ALJ/SAW/jc

Decision 90 03 031 MAR 14 1990

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ORIGINAL

Application of Pacific Gas and Electric Company for an order approving agreements with Texaco Inc. and Texaco Producing Inc. regarding deferral of the purchase of long-term capacity and energy from the Orradre Coalinga and Yoakum cogeneration projects, and with Texaco Inc., Texaco Producing Inc. and Mid-Set Cogeneration Company settling disputes regarding the purchase of long-term capacity and energy from the Orradre, Coalinga and Midway-Sunset Cogeneration projects.	Application 89-02-023 (Filed February 15, 1989)

OPINION

Summary

In this decision, we deny this application of Pacific Gas and Electric Company (PG&E) which seeks approval of amendments to four different Standard Offer 4 (SO4) contracts. The facilities involved are cogeneration projects to be developed by three related firms: Texaco Inc., Texaco Producing Inc. and Mid-Set Cogeneration Company (hereinafter collectively referred to as Texaco).[1] All

1 The Power Purchase Agreement for one of the projects (Midway-Sunset) was recently assigned, with PG&E's approval, from Texaco Producing Inc. (TPI) to Mid-Set Cogeneration Company (Mid-Set). Mid-Set is an affiliate of both TPI and Mission Energy Company (a subsidiary of SCE Corp.). The parties indicated that the other projects may also soon be assigned to Mid-Set.

four projects would use natural gas to generate steam as part of the enhanced oil recovery (EOR) process.[2] For three of the projects (Orradre, Coalinga, and Yoakum) PG&E seeks approval of deferrals of the contractual on-line dates in exchange for an upfront payment of $3.5 million and a $16/kW-yr. increase in the capacity payment to the Orradre project. For three of the projects (Orradre, Coalinga, and Midway-Sunset) PG&E seeks approval of contract modifications intended to resolve disputes concerning project descriptions and, in one instance, the project's transmission priority.

We reject this application because the record does not demonstrate that these projects would be viable in the absence of deferrals, because PG&E has not persuasively demonstrated the need for deferral payments and because most of the benefits expected to derive from the agreement have been achieved without its approval.

Background

PG&E filed this application on February 15, 1989, requesting ex parte treatment. In its application, PG&E seeks an order declaring that:

1. The deferral agreements are reasonable and prudent;

2. The interests of PG&E's ratepayers are adequately protected under the deferral agreements;

3. PG&E may book the cash deferral payments made under the agreements through the Energy Cost Balancing Account at the time the expense is incurred for subsequent recovery;

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2 Enhanced Oil Recovery projects use fire or steam to decrease the viscosity of crude oil which would otherwise be difficult to extract from the ground. The EOR cogeneration projects which are the subject of this application burn gas to spin turbines and generate electricity. The waste heat from that process produces steam which is injected into oil reservoirs.

4. The Qualifying Facility Milestone Procedure start of operation milestone date shall be extended for each affected project in accordance with the agreements;

5. The Commission's approval of the deferral agreements is final and not subject to further reasonableness review and;

6. Payments under each of the Purchase Power Agreements, as amended, are reasonable.

Accompanying the application were the Affidavit of Charles O. Myers on Behalf of Texaco describing the settlement package and the Prepared Testimony of Craig L. Smith of PG&E discussing project viability and the net benefits to be derived from the Deferral Agreements. PG&E filed errata to its application on March 27, 1989. On May 5, 1989, the Division of Ratepayer Advocates (DRA) filed a Limited Protest. DRA expressed doubts as to the viability of at least two of the projects. In addition, DRA proposed that the application be denied unless the Commission adopts a ratemaking treatment designed to reallocate between ratepayers and shareholders the risk that any of the deferred projects may prove not to be viable.

On May 25, 1989, the assigned Administrative Law Judge (ALJ) issued a ruling in response to the application and protest which set forth several areas in which an additional showing by PG&E would be required and set a prehearing conference for June 12, 1989. Immediately prior to the prehearing conference, PG&E presented additional written information in response to the ALJ's ruling. At the prehearing conference the ALJ indicated that the information presented by PG&E was still inadequate in several respects (discussed below). The ALJ asked the parties to report back to him with the additional information.

PG&E's additional submittal was entitled Response to the Limited Protest of DRA. In that response, PG&E reiterated its support for the original proposed deferral arrangement while offering an alternative proposal for overcoming DRA's concern related to upfront payments. PG&E did not provide the other requested information.

Under the alternative arrangement, Texaco would agree to the same deferrals and postpone compensation until the projects began delivering electricity to PG&E. In exchange for these concessions, Texaco would receive larger lump-sum payments and other price concessions. PG&E presented a range of projected savings from the proposed agreements. DRA agreed with the numbers at the low end of PG&E's range. According to PG&E, the net present value of the cost to ratepayers of the original proposal is $7.2 million and the comparable cost of the alternative is $9.9 million with a net benefit potentially as high as $23 million. DRA estimates the net benefits of the two proposals to be $13 million and $10 million respectively. DRA filed comments on August 18, 1989 stating that it looked more favorably upon the alternative approach because it eliminated upfront ratepayer risk.

A public hearing was held on November 20, 1989 at which Charles Myers testified for Texaco, Craig Smith testified for PG&E and Thomas Thompson testified for DRA. The matter was submitted without briefs.

The ALJ's proposed decision was mailed to all parties on January 12, 1990. The participants agreed to an expedited comment period. On January 19, 1990 comments were received from Texaco and PG&E. The language in the ALJ's proposed decision has been modified to reflect those comments, where appropriate.

<u>The Contract Modifications</u>

The contract modifications are contained in three sets of documents:

1. The Governing Agreement, a single document common to all four facilities which explains the Commission approval requirement, describes the payment PG&E will make if the Commission approves the

agreement and settles the "disputes" that are not related to the on-line date.

2. The Second Amendment for each of the four S04 contracts, which is subject to the approval of this Commission. It describes the terms of deferral and resolution of the other "disputes" where applicable.

3. The First Amendment for each of the four S04 contracts, which is currently in effect. PG&E has not asked for Commission approval of the First Amendments, which resolve the other "disputes" and provide for a day-to-day extension of the existing S04 contracts to cover the pendency of this application if the Commission ultimately rejects it.

In exchange for an upfront payment of $3.5 million and higher capacity payments for the Orradre project, Texaco would agree to defer the delivery of power from the Coalinga and Yeakum projects for one year and defer the delivery of power from Orradre for three years beyond the contractual deadline of June 28, 1990. The agreements appear to create the possibility of each of the project deferrals extending up to two more years. However, any such extensions would be purely at Texaco's discretion. Myers testified that he could see no circumstances under which Texaco would elect to extend the deferrals.

Although the First Amendments are not subject to our approval, Myers emphasized that they are integral to the overall package which was negotiated. If the Second Amendments are not approved, the First Amendments will govern the contractual on-line dates and the resolution of other matters which were previously in dispute.

The other "disputes", which are addressed in both the First Amendments and Second Amendments, have been resolved regardless of whether we approve the Second Amendments. Those disputes fall into two categories:

1. <u>Orradre Interconnection Priority</u>

PG&E reports that there has been a long-standing disagreement between Texaco and PG&E as to the relative interconnection priority dates of Orradre and an unrelated third party project. PG&E says that the issue was important to Texaco because the project with the earlier priority date had interconnection options available to it which were less costly than those otherwise available to Orradre. In settlement of this matter, Texaco agreed to accept Orradre's present priority position. PG&E's Smith testified that PG&E did not attempt to determine if this portion of the agreement produces benefits or costs for PG&E's ratepayers.

2. <u>Facility Descriptions</u>

In the space provided for facility description on the Power Purchase Agreements for both Coalinga and Midway-Sunset, Texaco entered the figure "33,000 kW." Texaco says that this figure was used in the agreements as a result of misinformation received from PG&E. Texaco asserts that it always intended to build units with larger nameplate capacity and that it was assumed that PG&E would be obligated to purchase a net output of 33 MW. PG&E interpreted the agreement as obligating the utility to purchase no more than the deliveries expected from a facility with a nameplate rating of 33 MW, which would result in PG&E purchasing significantly less energy and capacity than Texaco had anticipated.

As part of the settlement, the parties agreed to amend both of the contracts by modifying the facility description to read "46,000 kW." PG&E will have no obligation to accept or pay for deliveries in excess of 41 MW. Up to 33 MW of deliveries will be purchased at the forecasted as-delivered capacity prices included in the original agreements. Any additional deliveries will be purchased at PG&E's published as-delivered capacity prices, which should be substantially lower.

Because the low rate at which additional deliveries will be purchased will not exceed marginal cost, PG&E asserts that ratepayers will, at worst be indifferent to the purchases in excess of 33 MW. Texaco, on the other hand, stands to increase its revenues from the projects. Texaco claims that it has not calculated the potential benefit of this contract modification (Tr. 32).

PG&E's witness Smith states that the project descriptions in the First Amendments would lead to lower ratepayer costs than those in the Second Amendments. Pursuant to the First Amendments, PG&E would pay half of the Standard Offer 1 (SO1) capacity price for deliveries in excess of 33 MW. Under the Second Amendments, PG&E would pay the full SO1 capacity price for the same deliveries.

DRA's Limited Protest

DRA emphasized that it was only able to perform a limited review of the contract modifications, partially because PG&E was unable to produce the complete cash flow analysis requested by DRA to help assess the economic viability of the projects. DRA stated that the issues involved in determining whether or not the modifications should be approved were complicated by the fact that three separate projects, in different stages of development, were proposed for deferral. Further complications were perceived because of the incomplete status of the critical path permits for the Orradre and Coalinga projects. This brought into question the viability of those projects in the absence of deferrals. DRA concluded that, if the projects were otherwise viable, the deferrals could lead to a net ratepayer benefit of $13 million. However, DRA found that the day-to-day deferrals allowed in the First Amendments (which are not before us for approval) will lead to a $5-10 million ratepayer benefit even if the Commission does not approve the Second Amendments.

Because of the uncertainties related to project viability, DRA proposes that only half of the $3.5 million payment be recoverable in rates prior to the time that all the deferred projects come on-line. DRA points out that while QFs usually carry the full risk of project failure, some of that risk shifts to ratepayers when upfront payments are used to buy project deferrals. If a project which is the subject of a buyout deferral is never built, ratepayers may have paid for the deferral unnecessarily. DRA argues that by leaving PG&E at risk for half of the upfront payment, PG&E will have more incentive to gain assurance that the project is viable before agreeing to a deferral. DRA asserts that risk assignment is particularly appropriate in this case because two of the three projects for which contracts would be deferred have not yet been granted the permits necessary to commence construction.

<u>ALJ's Ruling and Prehearing Conference</u>

On May 25, 1989, the ALJ issued a ruling which identified issues which were not adequately resolved in the application and Limited Protest, set forth areas which required further showing and scheduled a prehearing conference to address the scope and timing of additional filings needed to resolve these issues. PG&E offered its initial response on the day of the prehearing conference. Some of the questions raised by the ALJ, and PG&E's related responses are set forth below:

1. The filings indicate that Texaco has not received all of the permits needed to build and operate the Orradre and Coalinga projects. What facts demonstrate the relative likelihood that Texaco would have received all of the permits for those projects on a timely basis in the absence of deferrals?

PG&E responded that the projects appeared to be moving smoothly through the permit process and that it was unaware of any permitting difficulties faced by either project.

2. As a general rule, the Commission will consider deferrals and buyouts only for QFs which have obtained all of the necessary permits and certifications. This point was clearly expressed in

D.88-10-032 in which the Commission approved Final Guidelines for Contract Administration of Standard Offers (see Conclusion of Law 31). Why should an exception be made in the case of these projects?

In response, PG&E said that it had no reason to expect that the two projects in question would not receive all of their permits, since the other two projects did. In addition, PG&E argued that the general rule expressed in the Guidelines decision should not apply because the negotiations which resulted in the current application were under way before that decision was issued.

3. Commission Guidelines call for the submission of cash flow analyses to demonstrate the economic viability of each project. This information was not provided to us in PG&E's application and was apparently not provided by Texaco to PG&E. This information should be produced for the Commission's determination of the viability of the projects.

In response, PG&E provided cash flow analysis for the generation side of a "hypothetical" EOR project. Texaco stated that it was unwilling to provide project-specific cash flow analysis which would address both the power generation and oil recovery sides of the project.

4. In its Limited Protest, DRA proposed that PG&E shareholders remain at risk for half of the proposed upfront payment until the projects are on-line. What other risk-sharing alternatives should be considered?

At the time of the prehearing conference, PG&E did not offer any alternative risk-sharing proposals, but voiced its opposition to the DRA proposal because it would place shareholders at risk.

5. Why should the Commission rule on the appropriateness of the resolution of other "disputes" when the overall agreement between PG&E and Texaco states that those resolutions will apply even if the Commission rejects the application?

In response, PG&E argued that, in the context of the Second Amendments and the Governing Agreement, the "dispute" resolution is part of an overall package and should be approved if the remainder of those agreements are to be approved. In addition, PG&E states that it would conserve time and resources if the reasonableness of all the contract modifications was addressed in the current application.

PG&E's Response to the Limited Protest

On August 3, 1989, three months after receiving DRA's Limited Protest, PG&E filed a response in which it both affirmed its support for the application as originally filed and offered an alternative deferral scheme. Instead of receiving $3.5 million upfront for all three deferrals, Texaco would receive $1.5 million when Coalinga became operational, $1.5 million when Yoakum became operational and $3.0 million when Orradre became operational, for a total of $6 million. Instead of receiving the original contractual capacity payments for Yoakum and Coalinga, Texaco would receive an additional $5/kW-yr. above the 1990 price.

This option would produce higher costs to ratepayers than would PG&E's original proposal. However, by eliminating all upfront payments, ratepayers would avoid the risk of paying money to defer a project which would never actually come on line.

DRA's Comment on PG&E's Response

DRA said that it would not object to the deferral agreements if they were modified as described in PG&E's Response to the Limited Protest. That is because the modifications would eliminate the risk of ratepayers paying for the deferral of a project which does not prove viable. DRA says that the resulting increase in costs is offset and outweighed by both the shifting of risk and the associated benefits derived by deferring payments under the three S04 contracts.

Discussion

1. Viability

Before consenting to any deferral arrangement, we need to be confident that the affected project would have been viable in the absence of a deferral. A project is viable when, even without a deferral, it would have been able to meet its contractual deadline for providing power to the utility. In order to be viable, the facility must receive, on a timely basis, the permits necessary for construction and operation. To be considered viable, a project must have a source of fuel, evidence that timely construction and operation is feasible and evidence that site control exists. To demonstrate viability, the project proponents must show that the project makes sufficient economic sense to merit financing, construction and operation within the time limits set by the contract.

The importance of a convincing showing of viability is even greater when utility ratepayers are being asked to pay for the deferral. We require preapproval of such arrangements and the utility is required to demonstrate that it has examined information necessary to determine project viability and that it is satisfied that the QF is able to meet the original terms of its contract.

Of course, we could never be certain that a project meets these viability criteria unless it is built and ready to offer power to PG&E on a timely basis. We do not need that level of assurance in order to approve a deferral. However, we will not approve a deferral, particularly a paid deferral, unless viability is demonstrated to a reasonable level of confidence.

Although Texaco has demonstrated compliance with many of the criteria set forth in the Commission's guidelines, two aspects of the showing in the current application undermine our confidence in the viability of these projects. First, two of the projects to be deferred lack important permits. Secondly, Texaco's refusal to supply the appropriate cash flow analysis leaves us unable to find the projects economically viable.

Orradre is the largest of the three projects and its deferral would be longer than the others. Orradre accounts for 60% of the potential savings. Yet the Orradre project does not have the key permit necessary to begin construction (the Authority to Construct from the local air district). Nor does Orradre have its Conditional Use Permit from the Monterey County Planning Commission. In addition, the Coalinga project, which accounts for another 20% of the potential savings does not have its Conditional Use Permit from the Fresno County Planning Commission. Not only were these permits missing at the beginning of 1988 when PG&E began its negotiations with Texaco, they were missing in February of 1989 when PG&E filed this application and, according to Myers of Texaco, were still at least two months short of approval in November of 1989 when we held our hearing on this matter. In its SO4 contracts, Texaco committed to bringing each of these projects on line by June 28, 1990. According to Myers, each project will take at least 11 months to construct.

As things stand now, it would not be possible for Texaco to meet its original contractual commitment. This raises a doubt as to whether or not Coalinga and Orradre are viable. Would Texaco have obtained the permits on a timely basis if there had been no deferral agreement? The evidence offered by PG&E and Texaco does not support this proposition. If the deferral agreement has delayed the permit process, Texaco has provided only the most meager justification for such a delay. Myers had the following interchange with PG&E's counsel in the course of cross-examination:

> "Q. And just one other topic, Mr. Myers: You mentioned that Texaco had slowed down its development of the projects due to the deferral, is that correct?
>
> "A. That's correct.

"Q. So that slowdown also would have affected the permitting process? That slowed down some as a result of the deferrals?

"A. It is possible that the counties -- that we didn't talk to the counties as often as was necessary. We were really trying to get these permits through and completed. That is true. And, of course, we did not go and talk to the engineering contractor until now. And it has just been the last three or four months that we have been talking to turbine manufacturer." (Tr. 25.)

Myers appears to be saying that although Texaco chose to slow down its search for engineering contractors and turbine vendors, it did not let up in its effort to obtain necessary permits. Myers merely referred to the possibility that Texaco might not have talked to the permitting authorities as frequently as necessary. This is the only portion of the record in which PG&E or Texaco reflected on the speed with which the permit applications have been pursued or processed. This evidence is certainly not enough to provide us with confidence that the critical permits for Orradre and Coalinga would have been received on a timely basis in the absence of the deferral arrangement.

In addition, we note the passage, during the 1989 legislative session, of SB 1659. This bill added Section 2826 to the California Public Utilities Code which expressed the Legislature's concern with the approval of a paid deferral for a project which has yet to receive all of its permits. The law now requires that, at minimum, such QFs be required to refund upfront payments in the event the project is not constructed and operating by the time the deferral period expires. It is consistent with the intent of this bill to be cautious when considering the merits of a paid deferral for projects which lack necessary permits. Furthermore, the requirements of SB 1659 are not a substitute for a determination of project viability. Assurance that upfront payments will be refunded does not eliminate the need to determine if the project was unlikely to meet its contractual commitments in the absence of a deferral.

The Final Guidelines require that a cash flow analysis be provided by the project proponents sufficient to demonstrate the economic viability of the project. This is a requirement which was added to the Guidelines at the suggestion of PG&E (see D.88-10-032 at pp. 6-7). This is a reasonable part of the viability analysis because it helps the utility and the Commission to understand whether or not the project would be economically attractive to lenders and whether or not the projected cash flow would induce a prudent developer to construct and operate the project in the absence of a deferral. In response to a request from the ALJ, PG&E provided a "hypothetical" cash flow analysis for the generation side of a EOR facility. Texaco refused to provide project-specific analysis that takes into account both the generation of electricity and the sale of oil derived from the project.

In assessing viability, it is crucial to examine the economics of both ends of an oilfield cogeneration facility. A QF which is projected to operate at a loss is unlikely to be viable. If oil were extracted at a loss, the overall economics of a project may be unfavorable even if the generating facility alone looks economically attractive. Because of Texaco's refusal to provide sufficient information, we are unable to say with any confidence that the facilities involved are economically viable.

Texaco has argued that the Final Guidelines should not be taken literally, that strict compliance with each provision is not necessary in order to find that a QF is viable. We agree. As we stated in D.88-10-032 which established the Final Guidelines, an individual item should not be administered as an "all or nothing" screening device. We emphasized, however, that in all cases the status of each item should be considered in order to develop a total picture of a QF's viability (see p. 20).

While a project might be found viable even if it does not meet every condition in the Final Guidelines, we cannot find these QFs to be viable for two reasons. First, we are not faced with a situation where a QF provided a cash flow analysis which causes us to question the economic viability of the undertaking. Texaco refused to provide any project-specific analysis at all. Thus, we are in no position to assess the importance of economic viability in the overall scheme of things. Second, the lack of cash flow analysis is not the only factor undermining our confidence in the viability of these projects. The unanswered economic questions in conjunction with the failure to obtain all necessary permits on a timely basis lead us to the conclusion that project viability for at least two of the projects is in doubt. This is especially significant because the project responsible for 60% of the potential ratepayer savings (Orradre) is the farthest behind in its effort to obtain authority to construct. In addition, it should be noted that the deferral agreements are set forth in a unified package. Even if it was only the viability of Orradre which was in doubt, this would be enough to taint the request for deferrals of the Coalinga and Yoakum projects.

2. <u>The Need for Deferral Payments</u>

Even if the viability of these projects was not in doubt, the contract modifications cannot be approved unless the terms of the new agreement are reasonable. First, we will look at the deferral payment itself.

Agreements such as this represent negotiated packages. As is true in all negotiations, the final agreement is a product of give and take. It is likely that no one walks away with exactly the deal they want. When parties to the agreement are asked to justify a dollar figure or other term in the package, the logical response is that the term was "the product of negotiation." While some deference must be given to the negotiating process itself, that factor alone does not establish the reasonableness of an agreement.

Another logical justification for a chosen deferral payment is that it is reasonable because it does not exceed the anticipated savings. There is a problem with placing too much reliance on this rationale. Anticipated savings are based on forecasts. We use forecasts all the time and strive to employ the most reliable forecasting tools at hand. Nonetheless, an element of risk is added when hard cash payments are measured against forecasted benefits.

If any payment is justified, a reasonable dollar figure lies somewhere between zero and the anticipated savings. The range of reasonableness cannot be determined without looking at the circumstances affecting the QF and the utility in a specific case.

In this case, PG&E and Texaco have failed to demonstrate why any deferral payment should be approved. In his prepared testimony, Myers said that the deferrals would delay Texaco's receipt of revenues and that this loss is not completely mitigated by the $3.5 million payment. However, Myers produced no calculations to support this statement. He testified that, as far as he knows, Texaco never attempted to calculate the effect of the delayed receipt of revenues and that the statement in his prepared testimony represented nothing more than an educated guess.

Myers said that his guess is based on the fact that delay will lead to higher capital costs and the fact that capacity payments are delayed and are therefore of less value unless increased. Without specific analysis to support these observations, we have no confidence that Myers has accurately or fully portrayed the effects of delay on these projects. How will capital costs go up? Is Myers assuming that the cost of borrowing will go up over the deferral period? If so, what is the basis of that assumption? Perhaps unit costs for construction will go up, but there are savings resulting from the sequential construction of the three projects made possible by the deferral which will reduce construction costs in other unquantified ways. In addition, Texaco must realize some advantage from being able to defer certain construction expenses for a period of one to three years. Those savings might offset some or all of any added capital costs.

The record in another recent paid deferral case provides an instructive contrast to Texaco's showing in this proceeding. In that case, PG&E sought approval of more than $3 million of payments in exchange for a five-year deferral of the Axel Johnson Soledad project. Our Soledad decision (D.89-11-041, at p. 13) reports estimates of nonrecoverable development costs to be incurred by Axel Johnson because of the deferral, including equipment deposits, permit fees, testing, and reengineering, which range from $1.6 (PG&E) to $2.9 million (Axel Johnson). In addition, Axel Johnson agreed to pricing concessions which represent payment reductions of $1.4 to $2.9 million (in Net Present Value, 1989 dollars). The Soledad deferral also delays the revenues that Axel Johnson would use to offset upfront bankruptcy disbursements, required as a condition for its assumption of the Purchase Power Agreement from the previous developer. In addition, Axel Johnson will lose certain tax benefits, as reflected in a somewhat lower cash flow and return to owner.

This detailed, project specific information allowed us to see a clear pattern of losses to Axel Johnson stemming from the deferral arrangement and supported PG&E's proposal for making offsetting payments to Axel Johnson. By contrast, Texaco, in this application, has merely offered an "educated guess" that it will suffer losses of an unspecified amount due to the deferral. This showing does not support a finding that any payment is reasonable, let alone a payment of more than $7 million.

Even in the absence of the upfront payment and price increase, the record indicates that the deferrals are advantageous to Texaco. As Myers explains, the deferrals will allow Texaco to build the three facilities in sequence instead of constructing them all at the same time. According to Myers:

> "We would have an advantage in that we wouldn't have to hire additional people and bring additional people in to build all three of the projects. By 'additional,' I mean contractors rather than company people. We have enough company people...." (Tr. 35.)

> "Also, by constructing the projects in sequence, we can possibly use a contractor that knows how to construct the first one. The second one is easier and he can charge less, and the third one can charge less. Thus, we have a monetary advantage there." (Tr. 36.)

As was the case with other aspects of the agreement, Texaco has not estimated the extent of the monetary advantage resulting from its ability to use the deferrals to construct sequentially. We only know that this is an advantage of the deferrals to Texaco even in the absence of upfront payments or price increases.

Additionally, PG&E agreed to rewrite the project descriptions in two of the contracts in a manner which will allow Texaco to run those two units more efficiently (lowering the unit cost of electric production) and to sell more kilowatt hours of electricity to PG&E.

PG&E claims that ratepayers should be indifferent to these changes because additional purchases from Texaco will be at or below PG&E's avoided cost. This may not be true. Before these project descriptions were rewritten, PG&E was obligated to pay SO4 prices for only the net output of two 33 MW plants (Coalinga and Midway-Sunset). That net output would have always been less than 33 MW per plant. As the descriptions are now revised, PG&E is obligated to pay SO4 prices for the full 33 MW per plant. The lower, SO1 prices will only apply to purchases in excess of 33 MW.

Whether or not ratepayers will face added costs because of these new project descriptions, the revisions do work to the advantage of Texaco. First, with PG&E willing to purchase higher output from the plants, Texaco will be allowed to run the units more efficiently, lowering their cost per kilowatt hour. Second, Texaco has the opportunity to sell much more energy to PG&E than at least PG&E thought they could under the original contract. By way of gross example, if each of the two affected units was able to constantly operate at the levels now allowed under the revised project descriptions, Texaco could sell 25% more kilowatt hours of electricity to PG&E from each unit. Even at the relatively low SO1 prices, this will create more net income for Texaco. In addition, as mentioned above, it appears that the revised descriptions enable Texaco to increase its sales at the higher SO4 rates. This could substantially improve the flow of revenues to Texaco.

Unfortunately, Texaco and PG&E chose not to present estimates of these revenue affects. We are left only with the realization that the agreement provides further advantages to Texaco, even in the absence of other payments.

3. <u>Timing</u>

The Purchase Power Agreements for Coalinga, Orradre, and Yoakum call for power to be delivered to PG&E no later than June 28, 1990. Each project takes at least 11 months to construct. PG&E and Texaco began deferral negotiations 29 months before the on-line date. The negotiations were not concluded for almost ten months. Texaco signed the agreements which are the subject of this application 19 months before the on-line date. It took the parties three more months to file this application with the Commission (16 months before the on-line date). PG&E responded to DRA's Limited Protest in August 1989, less than 11 months before the on-line date. Several months earlier, the ALJ had indicated areas in which the application was deficient. PG&E's failure to provide much of the missing information contributed to the need for hearings to be held and thus ensured that a decision on the modifications could not be issued more than 11 months prior to the deadline in the original PPA.

Since November 1988, when Texaco signed the agreements, the completion of the Coalinga, Yoakum, and Orradre projects has been deferred. The First Amendments allowed for day-to-day deferrals, to begin when Texaco signed the agreements, and to continue as long as this application is pending.

Thus, all three unbuilt projects have been deferred for one year even without approval of contract modifications. One year deferrals of the Coalinga and Yoakum projects are all that ratepayers would have been assured of receiving if the modifications were approved. The Orradre project would be deferred for two additional years. Myers testified that Texaco has no intention of opting for longer deferrals even if this application is approved.

The deferrals which have occurred as a result of the First Amendments have created substantial benefits for Texaco and for PG&E's ratepayers. As noted earlier, Texaco has been able to cut its expected construction costs by planning to build the facilities sequentially. Most importantly, Texaco has gained additional time for obtaining the permits it has yet to receive for the construction and operation of the Orradre and Coalinga facilities. If Texaco had not been granted these deferrals and if the permits had still been delayed, these projects would not have gone into service by the dates required in the SO4 contracts and Texaco would have lost its opportunity to sell the net output of those plants to PG&E under the lucrative Interim SO4 rates. With the deferrals, Texaco reduces its risk of losing that opportunity. Moreover, the delay by PG&E in negotiating the amendments, in filing the amendments, and in responding promptly has further extended the benefits of the day-to-day deferral.

PG&E's ratepayers benefit as well. If the facilities were all viable, they would have been producing costs to ratepayers which could otherwise have been avoided. Table 1 gives DRA's estimate and PG&E's relatively higher estimate of the savings resulting from this one-year deferral.[3]

Table 1

Project	Low Benefits (1989 millions)	High Benefits (1989 millions)
Orradre	5.4	8.50
Yoakum	4.2	6.55
Coalinga	4.2	6.55
Total Benefits	13.8	21.60

The question remaining is whether this Commission should approve either of the payment schemes proposed by PG&E and Texaco in exchange for an additional two years of deferral of the Orradre project. In the absence of a showing by Texaco or the applicant as to costs to Texaco stemming from further deferrals, the record does not support a finding that payments and price concessions are justified. Without complete, project-specific cash flow analysis and without all of the permits in place, the record does not support a conclusion that the projects are viable. Finally, the level of potential ratepayer savings as a result of further deferral of the Orradre project does not justify leaving ratepayers with the risk of cash payments and other price concessions. In fact, under DRA's assumptions, ratepayers would suffer a net loss if the Second Amendments were approved in order to gain a longer Orradre deferral. Table 2 reflects the additional net benefits to ratepayers if the Second Amendments were approved as originally proposed by PG&E. For all of these reasons, we find that the

3 We note, however, that the First Amendments are not before us for approval. The overall reasonableness of the First Amendments is a subject for a future reasonableness review.

timing and content of the proposed modifications do not support approval of the Second Amendments.

Table 2

Project	Low Benefits (1989 millions)	High Benefits (1989 millions)
Orradre	6.5	11.8
Yoakum	0.0	0.0
Coalinga	0.0	0.0
Total Benefits	6.5	11.8
Total Cost	7.2	7.2
Net Benefit	(0.7)	4.6

The Alternative Proposal

In its response to DRA's Limited Protest, PG&E presented an alternative payment arrangement for our consideration. The goal of this alternative was to respond to DRA's concern that an upfront payment shifts project development risk to ratepayers. In the alternative approach, the upfront payments would be replaced with separate payments to Texaco when each project went on line. In addition, capacity payments to the Coalinga project would be increased slightly.

As DRA indicated in its reply, this approach does answer its concern about shifting development risk to ratepayers. However, it would do so at a net cost to ratepayers of $9.9 million as opposed to the $7.2 million cost of the original proposal. Table 3 shows the effect that the alternative proposal would have on the real ratepayer benefits set forth in Table 2.

Table 3

Project	Low Benefits (1989 millions)	High Benefits (1989 millions)
Orradre	6.5	11.8
Yoakum	0.0	0.0
Coalinga	0.0	0.0
Total Benefits	6.5	11.8
Total Cost	9.9	9.9
Net Benefit	(3.4)	1.9

Even under the most liberal of assumptions, the alternative approach would lower potential ratepayer benefits from $4.6 million to $1.9 million. Under more conservative assumptions, it would lead to a $3.4 million ratepayer loss. In addition, this alternative would do nothing to alleviate our concerns about project viability, the need for payments and the timing problems discussed earlier.

Conclusion

Accordingly, we deny PG&E's request for an order making the findings set forth in this application. In doing so, we reach no conclusions as to the reasonableness of the First Amendments. The contract modifications contained in those amendments have not been brought before us for approval and are subject to future reasonableness review.

Findings of Fact

1. The facilities involved are cogeneration projects to be developed by three related firms: Texaco Inc., Texaco Producing Inc. and Mid-Set Cogeneration Company (hereinafter collectively referred to as Texaco).

2. For three of the projects (Orradre, Coalinga, and Yoakum) PG&E seeks approval of deferrals of the contractual on-line dates

in exchange for an upfront payment of $3.5 million and a $16/kW-yr. increase in the capacity payment to the Orradre project.

3. In exchange for the upfront payment of $3.5 million and higher capacity payments for the Orradre project, Texaco would agree to defer the delivery of power from the Coalinga and Yoakum projects for one year and defer the delivery of power from Orradre for three years beyond the contractual deadline of June 28, 1990.

4. Under an alternative arrangement, Texaco would agree to the same deferrals and postpone compensation until the projects began delivering electricity to PG&E.

5. Instead of receiving $3.5 million upfront for all three deferrals, Texaco would receive $1.5 million when Coalinga became operational, $1.5 million when Yoakum became operational and $3.0 million when Orradre became operational, for a total of $6 million; instead of receiving the original contractual capacity payments for Yoakum and Coalinga, Texaco would receive an additional $5/kW-yr. above the 1990 price.

6. According to PG&E, the net present value of the cost to ratepayers of the original proposal is $7.2 million and the comparable cost of the alternative is $9.9 million.

7. PG&E has not asked for Commission approval of the First Amendments, which resolve the other "disputes" and provide for a day-to-day extension of the existing SO4 contracts to cover the pendency of this application if the Commission ultimately rejects it.

8. There has been a long-standing disagreement between Texaco and PG&E as to the relative interconnection priority dates of Orradre and an unrelated third party project.

9. In settlement of this matter, Texaco agreed to accept Orradre's present priority position.

10. In the space provided for facility description on the Power Purchase Agreements for both Coalinga and Midway-Sunset, Texaco entered the figure "33,000 kW."

11. Texaco asserts that it always intended to build units with larger nameplate capacity and that it was assumed that PG&E would be obligated to purchase a net output of 33 MW.

12. As part of the settlement, the parties agreed to amend both of the contracts by modifying the facility description to read "46,000 kW." PG&E will have no obligation to accept or pay for deliveries in excess of 41 MW.

13. Any deliveries in excess of 33 MW will be purchased at PG&E's published as-delivered capacity prices, which should be substantially lower.

14. PG&E asserts that ratepayers will, at worst be indifferent to the purchases in excess of 33 MW.

15. Because of the modifications to project descriptions, Texaco stands to increase its revenues from the projects.

16. The project descriptions in the First Amendments would lead to lower ratepayer costs than those in the Second Amendments.

17. The other "disputes", which are addressed in both the First Amendments and Second Amendments, have been resolved regardless of whether we approve the Second Amendments.

18. DRA was only able to perform a limited review of the contract modifications, partially because PG&E was unable to produce the complete cash flow analysis requested by DRA to help assess the economic viability of the projects.

19. DRA questions the viability of those projects in the absence of deferrals.

20. Because of the uncertainties related to project viability, DRA proposes that only half of the $3.5 million payment be recoverable in rates prior to the time that all the deferred projects come on-line.

21. As a general rule, the Commission will consider deferrals and buyouts only for QFs which have obtained all of the necessary permits and certifications.

22. DRA said that it would not object to the deferral agreements if they were modified as described in PG&E's Response to the Limited Protest.

23. Before consenting to any deferral arrangement, we need to be confident that the affected project would have been viable in the absence of a deferral.

24. Orradre accounts for 60% of the savings potentially resulting from the modifications.

25. The Orradre project does not have the key permit necessary to begin construction (the Authority to Construct from the local air district).

26. The Orradre project does not have its Conditional Use Permit from the Monterey County Planning Commission.

27. The Coalinga project does not have its Conditional Use Permit from the Fresno County Planning Commission.

28. The required permits were still at least two months short of approval in November of 1989.

29. In its SO4 contracts, Texaco committed to bringing each of these projects on line by June 28, 1990.

30. Each project will take at least 11 months to construct.

31. As things stand now, it would not be possible for Texaco to meet its original contractual commitment for bringing Orradre, Coalinga, and Yoakum on line.

32. Commission guidelines call for the submission of cash flow analysis to demonstrate the economic viability of each project.

33. Texaco refused to provide project-specific cash flow analysis that takes into account both the generation of electricity and the sale of oil derived from the project.

34. In assessing viability, it is crucial to examine the economics of both ends of an oilfield cogeneration facility.

35. We are in no position to assess the importance of economic viability in the overall scheme of things.

36. Even if the viability of these projects was not in doubt, the contract modifications cannot be approved unless the terms of the new agreement are reasonable.

37. Texaco never attempted to calculate the effect of the delayed receipt of revenues.

38. Texaco, in this application, has merely offered an "educated guess" that it will suffer losses of an unspecified amount due to the deferral.

39. The record does indicate that, even in absence of the upfront payment and price increase, the deferrals are advantageous to Texaco.

40. The deferrals will allow Texaco to build the three facilities in sequence instead of constructing them all at the same time.

41. Texaco has not estimated the extent of the monetary advantage resulting from its ability to use the deferrals to construct sequentially.

42. Whether or not ratepayers will face added costs because of these new project descriptions, the revisions do work to the advantage of Texaco.

43. The reasonableness of the contract modifications is also affected by the timing of the agreement and the length of the resulting deferrals.

44. The negotiations which led to this agreement began in very early 1988.

45. The one-year delay for Coalinga and Yoakum has occurred even without the approval of the contract modifications.

46. Texaco has no intention of opting for longer deferrals even if this application is approved.

47. Approval of payments as far as these two projects are concerned, will produce no added ratepayer benefits.

48. Texaco states that pursuant to the contract modifications it would delay the Orradre project for no more than three years.

49. Even in the absence of approval of the contract modifications, at least one year of delay of each project has already occurred.

50. If we are to assume PG&E's higher estimate of deferral benefits, ratepayers would stand to save $4.6 million if che contract modifications are approved.

51. If we accept DRA's lower estimates, ratepayers would lose $700,000 if the modifications are approved.

52. Even under the most liberal of assumptions, the alternative approach would lower potential ratepayer benefits from $4.6 million to $1.9 million; under more conservative assumptions, it would lead to a $3.4 million ratepayer loss. The alternative proposal would do nothing to alleviate our concerns about project viability, the need for payments and the timing problems discussed earlier.

Conclusions of Law

1. Commission guidelines call for the submission of cash flow analysis to demonstrate the economic viability of each project.

2. Texaco's refusal to supply the appropriate cash flow analysis leaves us unable to find the projects economically viable.

3. The evidence provided is not enough to provide us with confidence that the critical permits for Orradre and Coalinga would have been received on a timely basis in the absence of the deferral arrangement.

4. The unanswered economic questions in conjunction with the failure to obtain all necessary permits on a timely basis lead us to the conclusion that project viability for at least two of the projects is in doubt.

5. PG&E and Texaco have failed to demonstrate why any deferral payment should be approved.

6. The record does not support a finding that any payment is reasonable, let alone a payment of more than $7 million.

7. The remaining savings that might occur from the longer Orradre deferral are insufficient to provide us with confidence that the agreement would work to the benefit of ratepayers.

8. The contract modifications brought before us in this application should not be approved.

O R D E R

IT IS ORDERED that the application of Pacific Gas and Electric Company is denied.

This order is effective today.

Dated MAR 14 1990, at San Francisco, California.

G. MITCHELL WILK
President
FREDERICK R. DUDA
STANLEY W. HULETT
JOHN B. OHANIAN
PATRICIA M. ECKERT
Commissioners

I will file a written concurring opinion.

/s/ G. MITCHELL WILK
President

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

Neal J. Shulman

NEAL J. SHULMAN, Executive Director

PB

A.89-02-023
D.90-03-031

G. MITCHELL WILK, Commissioner, concurring:

Today's Decision denies the application of Pacific Gas and Electric (PG&E) to amend four different Standard Offer 4 (SO4) contracts. This Decision complies with the Final Guidelines for Contract Administration of Standard Offers set forth in D. 88-10-032. These guidelines recognize the importance of obtaining all necessary permits and certifications before considering buyouts or paid deferrals of Qualifying Facility (QF) projects.

This Decision does not represent any change of heart by the Commission for support of California's QF program. The QF program benefits the utilities and ratepayers of California. The Commission also supports the development of Enhanced Oil Recovery Projects which can put cogeneration to good use. Those QF projects which do meet the Final Guidelines will continue to receive our support.

G. Mitchell Wilk, Commissioner

March 14, 1990
San Francsico, California