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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, 1987 to January 31, 1988, were prudent.	Application 88-04-020 (Filed April 7, 1988)
Application of PACIFIC GAS AND ELECTRIC COMPANY for authority to adjust its electric rates effective August 1, 1988.	Application 88-04-057 (Filed April 21, 1988)

(See Decision 88-11-052 for appearances.)

OPINION ON REVENUE ALLOCATION AND RATE DESIGN

I. Background

In an earlier decision in this proceeding, Decision (D.) 88-11-052, we resolved issues concerning the load forecast, resource forecast, modeling conventions, and calculation of the incremental energy rate (IER) for the August 1, 1988 through July 31, 1989 forecast year for Pacific Gas and Electric Company (PG&E). The earlier opinion decided all disputed issues that needed to be resolved before the parties' production cost models could be run to determine the revenue requirement for PG&E's Energy Cost Adjustment Clause (ECAC) expenses and the IER for the forecast period.

At the time of the preparation of the earlier decision, issues related to revenue allocation and rate design had been heard and briefed, but a motion by PG&E and the Commission's Division of Ratepayer Advocates (DRA) caused us to delay our resolution of these issues until this decision. The joint motion, filed on October 4, 1988, requested leave to submit a late-filed exhibit. The impetus behind the motion was a realization that rate changes from three different proceedings involving PG&E--this case, Application (A.) 88-07-037, the proceeding on the attrition rate adjustment (ARA) and cost of capital, and A.84-06-014 and A.85-08-025, the Diablo Canyon proceeding, in which a settlement is now being considered--could all occur on January 1, 1989. Rather than addressing the general issues of revenue allocation and rate design in three separate proceedings, PG&E and DRA proposed that this case should serve as the forum for consideration of the principles that would be applied to the net increase resulting from all three cases.

The problem this motion addressed was the limited record in this case. The net change of revenue requirement in this proceeding was the sum of changes to PG&E's ECAC, Annual Energy Rate, Electric Revenue Adjustment Mechanism (ERAM), Diablo Canyon Adjustment Clause, and Conservation Financing Adjustment (CFA). Most of the testimony and briefs on this issue focused on a rate increase of about $60 million--the range of increases recommended by PG&E and DRA, based on certain assumptions presented in a ruling of the Administrative Law Judge (ALJ) of August 5, 1988. Although the final increase in any of these cases will not be known until we issue our final decisions, PG&E's preliminary estimates were that the revenue requirement increases would be $164 million in the attrition case and $258 million in the Diablo Canyon case. Obviously, the potential increase that could result from these cases is far higher than the increase discussed on the record in this case.

The late-filed exhibit attempts to correct this gap in the record by setting out PG&E's and DRA's joint recommendations for principles the Commission should follow in allocating the increased revenues resulting from these cases and designing the resulting rates.

In a ruling of October 6, the ALJ invited all parties to the three proceedings to respond to the motion and to comment on the contents of the proposed exhibit. Parties were also requested to identify any disputed factual issues raised by the proposed exhibit that needed resolution in evidentiary hearings.

In a ruling of October 24, the ALJ granted the motion and received the joint exhibit as Exhibit 81 in this proceeding. The ruling determined that no factual disputes had been identified and that evidentiary hearings on the content of the joint exhibit were not needed. The ruling also stated that we would consider the comments on the exhibit, along with previously introduced exhibits, testimony presented at the hearings in this case, and arguments made in the earlier briefs, in reaching our decision on revenue allocation and rate design.

We take the joint exhibit and its statement of principles to supersede much of the testimony previously presented by PG&E and DRA. Our discussion of these parties' positions in this decision will quote or paraphrase the principles of the joint exhibit. We assume that the positions taken by PG&E and DRA at the hearings on issues not covered by the joint exhibit are unchanged.

In addition to PG&E and DRA, the parties who were concerned with revenue allocation and rate design were the San Francisco Bay Area Rapid Transit District (BART); the Federal Executive Agencies (FEA); Anheuser-Busch Companies, General Motors Corporation, Nabisco Brands, Inc., and Union Carbide Corporation (Industrial Users); the California Farm Bureau Federation (Farm Bureau); the California Large Energy Consumers Association (CLECA); Toward Utility Rate Normalization (TURN); Contra Costa County (Contra Costa); and the California Manufacturers Association (CMA). In addition, the Association of California Water Agencies (ACWA) presented some of its concerns in this area in a letter of August 31, 1988, to the ALJ.

The procedures of Public Utilities Code $ 311(d) were followed in developing this decision. The ALJ's proposed decision was issued on November 9, 1988. PG&E, DRA, CLECA, Farm Bureau, Industrial Users, and the California Department of General Services commented on the proposed decision.

We have reviewed and carefully considered the comments. We have incorporated appropriate changes from these comments in this decision.

The general positions of all parties were shaped by our decisions on revenue allocation and rate design in PG&E's last ECAC case, A.87-04-005. In D.87-12-003, we adopted a revenue allocation based on the equal percentage of marginal cost (EPMC) method. We have embraced the EPMC approach as a way of developing rates that are based on the costs incurred by groups of customers. In the past, we had applied the system average percentage change (SAPC) or equal cents per kilowatt-hour approaches, but these methods eventually led to rates that were not related to the underlying cost responsibility of the customer groups. The resulting distortions gave improper economic signals and led some customers to leave the system altogether, to the detriment of the remaining customers.

Because some of the existing distortions were great, we balanced our desire to move quickly toward cost-based rates with a consideration of the effect on certain customer groups. This balancing led us to limit the rate increases to some customer classes. In D.87-12-033, we capped the increases to the residential class and the agricultural class at 5% and 2.5% above the SAPC increase. This approach is referred to as the capped EPMC method.

We also considered rate design to a very limited extent in D.87-12-033. In D.88-01-016, we concluded that further hearings on rate design were unnecessary, and that the rate design issues considered in the current proceeding should be limited to residential time-of-use (TOU) rates and agricultural rates.

In addition to the agreements between PG&E and DRA set forth in the joint exhibit, there was considerable agreement between these parties on the revenue allocation and rate design issues raised during the hearings. This agreement was primarily expressed as PG&E's acceptance of DRA's positions (see Tr. 18:1954-1959; Ex.75). In this decision, we will concentrate on the remaining disputes between DRA and PG&E and on the few issues raised by other parties.

II. Interclass Revenue Allocation

The initial step in developing rates is to allocate the revenue requirement to the various rate classes. The forecasted sales for each class are multiplied by current rates to develop the estimates of revenues at present rates. The EPMC approach also requires a calculation of the revenue allocation under the SAPC and full EPMC approaches. These totals are then adjusted to meet the forecasted revenue requirement and other limitations, such as caps on increases for certain classes.

The marginal costs that all parties seem to have used in performing their EPMC allocations were those used by PG&E in its last ECAC case, except for the marginal energy costs, which are an output of the production simulation model runs directed in an earlier decision in this proceeding, D.88-11-052.

We will first describe the joint exhibit's principles for interclass revenue allocation. Then we will present other interclass allocation issues raised by the parties. Finally we will summarize our resolution of these issues.

A. The Joint Exhibit

The joint exhibit states the following principles for interclass revenue allocation:

1. The method used for class revenue allocation should be a capped EPMC method.

2. The revenue adjustments for the ECAC proceeding, ARA, and Diablo Canyon settlement should be combined into a single capped EPMC allocation (one-step method). If the Diablo Canyon settlement change is delayed until after the other changes, the changes for the three cases should be allocated in two steps. The changes resulting from the ECAC and ARA proceedings should be allocated using the capped EPMC method based on the EPMC targets determined for the one-step method. The Diablo Canyon settlement should then be allocated using the SAPC method. For all three revenue changes, the two-step method yields a result that is nearly identical to the result of the one-step method.

3. The residential class allocation should be limited to full EPMC.

4. The agricultural class should receive the same percentage increase as the residential class.

5. Any class that receives a decrease under full EPMC should receive no change.

6. The remaining revenue should be allocated to the other classes based on their marginal cost revenue responsibilities.

In earlier testimony, both parties had proposed use of a capped EPMC approach that would have resulted in increases for the residential and agricultural classes, limited by a set percentage over the SAPC, but below the level called for by a full EPMC allocation. Other classes would have received no change, even though they would have received a decrease under a full EPMC allocation.

Compared to the earlier proposals, the new principles equalize the increases to the residential class and the agricultural class, limit the increase to the residential class to no more than its EPMC share, and continue the condition that no class would receive a decrease. The cap under this proposal is set by the amount of the increase required for the residential class and is limited by the EPMC share of the residential class. The new proposal also contemplates that other classes would receive increases because of the substantially higher revenue requirement.

B. Details of the Capped EPMC Approach

As we have discussed, the joint exhibit proposes that revenues be allocated on an EPMC basis, with the cap for the agricultural class tied to the increase needed to reach full EPMC for the residential class. Other parties proposed variations on the capped EPMC method.

The Farm Bureau advocates a capped EPMC allocation, with the increase to the agricultural class limited to 2.5% over SAPC. This was the cap applied to the agricultural class in PG&E's last ECAC case. Farm Bureau notes that the changes in the structure of agricultural rates ordered in D.87-04-028 were completed on November 1, 1988. These changes resulted in increases to many agricultural customers, according to Farm Bureau, and it is unfair to adopt a higher cap under these circumstances. Farm Bureau also suspects that the review of marginal costs in PG&E's general rate case, taking place next year, will show that agricultural rates are closer to EPMC than under current estimates. Farm Bureau contends that this possibility argues for moderation in increases to agricultural customers.

Under CLECA's recommended capped EPMC approach, the cap on agriculture would be set at 5% above SAPC. CLECA believes that a 2.5% cap will require other customers to subsidize agricultural rates for eight rate changes. CLECA believes that this phase-in to cost-based rates is too gradual and a 5% cap will bring agricultural rates to their full EPMC level at a faster pace. Within the range of revenue increases considered in the ECAC case, CLECA's higher agricultural cap would permit decreases to other classes. But CLECA's proposals are robust enough to be applied directly to the larger revenue increases now being considered, according to CLECA.

CMA supports CLECA's recommendation. CMA is also concerned at the slow progress toward EPMC that would occur with a 2.5% cap on agricultural increases above SAPC. CMA believes that this is an appropriate time to apply a 5% cap, because both the November 1 deadline for the restructuring of agricultural rates and the expected January 1 date of the rate changes occur after the period of high power requirements for most agricultural customers. Agricultural customers will have some time to adjust to these changes before high seasonal power consumption resumes. In addition, CMA believes that this transition period, when many agricultural customers must review their power consumption and consider the new rate schedules, is the best time to give these customers a price signal of the move to cost-based rates. For these reasons, CMA believes that the agricultural cap should be at least 5%.

CMA also believes that no good reason exists to excuse the residential class from bearing its appropriate share of the cost of subsidizing agricultural rates once residential rates reach the full EPMC level. All classes should share equally in the cost of continuing agricultural rates below EPMC, according to CMA.

CMA's final point is that a higher cap on agricultural increases and the sharing of the agricultural subsidy by residential customers would permit some classes that are above their EPMC share to receive rate reductions. CMA opposes the suggested prohibition against reductions when overall revenue requirement is increasing, and CMA notes that such reductions were ordered in the last general rate case of Southern California Edison Company, even though Edison's overall revenue requirement increased (D.87-12-066).

FEA, for reasons similar to those presented by CLECA, favors capping increases to the agricultural class at 10% above SAPC. FEA would cap the residential allocation at the class's full EPMC. This proposal would permit decreases to other classes that are above their EPMC allocation, within the range of increases proposed in the ECAC case.

Industrial Users also believe that with the large potential increases now being contemplated, retaining a 2.5% cap on the agricultural class impedes progress toward full EPMC and is unfair to other customer classes.

TURN's primary recommendation is to use SAPC as the method for allocating revenues in this case. Of the capped EPMC proposals presented by other parties, TURN prefers DRA's original proposal. TURN agrees with DRA that no class should receive a decrease when overall rates are increasing.

CLECA, Industrial Users, and FEA argue that if the Commission's resolution of the Diablo Canyon settlement is delayed, the second step of any two-step approach should also employ the EPMC allocation method. To revert to SAPC for the second step is illogical and violates the Commission's stated intent to continue to progress to full EPMC, according to these parties.

C. <u>The Treatment of Revenues from Special Contracts</u>

PG&E differs with DRA and other parties on the treatment of the revenues from special contracts. PG&E believes that special contracts, contracts between the utility and certain customers at other than the tariff rates, should be accounted for in revenue allocation by using the actual revenues expected from these contracts at the rates set in the contracts, rather than imputing tariff rates to the sales to customers with these contracts. This adjustment will affect the calculation of revenues at present rates, and the calculation of the SAPC and full EPMC revenue allocations.

DRA believes that the calculation of revenues at present rates should include the sales to special contracts customers at the tariff rate that would apply to the customer except for the special contract. DRA's approach is equivalent to treating special contracts customers as a separate class for revenue allocation purposes (see Tr. 20:2127-2128). DRA believes that this is an appropriate way to perform the revenue allocation. The eventual resulting undercollection of revenues will be reflected in the ERAM. The Commission has stated that the shortfalls in revenue from special contracts should be recovered from all customers through the ERAM under present circumstances, according to DRA, and DRA believes that its approach is an efficient way to accomplish the Commission's purpose. Finally, DRA argues that its approach was adopted by the Commission in the last ECAC case, D.87-12-033.

Other parties, particularly CLECA and FEA, agree with DRA's approach.

D. The Treatment of Agricultural Revenues

Farm Bureau argues that the transition from the PA-1 rate schedule to the AG-1 schedule, which was completed on November 1, 1988, must be taken into account in the calculation of revenues at present rates. Since the rates under AG-1 are higher than under PA-1, revenue calculations based on PA-1 will underestimate the revenue contribution of the agricultural class and lead to higher rates for agricultural customers than are justified. Farm Bureau estimates that the revenues at present rates for agricultural customers should be about $8 million higher because of this adjustment.

ACWA joins Farm Bureau in this contention.

DRA responds to this argument by stating that its estimates of revenues already take into account the transition from PA-1 to AG-1 rates, and PG&E's estimates made the same adjustment. Any further adjustment, as urged by Farm Bureau, would distort the revenue allocation.

Farm Bureau also argues that Schedules AG-5 and AG-6 are equivalent to special contracts and the revenues from these schedules should be calculated as if these customers were served under the AG-1 tariff. Farm Bureau thus supports DRA's general approach to the crediting of special contracts' revenues, and would extend that treatment to what it believes are the corresponding customers within the agricultural class. Farm Bureau calculates that this change would increase the revenues at present rates attributed to the agricultural class by over $113 million. With this increase, the revenues for the agricultural class would exceed its full EPMC allocation, according to Farm Bureau.

ACWA makes similar points, and adds that the undercrediting of revenue to AG-5 and AG-6 sales have resulted in setting AG-1 rates at a level higher than a correct EPMC allocation would call for.

PG&E disputes Farm Bureau's contention that Schedules AG-5 and AG-6 are tantamount to special contracts. PG&E points out the rates for these schedules were developed because some agricultural customers were paying above their EPMC allocation. By contrast, special contracts rates normally do not collect the customer's full EPMC allocation, but are pegged to the marginal cost of service. PG&E believes that AG-5 and AG-6 revenues should be treated like special contracts' revenues in that both should be allocated on the basis of the revenues actually recovered from customers and not the rates of another tariff.

DRA joins PG&E in opposing Farm Bureau's contentions and points out that the AG-5 and AG-6 rates are tariff rates, not special contracts based on negotiated rates. DRA also notes that Farm Bureau provided no evidence to support the arguments it made in its brief.

DRA states that it made two adjustments to PG&E's allocation of agricultural sales. First, it reduced the allocation to summer on-peak sales, because it found the allocation--53% of annual sales--to be contrary to a rational selection of a TOU schedule. Second, DRA found that PG&E assumed unusually low load factors, so low that customers on the AG-5 and AG-6 schedules would be ineligible for those schedules. DRA used the load factors adopted in the last ECAC instead.

Farm Bureau disputes the first of these adjustments. Farm Bureau believes that AG-5 and AG-6 are not true TOU schedules.

The differentials between on-peak and off-peak prices are comparatively small, and as a result many of the customers on these schedules do not respond like conventional TOU customers. The resulting flat use pattern accounts for the high proportion of on-peak sales that DRA found, according to Farm Bureau.

E. The Treatment of BART Revenues

BART argues that the railway class should be treated as a separate customer class for purposes of revenue allocation. PG&E and DRA have included BART's sales and revenues as part of the large light and power class. BART argues that the Commission has treated the railway class as a separate class in the past, and that BART's contract with PG&E requires it to be treated as a separate class.

If the railway class is treated as a separate class, BART believes that its rates should be set at its EPMC allocation. PG&E's and DRA's treatment would result in BART's rates being 20% higher than under a full EPMC allocation. BART argues that this discrepancy amounts to a violation of Public Utilities Code § 453(a), which prohibits singling out a person or corporation for prejudice or disadvantage.

BART believes that with the proper treatment, its rates should decline by about $2.5 million, to its full EPMC rate level.

PG&E's and DRA's response is that BART's contract calls for PG&E to supply service to BART under schedules of the large light and power class. For this reason, these parties believe that it is appropriate to include BART as part of the large light and power class for revenue allocation purposes.

F. Treatment of the CFA Decrease

PG&E's earlier recommendation was that the decrease in the CFA should be passed through on an equal cents per kilowatt-hour basis. DRA believes that the changes to the CFA should be allocated like all other changes. Apparently DRA's position has been incorporated in the joint exhibit. The joint exhibit applies to the combined changes in the ECAC proceeding, which include the CFA decrease.

G. Discussion

We will adopt the general principles outlined in the joint exhibit. We continue to hold to our policy of using EPMC to allocate revenues as a way of moving toward fully cost-based rates. However, we recognize that some limits are necessary to moderate the pace at which we achieve this goal, to avoid the severe disruptions that could result from the sudden removal of the distortions that have accumulated in the past.

Thus, we agree that a capped EPMC is the approach to follow in developing the rates resulting from these three cases. By capping the increases to the residential class at its full EPMC allocation and limiting the agricultural increase to the same percentage as the residential class increase, the joint exhibit balances the concerns that have shaped our revenue allocation policy in recent years.

We disagree, however, with the joint exhibit's proposal to use SAPC to allocate the revenue requirement changes associated with the Diablo Canyon stipulation, if the decision in that case is delayed. We believe that the second step should also conform to the capped EPMC principles adopted in the rest of the exhibit. This second step, however, should not be an entirely separate EPMC allocation, with new caps and a new allocation. Rather, the second step revenue changes should be combined with the previously adopted revenue changes and revenue allocations in the first step so that the overall, final revenue allocation conforms to the allocation that would have resulted from the capped EPMC approach if all of the changes had been considered at the same time.

The primary problem with the exhibit's recommended SAPC allocation for the second step is that it is a retreat, albeit a slight one, from our goal. Although the expected differences in the allocations are minor, the SAPC approach nevertheless contains some distortions. For example, under the SAPC approach the streetlighting class receives an increase, even though the revenues of that class most exceed EPMC on a percentage basis. We want to avoid even these minor distortions that result from a SAPC allocation at this time.

For the same reasons, we reject TURN's primary recommendation that the SAPC approach should be applied to the overall revenue changes.

According to the tables attached to the joint exhibit, when the recommended approach is applied to the assumed revenue increases for the three cases, the resulting increase for the agricultural class is less than 3.5% above the system average increase. Although this is slightly above the 2.5% cap we had previously adopted for the agricultural class, we conclude that this level of increase is reasonable in light of the distance of the agricultural class from its EPMC share. We are swayed by the arguments that the 2.5% cap leads to very slow progress toward a full EPMC allocation, but we are reluctant to go beyond a 5% cap, as some parties have proposed. At the levels of the increases we are considering, the approach of the joint exhibit moderates the increase to agricultural customers and makes reasonable progress toward EPMC.

We also approve of capping the increases to the residential class at full EPMC. According to the attachments to the joint exhibit, this level can be reached in these cases with an increase above the system average change of around 3.5%, well below the 5% cap that we had previously applied. We also believe that it is appropriate not to permit the residential allocation to drift above EPMC. Although other classes will still receive increases above their EPMC allocation, and thus contribute some revenues to subsidize the agricultural class, we believe that it is fair to exempt the residential class from contributing to this subsidy. We note that the residential class will receive the largest percentage increase of any class under the assumptions of the joint exhibit. In light of the high rate increases that could result from these cases, we think it is appropriate to moderate the effect on residential customers to this small degree.

The question of how to treat the revenues from special contracts is the subject of detailed consideration in Investigation (I.) 86-10-001 and is still unresolved. No decision has been reached in that case, and none is likely in the next few months. Reasonable arguments have been made for the two treatments proposed in this case. In light of the unresolved state of I.86-10-001, we will continue the treatment we adopted in last year's ECAC case for PG&E. Thus, revenues from special contracts should be included in the revenue allocation calculation at the tariff rates that would otherwise apply to customers of the same class. We concluded in D.87-05-071 that until this issue is resolved in I.86-10-001, any revenue shortfalls should be made up by adjustments in ERAM. Calculating revenues from these contracts at tariff rates is consistent with this conclusion.

Farm Bureau suggested two adjustments to the calculation of agricultural revenues. We are persuaded that both DRA and PG&E have taken the difference in rates between the old PA-1 schedule and the new AG-1 schedule into account in estimating agricultural revenues (Tr. 20:2143), and no further adjustment is appropriate.

On Farm Bureau's second point, we do not agree that the AG-5 and AG-6 schedules are equivalent to special contracts. Other parties have presented many differences between special contracts and AG-5 and AG-6 schedules. The most persuasive difference is the simplest one: AG-5 and AG-6 <u>are</u> tariffs, and sales to customers under those schedules should be accounted for at the tariff rate and not, as Farm Bureau proposes, at the rates that apply to another schedule.

Farm Bureau also disputed DRA's corrections to PG&E's initial allocations of agricultural revenues. Farm Bureau felt the high summer on-peak use was a product of low differentials in on- and off-peak prices. However, DRA made it clear that its adjustments corrected data that were clearly wrong and its revised estimates, which PG&E agreed to, were reasonable (Tr. 20:2147-2150).

BART requests that we affirm that the railroad class is a separate class and that separate rates for that class should be developed if necessary. We note that BART's contract with PG&E calls for service to be provided on the schedules that apply to customers in the large light and power class. Whether BART is classified as a separate class or a subset of the large light and power class is a question of mere semantics, in our view. The important determination is that we conclude from the terms of the contract that it is appropriate to include BART's revenues as part of the large light and power class for purposes of revenue allocation and the development of the schedules that BART will be served under. We find BART's contention that the primary point of the contract is to assert the separate status of the railway class and that new schedules should be developed if needed to maintain that separation to be contrary to the references to specific schedules in the contract.

III. Intraclass Allocation

PG&E and DRA agreed on most elements of intraclass allocation over the course of the hearings. We will summarize the principles stated in the joint exhibit and address the issues raised by other parties in this area.

A. The Joint Exhibit

The joint exhibit sets out the following principles for intraclass revenue allocation:

1. The class average percentage change should be applied to schedules in the small and medium light and power classes.

2. A capped EPMC allocation should be applied to Schedule E-7, the TOU schedule for the residential class.

3. In the large light and power class, the marginal cost revenue responsibility for Schedules E-24 and E-25 and the railway class should be included in the allocation to Schedule E-20. The railway class will receive the resulting E-20 rates. Schedules E-24 and E-25 will be designed to be revenue-neutral with the resulting E-20 rates.

4. The target allocations for E-20 nonfirm schedules should be determined using the dollar per kilowatt discounts adopted in PG&E's 1986 ECAC and 1987 general rate case. During 1987 and 1988, SAPC rate adjustments have caused the discounts implicit in the rates to diverge from the adopted levels. Movement back to the adopted levels should be capped at 5% above or below the current discounts.

5. A capped EPMC allocation should be applied in the large light and power class. The cap should be 2.5% above or below the class percentage revenue change.

6. If the Diablo Canyon settlement is delayed, the preceding five steps should be applied to the allocation of the revenues in the ECAC and attrition cases. SAPC adjustments should be applied to all schedules to reflect the Diablo Canyon settlement.

Although the joint exhibit did not state a specific level for the recommended cap for Schedule E-7, during the hearings PG&E recommended a cap for Schedule E-7 of 5% over the average percentage increase for the class. The illustrative schedules of the joint exhibit comply with this limitation.

B. Other Issues

CLECA was concerned with the allocation within the large light and power class. CLECA recommended that allocation within the class should also be on an EPMC basis. If no marginal cost information is available, CLECA recommends that SAPC should be applied. The primary difference between CLECA's position and the recommendations of the joint exhibit is that DRA and PG&E would apply a 2.5% cap and floor to the EPMC-based allocation within the class. CLECA points out that under the proposal of the joint exhibit, the transmission and primary E-20 schedules receive the same percentage increase (because of the operation of the 2.5% floor), even though the transmission level customers are much further from EPMC. To avoid this "unfair and inappropriate" result, CLECA proposes a 5% cap and a floor of no decrease for the allocation within the large light and power class.

FEA proposes essentially the same allocation method as CLECA, for similar reasons.

C. Discussion

For the level of revenue requirement increase assumed in the joint exhibit, we conclude that for the large light and power class, the 2.5% ceiling and floor proposed in the joint exhibit is appropriate. This proposal makes adequate progress towards EPMC within the class without subjecting any particular schedule to a disproportionate rate increase. FEA and CLECA have made good arguments in favor of a higher cap, and these arguments reinforce our belief that we should continue to move towards EPMC in intraclass allocation whenever marginal cost information is available. This movement requires a consideration of the effect on individual classes and customers, and in this case that consideration leads us to favor the proposal of DRA and PG&E.

The remainder of the proposals of the joint exhibit were either not controversial or were related to issues that were raised in the section on interclass allocation. We will adopt the principles of the joint exhibit on intraclass allocation, with the exception of the provision calling for spreading of the revenues of the Diablo Canyon settlement on a SAPC basis. As we have discussed in the previous section, we believe that an EPMC-based allocation should apply to the Diablo Canyon revenues, even if the decision in that case is delayed slightly. We acknowledge and agree, however, that the SAPC approach should be used if adequate marginal cost information is not available for a particular schedule.

IV. Rate Design

D.88-01-016 limited the rate design issues in this proceeding to consideration of certain aspects of agricultural rate design and residential TOU rate design. The evidence introduced at the hearings stayed within this limitation. However, the much larger increase in revenue assumed in the joint exhibit led PG&E and DRA to present a few principles that affected other areas of rate design.

A. The Joint Exhibit

The joint exhibit stated the following principles for rate design:

1. Within the residential class, the Tier 1, or baseline, rate of Schedule E-1 should be set at the percentage of the system average rate adopted in I.88-07-009, the proceeding that is considering revision of the baseline allocations.

2. Schedule E-7 rates should be adjusted (a) by moving 75% of the way to a full EPMC seasonal allocation, (b) by moving 35% of the way to a full EPMC summer TOU differential, and (c) by setting the baseline discount so that the weighted average Tier 1 rate is equal to 0.94 (80/85) of the percentage of the system average rate adopted for Schedule E-1.

3. For all nonresidential classes, the relationships among TOU energy charges in current rates should be maintained.

4. Within the agricultural class, the maximum demand charges and rate limiters should be

increased by the class average percentage change. Energy and on-peak demand charges should be adjusted by equal percentages within schedules to recover the remaining revenue. For rate design calculations, Schedules AG-4C and AG-4B and Schedules AG-5C and AG-5B should be combined.

5. Within the large light and power class, maximum demand charges and rate limiters should be adjusted by the combined percentage change in the revenue allocations for the medium and large light and power classes. Energy and on-peak demand charges should be adjusted by equal percentages within schedules to recover the remaining revenue. Schedules E-24 and E-25 should be adjusted to remain revenue neutral with Schedule E-20.

6. Within the medium light and power class, the maximum and on-peak demand charges should be those determined for Schedule E-20 Secondary. Voltage discounts should be calculated as the difference between the maximum demand charge for Schedule E-20 Secondary, and those for Schedules E-20 Primary and E-20 Transmission. Energy charges should be adjusted by equal percentages within schedules to recover the remaining revenue.

7. Standby charges should be set at the maximum demand charge levels determined for the large light and power class.

As we have mentioned, several of these principles violated our earlier determination of the appropriate scope of the consideration of rate design in this case. It appears, however, that the recommendations exceeding our earlier limitations were made necessary by the greater revenue increases that accompanied the consideration of the increases from the ARA and Diablo Canyon settlement cases. These recommendations appear to be in the nature of housekeeping adjustments that need to be made to keep relationships within the classes in proportion to our earlier determinations. Our conclusion is supported by the lack of any remarks on these recommendations in the comments responding to the motion to admit Exhibit 81. Despite our earlier decision, we will take these recommendations into account in reaching our final decision on rate design.

B. Other Issues

CLECA and FEA both recommend that any rate increase to the large light and power class should be spread to each rate component (demand, customer, and energy charges) on an equal percentage basis until such time as the rate component is at its EPMC level. This recommendation would primarily affect demand and customer charges, which CLECA states are not at their full EPMC level.

Contra Costa was primarily concerned with the residential TOU program. Its concerns were satisfied by an agreement reached between PG&E and DRA. In addition to the points included in the joint exhibit, PG&E agreed to install an annual minimum of 10,000 residential TOU meters for new customers on Schedule E-7 in 1988 and 1989. In addition, PG&E will try to catch up on its deficit in installations in 1987.

PG&E also agreed to file testimony in its next general rate case on the results of studies on the residential TOU program.

DRA had originally proposed that residential TOU hours should be expressed in terms of standard time, which would have the effect of shifting the peak period during daylight savings time. PG&E rejected this proposal because of its fear of customer confusion. These parties, joined by Contra Costa, eventually agreed that DRA and PG&E would perform a joint study on the desirability of such a change.

PG&E raised an issue concerning the definition of the agricultural class. PG&E recommends that customers should be served on agricultural schedules if 70 percent or more of the energy usage of the customer's account is dedicated to agricultural end-uses. Agricultural end-uses include growing crops, raising livestock, pumping water for irrigation, or other uses that involve production for sale and that do not change the form of the agricultural product.

PG&E also recommends that the Commission adopt the new definition of the agricultural class in this proceeding, but the definition would not be implemented until next year's ECAC decision. The intervening year would give PG&E time to identify affected customers and inform them of their options in their new rate classes.

C. Discussion

We will adopt most of the principles for rate design proposed in the joint exhibit. No party disputed these principles.

On one point, however, we disagree with the joint exhibit. Rather than setting the Tier I rate on a percentage basis, we believe the absolute differential between the Tier I (baseline) and Tier II rates of Schedule E-1 recently adopted in D.88-10-062 should be maintained. This approach is more in keeping with the intent of D.88-10-062 than the joint exhibit's proposal.

We agree with CLECA's general point that EPMC principles should apply to the rate components, but this proposal was not discussed in detail at the hearings, and we are uncertain about the mechanics and effects of implementing CLECA's proposal. In addition, we are unclear about whether CLECA's proposal can be harmonized with the joint exhibit's recommendations. We will not adopt CLECA's recommendation at this time, but we intend to consider this proposal in more detail in future proceedings.

No party opposed PG&E's recommendations for adopting and implementing a new definition of the agricultural class, and we will adopt PG&E's proposals.

In addition, we endorse the terms of the agreement between DRA and PG&E on the residential TOU program. This agreement was fully supported by Contra Costa.

Findings of Fact

1. Allocation of interclass revenues by the EPMC approach should continue for the revenue changes associated with this ECAC proceeding, the Diablo Canyon settlement, and the ARA and cost of capital proceeding, since PG&E needs to continue movement toward a full EPMC revenue allocation without interclass subsidies.

2. The present rates of the residential and agricultural classes are below the levels necessary to recover the costs of serving those classes, and other classes generate revenues above the level needed to collect the costs of serving those classes.

3. A revenue allocation based on a full EPMC approach would produce significant rate increases for the agricultural class, and the Commission's policy is to give agricultural customers continued high priority in mitigating the impact of implementing the Commission's EPMC goals.

4. The proposals of the joint exhibit generally provide a reasonable balance of the competing interests in this case.

5. The Commission is separately considering PG&E's ECAC, ARA, and Diablo Canyon cases, and the total revenue increase is not known at this time.

6. The question of how to treat the revenues from special contracts is being considered in detail in I.86-10-001, but no resolution of that issue has yet been made.

7. BART's contract with PG&E requires PG&E to provide service to BART at its applicable large light and power schedules.

Conclusions of Law

1. The principles for allocating revenue and designing rates for the revenue increases currently being considered by the Commission in this proceeding, the ARA and cost of capital case, and the Diablo Canyon settlement should be established in this case.

2. The principles proposed by the joint exhibit for allocating revenue among customer classes should be adopted, except

that if the resolution of the Diablo Canyon settlement is delayed, the revenue increase resulting from that resolution should also be allocated according to EPMC principles. The allocations of revenue under a two-step allocation should be equal to those that would have resulted from a one-step allocation of the total revenues from these three cases.

3. For purposes of the revenue allocation in this proceeding, the revenues from special contracts should be included at tariff rates in the calculation of revenues at present rates.

4. Schedules AG-5 and AG-6 are tariffs and are not equivalent to special contracts.

5. BART should be included in the large light and power class for purposes of revenue allocation and the development of rates.

6. The principles proposed by the joint exhibit for intraclass revenue allocation are reasonable, except that if resolution of the Diablo Canyon settlement is delayed, the intraclass revenue allocation should still follow the EPMC approach.

7. The allocation to Schedule E-7 should not exceed 5% over the average percentage increase for the residential class.

8. The principles proposed by the joint exhibit for rate design are reasonable, except for the principle calling for baseline rates to be set on a percentage basis. The absolute differential between the Tier I (baseline) and Tier II rates of Schedule E-1 should be maintained at the level adopted in D.88-10-062.

9. The application of the EPMC approach to rate components should be considered in future proceedings addressing broad changes in PG&E's rate design.

10. Beginning on the effective date of the decision adopting specific rates in PG&E's 1989 ECAC proceeding, all agricultural accounts must meet the condition that 70 percent or more of the

energy usage on the account be dedicated to agricultural end-uses, defined to include growing crops, raising livestock, pumping water for irrigation and other uses involving production for sale which do not change the form of the agricultural product.

11. PG&E should file testimony in its next general rate case on the results of studies of the residential TOU program.

12. PG&E should be authorized to file revised electric rates to become effective not sooner than January 1, 1989. The new rates should reflect the net amount of any increases granted by the Commission in decisions made effective before January 1, 1989, in this proceeding, the Diablo Canyon case, and the ARA and cost of capital case. The new rates should be based on the determinations made in this decision.

O R D E R

IT IS ORDERED that:

1. Pacific Gas and Electric Company (PG&E) shall incorporate the principles set forth in the findings and conclusions of this decision into rates to recover the revenue requirements to be authorized in this proceeding, in Application (A.) 84-06-014 and A.85-08-025, and in A.88-07-037.

2. The rate revisions shall become effective no earlier than January 1, 1989.

This order is effective today.

Dated DEC 9 1988, 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 W[illegible], Executive Director

ALJ/BTC/pc

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, 1987 to January 31, 1988, were prudent.	)	Application 88-04-020 (Filed April 7, 1988)
Application of PACIFIC GAS AND ELECTRIC COMPANY for authority to adjust its electric rates effective August 1, 1988.	)	Application 88-04-057 (Filed April 21, 1988)

(See Decision 88-11-___ for appearances.)

OPINION ON REVENUE ALLOCATION AND RATE DESIGN

I. Background

In an earlier decision in this proceeding, Decision (D.) 88-11-___, we resolved issues concerning the load forecast, resource forecast, modeling conventions, and calculation of the incremental energy rate (IER) for the August 1, 1988 through July 31, 1989 forecast year for Pacific Gas and Electric Company (PG&E). The earlier opinion decided all disputed issues that needed to be resolved before the parties' production cost models could be run to determine the revenue requirement for PG&E's Energy Cost Adjustment Clause (ECAC) expenses and the IER for the forecast period.

At the time of the preparation of the earlier decision, issues related to revenue allocation and rate design had been heard and briefed, but a motion by PG&E and the Commission's Division of Ratepayer Advocates (DRA) caused us to delay our resolution of these issues until this decision. The joint motion, filed on October 4, 1988, requested leave to submit a late-filed exhibit. The impetus behind the motion was a realization that rate changes from three different proceedings involving PG&E--this case, Application (A.) 88-07-037, the proceeding on the attrition rate adjustment (ARA) and cost of capital, and A.84-06-014 and A.85-08-025, the Diablo Canyon proceeding, in which a settlement is now being considered--could all occur on January 1, 1989. Rather than addressing the general issues of revenue allocation and rate design in three separate proceedings, PG&E and DRA proposed that this case should serve as the forum for consideration of the principles that would be applied to the net increase resulting from all three cases.

The problem this motion addressed was the limited record in this case. The net change of revenue requirement in this proceeding was the sum of changes to PG&E's ECAC, Annual Energy Rate, Electric Revenue Adjustment Mechanism (ERAM), Diablo Canyon Adjustment Clause, and Conservation Financing Adjustment (CFA). Most of the testimony and briefs on this issue focused on a rate increase of about $60 million--the range of increases recommended by PG&E and DRA, based on certain assumptions presented in a ruling of the Administrative Law Judge (ALJ) of August 5, 1988. Although the final increase in any of these cases will not be known until we issue our final decisions, PG&E's preliminary estimates were that the revenue requirement increases would be $164 million in the attrition case and $258 million in the Diablo Canyon case. Obviously, the potential increase that could result from these cases is far higher than the increase discussed on the record in this case.

The late-filed exhibit attempts to correct this gap in the record by setting out PG&E's and DRA's joint recommendations for principles the Commission should follow in allocating the increased revenues resulting from these cases and designing the resulting rates.

In a ruling of October 6, the ALJ invited all parties to the three proceedings to respond to the motion and to comment on the contents of the proposed exhibit. Parties were also requested to identify any disputed factual issues raised by the proposed exhibit that needed resolution in evidentiary hearings.

In a ruling of October 24, the ALJ granted the motion and received the joint exhibit as Exhibit 81 in this proceeding. The ruling determined that no factual disputes had been identified and that evidentiary hearings on the content of the joint exhibit were not needed. The ruling also stated that we would consider the comments on the exhibit, along with previously introduced exhibits, testimony presented at the hearings in this case, and arguments made in the earlier briefs, in reaching our decision on revenue allocation and rate design.

We take the joint exhibit and its statement of principles to supersede much of the testimony previously presented by PG&E and DRA. Our discussion of these parties' positions in this decision will quote or paraphrase the principles of the joint exhibit. We assume that the positions taken by PG&E and DRA at the hearings on issues not covered by the joint exhibit are unchanged.

In addition to PG&E and DRA, the parties who were concerned with revenue allocation and rate design were the San Francisco Bay Area Rapid Transit District (BART); the Federal Executive Agencies (FEA); Anheuser-Busch Companies, General Motors Corporation, Nabisco Brands, Inc., and Union Carbide Corporation (Industrial Users); the California Farm Bureau Federation (Farm Bureau); the California Large Energy Consumers Association (CLECA); Toward Utility Rate Normalization (TURN); Contra Costa County (Contra Costa); and the California Manufacturers Association (CMA). In addition, the Association of California Water Agencies (ACWA) presented some of its concerns in this area in a letter of August 31, 1988, to the ALJ.

The general positions of all parties were shaped by our decisions on revenue allocation and rate design in PG&E's last ECAC case, A.87-04-005. In D.87-12-003, we adopted a revenue allocation based on the equal percentage of marginal cost (EPMC) method. We have embraced the EPMC approach as a way of developing rates that are based on the costs incurred by groups of customers. In the past, we had applied the system average percentage change (SAPC) or equal cents per kilowatt-hour approaches, but these methods eventually led to rates that were not related to the underlying cost responsibility of the customer groups. The resulting distortions gave improper economic signals and led some customers to leave the system altogether, to the detriment of the remaining customers.

Because some of the existing distortions were great, we balanced our desire to move quickly toward cost-based rates with a consideration of the effect on certain customer groups. This balancing led us to limit the rate increases to some customer classes. In D.87-12-033, we capped the increases to the residential class and the agricultural class at 5% and 2.5% above the SAPC increase. This approach is referred to as the capped EPMC method.

We also considered rate design to a very limited extent in D.87-12-033. In D.88-01-016, we concluded that further hearings on rate design were unnecessary, and that the rate design issues considered in the current proceeding should be limited to residential time-of-use (TOU) rates and agricultural rates.

In addition to the agreements between PG&E and DRA set forth in the joint exhibit, there was considerable agreement between these parties on the revenue allocation and rate design issues raised during the hearings. This agreement was primarily expressed as PG&E's acceptance of DRA's positions (see Tr. 18:1954-1959; Ex.75). In this decision, we will concentrate on the remaining disputes between DRA and PG&E and on the few issues raised by other parties.

II. Interclass Revenue Allocation

The initial step in developing rates is to allocate the revenue requirement to the various rate classes. The forecasted sales for each class are multiplied by current rates to develop the estimates of revenues at present rates. The EPMC approach also requires a calculation of the revenue allocation under the SAPC and full EPMC approaches. These totals are then adjusted to meet the forecasted revenue requirement and other limitations, such as caps on increases for certain classes.

The marginal costs that all parties seem to have used in performing their EPMC allocations were those used by PG&E in its last ECAC case, except for the marginal energy costs, which are an output of the production simulation model runs directed in an earlier decision in this proceeding, D.88-11-___.

We will first describe the joint exhibit's principles for interclass revenue allocation. Then we will present other interclass allocation issues raised by the parties. Finally we will summarize our resolution of these issues.

A. The Joint Exhibit

The joint exhibit states the following principles for interclass revenue allocation:

1. The method used for class revenue allocation should be a capped EPMC method.

2. The revenue adjustments for the ECAC proceeding, ARA, and Diablo Canyon settlement should be combined into a single capped EPMC allocation (one-step method). If the Diablo Canyon settlement change is delayed until after the other changes, the

changes for the three cases should be allocated in two steps. The changes resulting from the ECAC and ARA proceedings should be allocated using the capped EPMC method based on the EPMC targets determined for the one-step method. The Diablo Canyon settlement should then be allocated using the SAPC method. For all three revenue changes, the two-step method yields a result that is nearly identical to the result of the one-step method.

3. The residential class allocation should be limited to full EPMC.

4. The agricultural class should receive the same percentage increase as the residential class.

5. Any class that receives a decrease under full EPMC should receive no change.

6. The remaining revenue should be allocated to the other classes based on their marginal cost revenue responsibilities.

In earlier testimony, both parties had proposed use of a capped EPMC approach that would have resulted in increases for the residential and agricultural classes, limited by a set percentage over the SAPC, but below the level called for by a full EPMC allocation. Other classes would have received no change, even though they would have received a decrease under a full EPMC allocation.

Compared to the earlier proposals, the new principles equalize the increases to the residential class and the agricultural class, limit the increase to the residential class to no more than its EPMC share, and continue the condition that no class would receive a decrease. The cap under this proposal is set by the amount of the increase required for the residential class and is limited by the EPMC share of the residential class. The new proposal also contemplates that other classes would receive increases because of the substantially higher revenue requirement.

B. Details of the Capped EPMC Approach

As we have discussed, the joint exhibit proposes that revenues be allocated on an EPMC basis, with the cap for the agricultural class tied to the increase needed to reach full EPMC for the residential class. Other parties proposed variations on the capped EPMC method.

The Farm Bureau advocates a capped EPMC allocation, with the increase to the agricultural class limited to 2.5% over SAPC. This was the cap applied to the agricultural class in PG&E's last ECAC case. Farm Bureau notes that the changes in the structure of agricultural rates ordered in D.87-04-028 were completed on November 1, 1988. These changes resulted in increases to many agricultural customers, according to Farm Bureau, and it is unfair to adopt a higher cap under these circumstances. Farm Bureau also suspects that the review of marginal costs in PG&E's general rate case, taking place next year, will show that agricultural rates are closer to EPMC than under current estimates. Farm Bureau contends that this possibility argues for moderation in increases to agricultural customers.

Under CLECA's recommended capped EPMC approach, the cap on agriculture would be set at 5% above SAPC. CLECA believes that a 2.5% cap will require other customers to subsidize agricultural rates for eight rate changes. CLECA believes that this phase-in to cost-based rates is too gradual and a 5% cap will bring agricultural rates to their full EPMC level at a faster pace. Within the range of revenue increases considered in the ECAC case, CLECA's higher agricultural cap would permit decreases to other classes. But CLECA's proposals are robust enough to be applied directly to the larger revenue increases now being considered, according to CLECA.

CMA supports CLECA's recommendation. CMA is also concerned at the slow progress toward EPMC that would occur with a 2.5% cap on agricultural increases above SAPC. CMA believes that this is an appropriate time to apply a 5% cap, because both the November 1 deadline for the restructuring of agricultural rates and the expected January 1 date of the rate changes occur after the period of high power requirements for most agricultural customers. Agricultural customers will have some time to adjust to these changes before high seasonal power consumption resumes. In addition, CMA believes that this transition period, when many agricultural customers must review their power consumption and consider the new rate schedules, is the best time to give these customers a price signal of the move to cost-based rates. For these reasons, CMA believes that the agricultural cap should be at least 5%.

CMA also believes that no good reason exists to excuse the residential class from bearing its appropriate share of the cost of subsidizing agricultural rates once residential rates reach the full EPMC level. All classes should share equally in the cost of continuing agricultural rates below EPMC, according to CMA.

CMA's final point is that a higher cap on agricultural increases and the sharing of the agricultural subsidy by residential customers would permit some classes that are above their EPMC share to receive rate reductions. CMA opposes the suggested prohibition against reductions when overall revenue requirement is increasing, and CMA notes that such reductions were ordered in the last general rate case of Southern California Edison Company, even though Edison's overall revenue requirement increased (D.87-12-066).

FEA, for reasons similar to those presented by CLECA, favors capping increases to the agricultural class at 10% above SAPC. FEA would cap the residential allocation at the class's full EPMC. This proposal would permit decreases to other classes that are above their EPMC allocation, within the range of increases proposed in the ECAC case.

Industrial Users also believe that with the large potential increases now being contemplated, retaining a 2.5% cap on the agricultural class impedes progress toward full EPMC and is unfair to other customer classes.

TURN's primary recommendation is to use SAPC as the method for allocating revenues in this case. Of the capped EPMC proposals presented by other parties, TURN prefers DRA's original proposal. TURN agrees with DRA that no class should receive a decrease when overall rates are increasing.

CLECA, Industrial Users, and FEA argue that if the Commission's resolution of the Diablo Canyon settlement is delayed, the second step of any two-step approach should also employ the EPMC allocation method. To revert to SAPC for the second step is illogical and violates the Commission's stated intent to continue to progress to full EPMC, according to these parties.

C. The Treatment of Revenues from Special Contracts

PG&E differs with DRA and other parties on the treatment of the revenues from special contracts. PG&E believes that special contracts, contracts between the utility and certain customers at other than the tariff rates, should be accounted for in revenue allocation by using the actual revenues expected from these contracts at the rates set in the contracts, rather than imputing tariff rates to the sales to customers with these contracts. This adjustment will affect the calculation of revenues at present rates, and the calculation of the SAPC and full EPMC revenue allocations.

DRA believes that the calculation of revenues at present rates should include the sales to special contracts customers at the tariff rate that would apply to the customer except for the special contract. DRA's approach is equivalent to treating special contracts customers as a separate class for revenue allocation purposes (see Tr. 20:2127-2128). DRA believes that this is an appropriate way to perform the revenue allocation. The eventual resulting undercollection of revenues will be reflected in the ERAM. The Commission has stated that the shortfalls in revenue from special contracts should be recovered from all customers through the ERAM under present circumstances, according to DRA, and DRA believes that its approach is an efficient way to accomplish the Commission's purpose. Finally, DRA argues that its approach was adopted by the Commission in the last ECAC case, D.87-12-033.

Other parties, particularly CLECA and FEA, agree with DRA's approach.

D. The Treatment of Agricultural Revenues

Farm Bureau argues that the transition from the PA-1 rate schedule to the AG-1 schedule, which was completed on November 1, 1988, must be taken into account in the calculation of revenues at present rates. Since the rates under AG-1 are higher than under PA-1, revenue calculations based on PA-1 will underestimate the revenue contribution of the agricultural class and lead to higher rates for agricultural customers than are justified. Farm Bureau estimates that the revenues at present rates for agricultural customers should be about $8 million higher because of this adjustment.

ACWA joins Farm Bureau in this contention.

DRA responds to this argument by stating that its estimates of revenues already take into account the transition from PA-1 to AG-1 rates, and PG&E's estimates made the same adjustment. Any further adjustment, as urged by Farm Bureau, would distort the revenue allocation.

Farm Bureau also argues that Schedules AG-5 and AG-6 are equivalent to special contracts and the revenues from these schedules should be calculated as if these customers were served under the AG-1 tariff. Farm Bureau thus supports DRA's general approach to the crediting of special contracts' revenues, and would extend that treatment to what it believes are the corresponding customers within the agricultural class. Farm Bureau calculates that this change would increase the revenues at present rates attributed to the agricultural class by over $113 million. With this increase, the revenues for the agricultural class would exceed its full EPMC allocation, according to Farm Bureau.

ACWA makes similar points, and adds that the undercrediting of revenue to AG-5 and AG-6 sales have resulted in setting AG-1 rates at a level higher than a correct EPMC allocation would call for.

PG&E disputes Farm Bureau's contention that Schedules AG-5 and AG-6 are tantamount to special contracts. PG&E points out the rates for these schedules were developed because some agricultural customers were paying above their EPMC allocation. By contrast, special contracts rates normally do not collect the customer's full EPMC allocation, but are pegged to the marginal cost of service. PG&E believes that AG-5 and AG-6 revenues should be treated like special contracts' revenues in that both should be allocated on the basis of the revenues actually recovered from customers and not the rates of another tariff.

DRA joins PG&E in opposing Farm Bureau's contentions and points out that the AG-5 and AG-6 rates are tariff rates, not special contracts based on negotiated rates. DRA also notes that Farm Bureau provided no evidence to support the arguments it made in its brief.

DRA states that it made two adjustments to PG&E's allocation of agricultural sales. First, it reduced the allocation to summer on-peak sales, because it found the allocation--53% of annual sales--to be contrary to a rational selection of a TOU schedule. Second, DRA found that PG&E assumed unusually low load factors, so low that customers on the AG-5 and AG-6 schedules would be ineligible for those schedules. DRA used the load factors adopted in the last ECAC instead.

Farm Bureau disputes the first of these adjustments. Farm Bureau believes that AG-5 and AG-6 are not true TOU schedules.

The differentials between on-peak and off-peak prices are comparatively small, and as a result many of the customers on these schedules do not respond like conventional TOU customers. The resulting flat use pattern accounts for the high proportion of on-peak sales that DRA found, according to Farm Bureau.

E. The Treatment of BART Revenues

BART argues that the railway class should be treated as a separate customer class for purposes of revenue allocation. PG&E and DRA have included BART's sales and revenues as part of the large light and power class. BART argues that the Commission has treated the railway class as a separate class in the past, and that BART's contract with PG&E requires it to be treated as a separate class.

If the railway class is treated as a separate class, BART believes that its rates should be set at its EPMC allocation. PG&E's and DRA's treatment would result in BART's rates being 20% higher than under a full EPMC allocation. BART argues that this discrepancy amounts to a violation of Public Utilities Code § 453(a), which prohibits singling out a person or corporation for prejudice or disadvantage.

BART believes that with the proper treatment, its rates should decline by about $2.5 million, to its full EPMC rate level.

PG&E's and DRA's response is that BART's contract calls for PG&E to supply service to BART under schedules of the large light and power class. For this reason, these parties believe that it is appropriate to include BART as part of the large light and power class for revenue allocation purposes.

F. Treatment of the CFA Decrease

PG&E's earlier recommendation was that the decrease in the CFA should be passed through on an equal cents per kilowatt-hour basis. DRA believes that the changes to the CFA should be allocated like all other changes. Apparently DRA's position has been incorporated in the joint exhibit. The joint exhibit applies to the combined changes in the ECAC proceeding, which include the CFA decrease.

G. Discussion

We will adopt the general principles outlined in the joint exhibit. We continue to hold to our policy of using EPMC to allocate revenues as a way of moving toward fully cost-based rates. However, we recognize that some limits are necessary to moderate the pace at which we achieve this goal, to avoid the severe disruptions that could result from the sudden removal of the distortions that have accumulated in the past.

Thus, we agree that a capped EPMC is the approach to follow in developing the rates resulting from these three cases. By capping the increases to the residential class at its full EPMC allocation and limiting the agricultural increase to the same percentage as the residential class increase, the joint exhibit balances the concerns that have shaped our revenue allocation policy in recent years.

We disagree, however, with the joint exhibit's proposal to use SAPC to allocate the revenue requirement changes associated with the Diablo Canyon stipulation, if the decision in that case is delayed. We believe that the second step should also conform to the capped EPMC principles adopted in the rest of the exhibit. This second step, however, should not be an entirely separate EPMC allocation, with new caps and a new allocation. Rather, the second step revenue changes should be combined with the previously adopted revenue changes and revenue allocations in the first step so that the overall, final revenue allocation conforms to the allocation that would have resulted from the capped EPMC approach if all of the changes had been considered at the same time.

The primary problem with the exhibit's recommended SAPC allocation for the second step is that it is a retreat, albeit a slight one, from our goal. Although the expected differences in the allocations are minor, the SAPC approach nevertheless contains some distortions. For example, under the SAPC approach the streetlighting class receives an increase, even though the revenues of that class most exceed EPMC on a percentage basis. We want to avoid even these minor distortions that result from a SAPC allocation at this time.

For the same reasons, we reject TURN's primary recommendation that the SAPC approach should be applied to the overall revenue changes.

According to the tables attached to the joint exhibit, when the recommended approach is applied to the assumed revenue increases for the three cases, the resulting increase for the agricultural class is less than 3.5% above the system average increase. Although this is slightly above the 2.5% cap we had previously adopted for the agricultural class, we conclude that this level of increase is reasonable in light of the distance of the agricultural class from its EPMC share. We are swayed by the arguments that the 2.5% cap leads to very slow progress toward a full EPMC allocation, but we are reluctant to go beyond a 5% cap, as some parties have proposed. At the levels of the increases we are considering, the approach of the joint exhibit moderates the increase to agricultural customers and makes reasonable progress toward EPMC.

We also approve of capping the increases to the residential class at full EPMC. According to the attachments to the joint exhibit, this level can be reached in these cases with an increase above the system average change of around 3.5%, well below the 5% cap that we had previously applied. We also believe that it is appropriate not to permit the residential allocation to drift above EPMC. Although other classes will still receive increases above their EPMC allocation, and thus contribute some revenues to subsidize the agricultural class, we believe that it is fair to exempt the residential class from contributing to this subsidy. We note that the residential class will receive the largest percentage increase of any class under the assumptions of the joint exhibit. In light of the high rate increases that could result from these cases, we think it is appropriate to moderate the effect on residential customers to this small degree.

The question of how to treat the revenues from special contracts is the subject of detailed consideration in Investigation (I.) 86-10-001 and is still unresolved. No decision has been reached in that case, and none is likely in the next few months. Reasonable arguments have been made for the two treatments proposed in this case. In light of the unresolved state of I.86-10-001, we will continue the treatment we adopted in last year's ECAC case for PG&E. Thus, revenues from special contracts should be included in the revenue allocation calculation at the tariff rates that would otherwise apply to customers of the same class. We concluded in D.87-05-071 that until this issue is resolved in I.86-10-001, any revenue shortfalls should be made up by adjustments in ERAM. Calculating revenues from these contracts at tariff rates is consistent with this conclusion.

Farm Bureau suggested two adjustments to the calculation of agricultural revenues. We are persuaded that both DRA and PG&E have taken the difference in rates between the old PA-1 schedule and the new AG-1 schedule into account in estimating agricultural revenues (Tr. 20:2143), and no further adjustment is appropriate.

On Farm Bureau's second point, we do not agree that the AG-5 and AG-6 schedules are equivalent to special contracts. Other parties have presented many differences between special contracts and AG-5 and AG-6 schedules. The most persuasive difference is the simplest one: AG-5 and AG-6 <u>are</u> tariffs, and sales to customers under those schedules should be accounted for at the tariff rate and not, as Farm Bureau proposes, at the rates that apply to another schedule.

Farm Bureau also disputed DRA's corrections to PG&E's initial allocations of agricultural revenues. Farm Bureau felt the high summer on-peak use was a product of low differentials in on- and off-peak prices. However, DRA made it clear that its adjustments corrected data that were clearly wrong and its revised estimates, which PG&E agreed to, were reasonable (Tr. 20:2147-2150).

BART requests that we affirm that the railroad class is a separate class and that separate rates for that class should be developed if necessary. We note that BART's contract with PG&E calls for service to be provided on the schedules that apply to customers in the large light and power class. Whether BART is classified as a separate class or a subset of the large light and power class is a question of mere semantics, in our view. The important determination is that we conclude from the terms of the contract that it is appropriate to include BART's revenues as part of the large light and power class for purposes of revenue allocation and the development of the schedules that BART will be served under. We find BART's contention that the primary point of the contract is to assert the separate status of the railway class and that new schedules should be developed if needed to maintain that separation to be contrary to the references to specific schedules in the contract.

III. Intraclass Allocation

PG&E and DRA agreed on most elements of intraclass allocation over the course of the hearings. We will summarize the principles stated in the joint exhibit and address the issues raised by other parties in this area.

A. The Joint Exhibit

The joint exhibit sets out the following principles for intraclass revenue allocation:

1. The class average percentage change should be applied to schedules in the small and medium light and power classes.

2. A capped EPMC allocation should be applied to Schedule E-7, the TOU schedule for the residential class.

3. In the large light and power class, the marginal cost revenue responsibility for Schedules E-24 and E-25 and the railway class should be included in the allocation to Schedule E-20. The railway class will receive the resulting E-20 rates. Schedules E-24 and E-25 will be designed to be revenue-neutral with the resulting E-20 rates.

4. The target allocations for E-20 nonfirm schedules should be determined using the dollar per kilowatt discounts adopted in PG&E's 1986 ECAC and 1987 general rate case. During 1987 and 1988, SAPC rate adjustments have caused the discounts implicit in the rates to diverge from the adopted levels. Movement back to the adopted levels should be capped at 5% above or below the current discounts.

5. A capped EPMC allocation should be applied in the large light and power class. The cap should be 2.5% above or below the class percentage revenue change.

6. If the Diablo Canyon settlement is delayed, the preceding five steps should be applied to the allocation of the revenues in the ECAC and attrition cases. SAPC adjustments should be applied to all schedules to reflect the Diablo Canyon settlement.

Although the joint exhibit did not state a specific level for the recommended cap for Schedule E-7, during the hearings PG&E recommended a cap for Schedule E-7 of 5% over the average percentage increase for the class. The illustrative schedules of the joint exhibit comply with this limitation.

B. <u>Other Issues</u>

CLECA was concerned with the allocation within the large light and power class. CLECA recommended that allocation within the class should also be on an EPMC basis. If no marginal cost information is available, CLECA recommends that SAPC should be applied. The primary difference between CLECA's position and the recommendations of the joint exhibit is that DRA and PG&E would apply a 2.5% cap and floor to the EPMC-based allocation within the class. CLECA points out that under the proposal of the joint exhibit, the transmission and primary E-20 schedules receive the same percentage increase (because of the operation of the 2.5% floor), even though the transmission level customers are much further from EPMC. To avoid this "unfair and inappropriate" result, CLECA proposes a 5% cap and a floor of no decrease for the allocation within the large light and power class.

FEA proposes essentially the same allocation method as CLECA, for similar reasons.

C. <u>Discussion</u>

For the level of revenue requirement increase assumed in the joint exhibit, we conclude that for the large light and power class, the 2.5% ceiling and floor proposed in the joint exhibit is appropriate. This proposal makes adequate progress towards EPMC within the class without subjecting any particular schedule to a disproportionate rate increase. FEA and CLECA have made good arguments in favor of a higher cap, and these arguments reinforce our belief that we should continue to move towards EPMC in intraclass allocation whenever marginal cost information is available. This movement requires a consideration of the effect on individual classes and customers, and in this case that consideration leads us to favor the proposal of DRA and PG&E.

The remainder of the proposals of the joint exhibit were either not controversial or were related to issues that were raised in the section on interclass allocation. We will adopt the principles of the joint exhibit on intraclass allocation, with the exception of the provision calling for spreading of the revenues of the Diablo Canyon settlement on a SAPC basis. As we have discussed in the previous section, we believe that an EPMC-based allocation should apply to the Diablo Canyon revenues, even if the decision in that case is delayed slightly. We acknowledge and agree, however, that the SAPC approach should be used if adequate marginal cost information is not available for a particular schedule.

IV. Rate Design

D.88-01-016 limited the rate design issues in this proceeding to consideration of certain aspects of agricultural rate design and residential TOU rate design. The evidence introduced at the hearings stayed within this limitation. However, the much larger increase in revenue assumed in the joint exhibit led PG&E and DRA to present a few principles that affected other areas of rate design.

A. The Joint Exhibit

The joint exhibit stated the following principles for rate design:

1. Within the residential class, the Tier 1, or baseline, rate of Schedule E-1 should be set at the percentage of the system average rate adopted in I.88-07-009, the proceeding that is considering revision of the baseline allocations.

2. Schedule E-7 rates should be adjusted (a) by moving 75% of the way to a full EPMC seasonal allocation, (b) by moving 35% of the way to a full EPMC summer TOU differential, and (c) by setting the baseline discount so that the weighted average Tier 1 rate is equal to 0.94 (80/85) of the percentage of the system average rate adopted for Schedule E-1.

3. For all nonresidential classes, the relationships among TOU energy charges in current rates should be maintained.

4. Within the agricultural class, the maximum demand charges and rate limiters should be

increased by the class average percentage change. Energy and on-peak demand charges should be adjusted by equal percentages within schedules to recover the remaining revenue. For rate design calculations, Schedules AG-4C and AG-4B and Schedules AG-5C and AG-5B should be combined.

5. Within the large light and power class, maximum demand charges and rate limiters should be adjusted by the combined percentage change in the revenue allocations for the medium and large light and power classes. Energy and on-peak demand charges should be adjusted by equal percentages within schedules to recover the remaining revenue. Schedules E-24 and E-25 should be adjusted to remain revenue neutral with Schedule E-20.

6. Within the medium light and power class, the maximum and on-peak demand charges should be those determined for Schedule E-20 Secondary. Voltage discounts should be calculated as the difference between the maximum demand charge for Schedule E-20 Secondary, and those for Schedules E-20 Primary and E-20 Transmission. Energy charges should be adjusted by equal percentages within schedules to recover the remaining revenue.

7. Standby charges should be set at the maximum demand charge levels determined for the large light and power class.

As we have mentioned, several of these principles violated our earlier determination of the appropriate scope of the consideration of rate design in this case. It appears, however, that the recommendations exceeding our earlier limitations were made necessary by the greater revenue increases that accompanied the consideration of the increases from the ARA and Diablo Canyon settlement cases. These recommendations appear to be in the nature of housekeeping adjustments that need to be made to keep relationships within the classes in proportion to our earlier determinations. Our conclusion is supported by the lack of any remarks on these recommendations in the comments responding to the motion to admit Exhibit 81. Despite our earlier decision, we will take these recommendations into account in reaching our final decision on rate design.

B. Other Issues

CLECA and FEA both recommend that any rate increase to the large light and power class should be spread to each rate component (demand, customer, and energy charges) on an equal percentage basis until such time as the rate component is at its EPMC level. This recommendation would primarily affect demand and customer charges, which CLECA states are not at their full EPMC level.

Contra Costa was primarily concerned with the residential TOU program. Its concerns were satisfied by an agreement reached between PG&E and DRA. In addition to the points included in the joint exhibit, PG&E agreed to install an annual minimum of 10,000 residential TOU meters for new customers on Schedule E-7 in 1988 and 1989. In addition, PG&E will try to catch up on its deficit in installations in 1987.

PG&E also agreed to file testimony in its next general rate case on the results of studies on the residential TOU program.

DRA had originally proposed that residential TOU hours should be expressed in terms of standard time, which would have the effect of shifting the peak period during daylight savings time. PG&E rejected this proposal because of its fear of customer confusion. These parties, joined by Contra Costa, eventually agreed that DRA and PG&E would perform a joint study on the desirability of such a change.

C. Discussion

We will adopt the principles for rate design proposed in the joint exhibit. No party disputed these principles.

We agree with CLECA's general point that EPMC principles should apply to the rate components, but this proposal was not discussed in detail at the hearings. CLECA's proposals may conflict with parts of the joint exhibits recommendations. We will not adopt CLECA's recommendation at this time, but we intend to consider this proposal in more detail in future proceedings.

In addition, we endorse the terms of the agreement between DRA and PG&E on the residential TOU program. This agreement was fully supported by Contra Costa.

Findings of Fact

1. Allocation of interclass revenues by the EPMC approach should continue for the revenue changes associated with this ECAC proceeding, the Diablo Canyon settlement, and the ARA and cost of capital proceeding, since PG&E needs to continue movement toward a full EPMC revenue allocation without interclass subsidies.

2. The present rates of the residential and agricultural classes are below the levels necessary to recover the costs of serving those classes, and other classes generate revenues above the level needed to collect the costs of serving those classes.

3. A revenue allocation based on a full EPMC approach would produce significant rate increases for the agricultural class, and the effect on agricultural customers would be harsh.

4. The proposals of the joint exhibit generally provide a reasonable balance of the competing interests in this case.

5. The Commission is separately considering PG&E's ECAC, ARA, and Diablo Canyon cases, and the total revenue increase is not known at this time.

6. The question of how to treat the revenues from special contracts is being considered in detail in I.86-10-001, but no resolution of that issue has yet been made.

7. BART's contract with PG&E requires PG&E to provide service to BART at its applicable large light and power schedules.

Conclusions of Law

1. The principles for allocating revenue and designing rates for the revenue increases currently being considered by the Commission in this proceeding, the ARA and cost of capital case, and the Diablo Canyon settlement should be established in this case.

2. The principles proposed by the joint exhibit for allocating revenue among customer classes should be adopted, except that if the resolution of the Diablo Canyon settlement is delayed, the revenue increase resulting from that resolution should also be allocated according to EPMC principles. The allocations of revenue under a two-step allocation should be equal to those that would have resulted from a one-step allocation of the total revenues from these three cases.

3. For purposes of the revenue allocation in this proceeding, the revenues from special contracts should be included at tariff rates in the calculation of revenues at present rates.

4. Schedules AG-5 and AG-6 are tariffs and are not equivalent to special contracts.

5. BART should be included in the large light and power class for purposes of revenue allocation and the development of rates.

6. The principles proposed by the joint exhibit for intraclass revenue allocation are reasonable, except that if resolution of the Diablo Canyon settlement is delayed, the intraclass revenue allocation should still follow the EPMC approach.

7. The allocation to Schedule E-7 should not exceed 5% over the average percentage increase for the residential class.

8. The principles proposed by the joint exhibit for rate design are reasonable.

9. A capped EPMC approach should be applied to rate components in the large light and power class. The cap should be 5% above the average change for the schedule at this time.

10. PG&E should file testimony in its next general rate case on the results of studies of the residential TOU program.

11. PG&E should be authorized to file revised electric rates to become effective not sooner than January 1, 1989. The new rates should reflect the net amount of any increases granted by the Commission in decisions made effective before January 1, 1989, in this proceeding, the Diablo Canyon case, and the ARA and cost of capital case. The new rates should be based on the determinations made in this decision.

O R D E R

IT IS ORDERED that:

1. Pacific Gas and Electric Company (PG&E) shall incorporate the principles set forth in the findings and conclusions of this decision into rates to recover the revenue requirements to be authorized in this proceeding, in Application (A.) 84-06-014 and A.85-08-025, and in A.88-07-037.

2. The rate revisions shall become effective no earlier than January 1, 1989.

This order is effective today.

Dated ______________, at San Francisco, California.