91	13.18%	\$1,833,983	8.33	5.28%
Small Light & Power	7,171,756	\$685,355	9.56	-5.45%	\$685,355	9.56	.00%
Med. Light & Power	10,890,673	\$934,025	8.58	-9.55%	\$934,025	8.58	.00%
Large Light & Power	20,023,319	\$1,266,227	6.32	-6.49%	\$1,266,227	6.32	.00%
Agriculture	2,637,372	\$176,326	6.69	46.78%	\$184,353	6.99	4.55%
Railway	249,000	\$17,727	7.12	-14.99%	\$17,727	7.12	.00%
Streetlight	280,880	\$36,374	12.95	-1.75%	\$36,374	12.95	.00%
Other Revenue		\$22,177			\$22,177		
Total	63,273,841	\$4,880,221	7.71	2.05%	\$4,980,221	7.87	2.05%

1/ This table reflects a \$100.0 million increase from system revenues at present rates of \$4,880 million, due to ERAM, AER, and attrition adjustments. No changes are assumed in revenue from meter charges for optional TOU schedules, submeter discounts, streetlight facilities charges, load management adjustments, or other operating revenues. Revenues from meter charges, submeter discounts, streetlight facilities charges, and load management adjustments are included in customer class revenues shown in this table.

2/ Based on adjusted residential sales.

3/ The proposed revenues reflect the 5% cap on residential and 2.5% cap on agriculture.

period starting August 1, 1988 if an update has not been performed by that time.

A copy of the stipulation was served on all parties to this proceeding. Parties were given 10 days to file objections. No objections were received.

We conclude that the stipulation, as set forth in Appendix C, is reasonable in light of the record and should be adopted.

#### Findings of Fact

1. EPMC revenue allocation of interclass revenues should be used in this offset phase since PG&E needs to continue further movement towards a full EPMC revenue allocation without interclass subsidies.

2. Based on present revenues, rates of the residential and agricultural classes are significantly below the level necessary to collect the cost of serving those classes.

3. The present rates of all classes, other than residential and agriculture, generate revenues above the level necessary to collect the cost of serving those classes.

4. In this phase of PG&E's offset proceeding, it is not appropriate to provide rate reductions to the classes that would be entitled to rate reductions, and, at the same time, impose significant rate increases on the residential and agricultural classes. The impact on these classes would be too harsh.

5. In order to approach an EPMC revenue allocation as rapidly as is realistically possible, the present ceilings of 5% and 2.5% over system average percentage change, by which residential and agricultural classes rates can be increased above the overall system increase, should remain unchanged.

6. The ALJ alternative revenue allocation provides a reasonable balance of the competing interests of the various parties.

7. Under the ALJ alternative revenue allocation, there will be no change in rate schedules, other than to the schedules of the residential and agricultural classes.

8. Under the ALJ alternative revenue allocation, if the net revenue increase is \$140 million, residential rates will increase 7.6% and agricultural rates 5.4%; if the net revenue increase is \$100 million, the increases will be 5.3% and 4.6%, respectively. There will be no change to all other rate schedules.

9. Since the Commission is separately considering PG&E's ECAC, AER, ERAM, and Attrition case, the net amount of revenue increase is not known at this time. Based on the outcome of those decisions, PG&E should file new rates for the residential and agricultural classes based on the ALJ alternative revenue allocation. Rate schedules should be increased by the same percentage as for the whole class. The various demand changes and energy changes should comport with the schedules set forth in Appendix D.

10. The stipulation on IER issues set forth in Appendix C is reasonable in light of the record in this proceeding.

#### Conclusions of Law

1. For purposes of this phase, the ALJ alternative revenue allocation proposal should be adopted.

2. The stipulation on IER issues set forth in Appendix C should be adopted.

3. PG&E should be authorized to file new electric rates for the residential and agricultural classes which may become effective no sooner than January 1, 1988. The new rates should reflect the net amount of the increase granted by the Commission in PG&E's ECAC, AER, ERAM, and Attrition Case. The new rates should be based on the ALJ alternative revenue allocation and comport with the schedules set forth in Appendix D.

4. PG&E should be authorized to file new IERs based on the stipulation set forth in Appendix C.



5. Since the ALJ's Proposed Decision was sent to all parties for comment and the new rates should be in effect on January 1, 1988, this decision should be effective on the date of signature.

INTERIM ORDER

IT IS ORDERED that:

1. Pacific Gas & Electric Company (PG&E) is authorized to file with this Commission on or after the effective date of this order, revised tariff schedules for electric rates which are in accordance with this decision.

2. The revised tariff schedules shall become effective 3 days after the date of filing but not earlier than January 1, 1988, and shall comply with General Order 96-A. The tariffs shall apply to service rendered on or after their effective date.

3. This proceeding shall remain open for the purpose of receiving evidence in Phase 4 - Further Rate Design issues.

This order is effective today.

Dated \_\_\_\_\_, at San Francisco, California.