Process

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Decision 82 04 087 April 21, 1982

ORIGINAL

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of PACIFIC GAS AND ELECTRIC COMPANY, for an order approving certain provisions of a power sales agreement between U.S. Windpower, Inc. and Pacific Gas and Electric Company. (Electric)	Application 61073 (Filed November 23, 1981)

Daniel E. Gibson and Jo Ann Shaffer, Attorneys at Law, for Pacific Gas and Electric Company, applicant.
Brobeck, Phleger & Harrison, by William H. Booth, Attorney at Law, for U.S. Windpower, Inc.; Leonard L. Snaider, Attorney at Law, for George Agnost, City Attorney; and Catherine Johnson, Attorney at Law, for California Energy Commission; interested parties.
Brian T. Cragg, Attorney at Law, for the Commission staff.

OPINION

I. Summary

By this order, we approve a power sales agreement (Agreement) between Pacific Gas and Electric Company (PG&E) and U.S. Windpower, Inc. (USW). Our approval is given after a thorough review of the application by our staff. We find that the provisions of the Agreement, which call for initial contract payments above PG&E's avoided cost, are in the ratepayers' interest. We also conclude that the levelized price of 9¢ or 10¢ per kilowatt-hour (kWh) specified in the Agreement is necessary for this project to attract investors. Accordingly, PG&E is authorized to recover concurrently all contract payments through its Energy Cost Adjustment Clause (ECAC).

This application is our first review of a nonstandard offer since issuance of Decision (D.) 82-01-103 in Order Instituting Rulemaking (OIR) 2. The procedure followed here is a good example of the "nonstandard review process" contemplated in D.82-01-103.

II. Background

In Application (A.) 61073, PG&E, supported by USW, requests (1) approval of a levelized payment agreement with USW, and (2) permission for concurrent recovery of all contract payments through ECAC. Prior approval of the Agreement is sought because it calls for levelized payments above PG&E's avoided cost, a significant departure from the standard offers authorized in D.82-01-103.

Two days of hearing before Administrative Law Judge R. Wu were held in San Francisco. PG&E offered one witness, Glenn Ikemoto, formerly a senior resource planner and now a consultant. USW sent three representatives: Stanley Charren, chairman of the board of USW; James Connelly, vice president of TXL Corporation; and Herbert Weiss, vice president for engineering at USW. The staff showing coordinated by Brian T. Cragg consisted of a technical witness, Thomas Beach; a policy witness, Charlotte Ford; and a financial witness, Ron Knecht. The City and County of San Francisco (CCSF) did not present any witnesses but participated through cross-examination. The matter was submitted on February 26, 1982, after the receipt of oral argument from the parties.

III. Applicant's Showing

PG&E and USW combined to explain why the nonstandard provisions of the Agreement are essential to the developer USW, are attractive to investors such as TXL Corporation, and are beneficial to PG&E's ratepayers. A brief description of the Agreement and its nonstandard pricing provisions is appropriate before we review the arguments offered by PG&E and USW.

The Agreement

Under the Agreement, PG&E will purchase all energy delivered from USW's 30-megawatt (MW) wind generation facilities, located in the Altamont Pass area of eastern Alameda County, for a term of 30 years. PG&E and USW used PG&E's standard offer for wind facilities over 100 kilowatts (kW), submitted to the Commission in August 1980, as the starting point for negotiations. PG&E asserts that it tried to negotiate a contract that not only would provide a pricing mechanism to promote the development of USW's Altamont Pass project, but also would minimize ratepayer risk.

The Agreement specified four pricing phases. Phase 1 is in effect without any action by the Commission. During Phase 1, USW is paid PG&E's published standard offer price for all energy delivered. Phase 1 ends and Phase 2 begins only after the Commission approves the Agreement, and USW elects for the fixed price of 9¢ or 10¢ per kWh.[1]

During Phase 2, PG&E will pay USW a fixed price for each kWh actually delivered. This price is 9¢ under current Internal Revenue Service (IRS) regulations and may be 10¢ if the federal tax law and regulations are changed to reduce the available tax credits. PG&E expects the fixed price during Phase 2 to be 9¢ per kWh.

During Phase 2, the difference between the fixed price of 9¢ or 10¢ per kWh and 97% of the standard offer price at the time energy is delivered will be entered in a "payment tracking account" (PTA). At the beginning of Phase 2, PG&E expects the fixed price to exceed 97% of the standard offer price. The PTA will accumulate this difference. Once 97% of the standard offer price exceeds the fixed price, the balance in the PTA will be reduced as energy is delivered to PG&E.

[1] Under an amendment to the Agreement, USW or its assignee must elect for fixed price payments on or before December 31, 1983.

At all times, the balance in the PTA will accrue interest at the rate of 120% of Bank of America's prime rate for 90-day loans to commercial borrowers, compounded monthly. Phase 2 will end when the PTA balance is eliminated. Under present projections of the standard offer price, PG&E anticipates that the PTA balance will be zero within five years.

Phase 3 occurs only if Phase 2 ends before January 1, 2002, and would continue until January 1, 2002. During Phase 3, PG&E would pay USW 95% of the standard offer price for energy delivered.

Phase 4 will begin January 1, 2002, and will end December 31, 2011, the end of the Agreement term. During Phase 4, USW will be paid 90% of PG&E's standard offer price. If the PTA has a balance on January 1, 2002, the beginning of Phase 4 will be delayed until the PTA balance reaches zero.

To minimize the risk created by these pricing provisions, i.e., paying a fixed price above the standard offer price during the initial years of Phase 2, the Agreement also contains the following safeguards:

1. PG&E pays only for energy actually delivered. Therefore, the wind facilities must perform well if a significant balance in the PTA is to accumulate.

2. The balance in the PTA, including interest, cannot exceed $500,000 per installed MW or $15 million once the entire 30 MW project is installed.

3. PG&E has a secured first lien on the facilities as collateral for the PTA balance.

4. USW or its assignees is liable for any balance in the PTA in the event the Agreement is terminated or expires.

Justification of the Agreement

USW and PG&E witnesses explained the need for the Agreement's nonstandard provisions from the perspectives of the developer, the investor, and the utility-ratepayer.[2]

The Developer

Witness Charren, a mechanical engineer who is one of the founders of USW, explained why the fixed price payment called for in Phase 2 is necessary to help USW finance the Altamont Pass windfarm.

USW not only manufactures the wind turbines to be used at Altamont Pass but also is the developer of the project. As such, USW locates the site, has the meteorological studies performed, secures all required permits, and arranges the financing for the project. In addition, a wholly owned subsidiary of USW is expected to be the general and operating partner of the Altamont project.

The financing arranged by USW is to be raised through a series of limited partnership offerings. Each limited partnership must purchase a wind generation facility with a capacity of at least 5 MW. Eventually, there may be as many as 6 limited partnerships owning equal shares of the 30 MW Altamont windfarm.

The limited partnerships are required to pay cash and to accept a note offered by USW. For example, one limited partnership for the first 5 MW of the Altamont windfarm has been formed. This partnership, Windpower Partners, 1981-1, has paid the purchase price of $10 million by providing $6 million in cash and by issuing a $4 million note due to USW. The note is to be paid by the partnership to USW over a period of ten years from the revenues generated by the sale of electricity to PG&E. Charren emphasized that since the repayment of USW's note comes from revenues produced by the windfarm, USW has an economic interest in ensuring optimal performance of the windfarm for the life of the note even though it has transferred ownership to the limited partnerships.

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[2] Although the testimony of Herbert Weiss is not discussed in this opinion, we note that he very capably described the engineering and technical progress of USW's wind machines.

In Charren's opinion, a fixed price of 9¢ or 10¢ per kWh is necessary to attract investors to the limited partnership offerings. Otherwise, he asserts the investment opportunity presented by the Altamont project is simply not comparable with other investments available to investors.

According to Charren, potential investors in the Altamont project usually evaluate the following risks: (1) Will the wind blow at the Altamont site? (2) Will USW's wind turbines work well over a long period of time? (3) Will the current regulatory climate change? (4) What will the price of electricity be? USW is attempting to reduce the uncertainty investors perceive in all four of these areas. Approval of the Agreement obviously would reduce the pricing uncertainty.

Although USW has been able to solicit enough investors for one 5 MW limited partnership, Charren maintains that additional financing will be extremely difficult unless the fixed price provisions of the Agreement are approved. In his opinion, approval by the Commission will enable the Altamont project to move forward and become the first commercial scale wind facility in California.

The Investor

Witness Connelly spoke on behalf of the TXL Corporation,which is a stockholder of USW. Connelly has worked in the equipment finance field for the last seven years and is knowledgeable about investment opportunities comparable to the Altamont project.

Connelly compared windmills to other more conventional types of lease equipment such as railroad cars and automobiles. Many hundreds, in some cases thousands, of units of the same or similar type of conventional equipment have been sold to investors. The performance, maintenance, and obsolescence risks involved are known and have been quantified by investors. Connelly declared that this is obviously not the case with windmills. He noted, as Charren previously stated, that the investor in a windfarm is faced with four major uncertainties.

Connelly said that while the investor can look at the technical competence of USW's engineering and design team, there is no way in a new venture that the second uncertainty, the uncertainty about the windmills' performance, maintenance, and obsolescence, may be reduced to a level that makes this windfarm investment comparable to other types of equipment. And the uncertainty about the windmills is the key uncertainty from an investor's point of view. Thus, to be able to sell the windfarm, the other types of uncertainty must be minimized or eliminated. USW's efforts to minimize the uncertainty associated with the first risk are shown by the meteorological studies it has requested. Obviously, given recent shifts in the Reagan administration's overall energy policy, the third risk will be a continuing one from an investor's point of view. A constant price for power, particularly in the early years of the project when the perceived risk of the wind turbines failing is highest, eliminates the fourth uncertainty by guaranteeing a price if the windmills do generate power.

Connelly pointed out that price guarantees are a standard feature of the equipment financing business. Companies that want to finance equipment purchases are required to provide guarantees either for the debt extended for the purchase or for the lease payments if the purchase is financed on a third-party basis. In addition, sellers of equipment typically face markets with many buyers. This increases the probability that the goods will be sold at the manufacturer's price. The windfarm can sell its electricity to very few buyers. This increases the perceived risk of being able to sell power at a price that makes the project economically viable and so increases the need for a guaranteed level of payment.

Connelly also compared the tax benefits from investment in a windfarm to investments in other types of equipment and said the comparison was to the windfarm's disadvantage. The reason is the type of debt instrument commonly used to finance such alternative energy projects.

In order to strengthen the IRS hand in dealing with fraudulent overevaluation, the Economic Recovery Tax Act of 1981 (ERTA) extended the concept of "at risk" to investment tax credits. This means that instead of the investment/energy tax credit being computed based on the equipment's full cost to the investor, the tax credit would be computed only on the basis of the amount the investor had "at risk". Roughly, the amount "at risk" is defined by the IRS as the amount the investor pays in cash plus any amount paid for with a recourse note. Typically, alternative energy projects use nonrecourse debt, that is, debt for which the collateral is only the asset purchased with the note, not any other asset of the purchasing party. Nonrecourse financing is not an unusual sort of debt instrument. Home mortgages in California and many other states are nonrecourse notes. It is, however, also the type of debt typically used in the fraudulent deals the IRS intended to stop, Connelly said. The effect of the "at risk" provisions of ERTA would have been to reduce by 50-100% the benefits of the Federal Energy Tax Credit.

A coalition representing a wide variety of alternative energy interests succeeded, thanks to Senator Matsunaga of Hawaii, in securing passage of an amendment that exempted alternative energy property from these new "at risk" provisions. To qualify for the exemption and the full benefits of the federal energy and investment tax credits, a project must meet a number of criteria. Among them is that any nonrecourse debt extended by the manufacturer to the purchaser of the equipment must be in the form of a level payment loan. Should the principal repayment of this loan be delayed because the project fails to operate as expected and does not generate sufficient revenue, an occurrence most likely to happen in the first year or two of a new project, then a portion of the credit would be recaptured. Other types of equipment financing are not subject to this type of rigid debt structuring and early recapture penalty. Thus, while Senator Matsunaga's amendment did preserve the full benefit of the credit for alternative energy projects, it did so in a way that added to the risks the investor in the project perceives relative to other types of investments. The fixed price payment provision in the Agreement is particularly helpful in minimizing this added recapture risk since it provides a higher level of payment in the early years of the project when revenues are most uncertain and the risk of recapture is the highest.

Utility-Ratepayer

Witness Ikemoto explained the advantages of the Agreement to PG&E and its ratepayers.

First, USW bears all responsibility for siting, permitting, financing, construction, and operation of the facility. PG&E and its ratepayers pay USW only for delivered power. If the project is a complete failure and does not generate any electricity, the ratepayer pays nothing. The risk of developing wind generation technology on a commercial scale is largely taken by USW.

Second, under a sensitivity analysis performed with PG&E's computer model, Ikemoto estimates a net present value of ratepayer savings over the life of the Agreement to be $5.8 million. These savings accumulate over the life of the project due to the negotiated 3, 5, and 10% discounts from PG&E's standard offer price.

Third, the USW project will help reduce PG&E's need to raise capital for constructing plants required to meet load demands.

Fourth, the USW project should be on-line in 1983 and would reduce PG&E's oil use and related air pollution. The project has the additional benefit of further diversifying PG&E's resource mix.

Last, the Agreement will facilitate the development of the wind industry in California. Ikemoto contends that mass production of wind turbines at a lower unit cost will not occur unless the technology is tested and demonstrated on a commercial scale. In his opinion, the Altamont project provides an opportunity for the commercial demonstration of wind technology and will advance the development of wind power.

Ikemoto also emphasized that contracts with above avoided cost payments should not be made available to all wind developers. In his opinion, PG&E should exercise its business judgment in selecting developers who have the technical and business expertise necessary for a successful project. He recognized that payments above avoided cost create financial risk which should not be automatically assumed by the ratepayer. However, he contends that approval of the instant Agreement is necessary to meet the Commission's own goal of rapidly developing wind technology.

IV. Staff Review

The staff reviewed this application and the underlying Agreement with three concerns in mind. First, the staff reviewed Commission policy to see what criteria, standards, or guidelines should be considered when reviewing nonstandard offers to small power producers. Second, the staff examined the technical risk borne by ratepayers if the project should fail or otherwise perform poorly. Last, the staff analyzed the financial risk presented by the Agreement and the benefits, if any, offered to ratepayers. All three staff witnesses found that the Agreement with its pricing provisions is prudent and reasonable. Nonetheless, one staff witness, Ron Knecht, recommended that PG&E's ECAC recovery should be limited to its avoided costs at the time energy is delivered. Witness Knecht believes that PG&E rather than the ratepayer should accept the risks and receive the benefits presented by this Agreement.

Commission Policy

Witness Ford points out that prior Commission decisions encourage the development of small power production and alternative energy resources such as wind power. In addition, the Commission in D.82-01-103 anticipated nonstandard offers calling for levelized payments above avoided costs and provided for advance review of such nonstandard agreements. Thus, the instant application conforms with all known Commission guidelines.

Witness Ford acknowledges that the present Agreement, if approved, passes on some risk to the ratepayers. However, she states that ratepayers under current accounting practices routinely face the risk of construction cost overruns and operational problems for conventional plants. In her opinion, allocation of some risk to the ratepayer may speed the development of wind power. As the technology is tested and proven, the reasons for ratepayer risk-bearing become less compelling.

To summarize, witness Ford concludes that the Agreement with its nonstandard pricing provisions is reasonable as the risks and benefits to the ratepayer are well-balanced. Accordingly, witness Ford on behalf of the Policy and Planning Division recommends that we approve the application.

Technical Analysis

Witness Beach evaluated the technical risk posed by the Altamont project. His evaluation included an inspection of USW's equipment and its performance record. In addition, witness Beach looked at three failure scenarios and the consequences to the ratepayer.

The first scenario is that USW's wind turbines do not work and produce insignificant amounts of electricity. In this event, the ratepayers would pay very little to USW's limited partnerships and the PTA balance should be negligible.

The second scenario is that the USW machines perform well for several years and then experience operational problems due to design flaws or to limited durability of the equipment. In this event, the ratepayer's exposure is maximized since the PTA balance could be substantial with poor prospects for reduction by way of additional revenues.

The third scenario is that the USW project runs well for 10-15 years but wears out well before the end of the 30-year contract term. At this time, the PTA balance should be zero, so the ratepayer will not be suffering a loss. However, the ratepayer will lose the discounts on PG&E's avoided costs which the Agreement calls for in the later years.

If the Altamont project fails with an unpaid balance in the PTA, PG&E under the Agreement has a lien on the windfarm. The salvage value of the project could be used to reduce the PTA balance if USW is unable to pay the balance. USW, at the staff's request, commissioned an independent appraiser to evaluate the project's salvage value under the following assumptions:

Case 1: The wind machines and associated hardware are removed and sold as scrap.

Case 2: The generating units are removed and sold as wind machines in an existing market for used wind turbines.

Case 3: The wind turbines have no value, but the project infrastructure (towers, roads, interconnection facilities, control building, etc.) can be used by PG&E or sold to another wind developer.

Witness Beach observed that if the wind industry in California continues to grow and develops into a viable industry, then Case 3 is the most likely scenario. If, however, the regulatory climate changes to make wind power development unattractive in California or technical problems prevent reliable operation of wind machines, then Case 1 has the higher probability.

Witness Beach found that in all cases, the salvage values estimated by the appraiser were sufficient to cover the projected PTA balances if a 9¢ per kWh fixed price is assumed. He also stated that under one scenario as shown in Exhibit 11, assuming a 10¢ per kWh fixed price, 5% avoided cost escalation rate, and 14% prime rate, the salvage values in all three cases would not cover the estimated PTA balance in 1991 of $11.5 million. However, Beach further stated that at least some of the wind machines definitely will be operating under a 9¢ per kWh fixed price, if the Commission approves the Agreement.

After reviewing the safeguards in the Agreement, witness Beach concluded that the risk to the ratepayer from the possible technical failure of USW's machines is not sufficient to deny approval of the application. Accordingly, the Utilities Division recommends approval.

Financial Analysis

Witness Knecht reviewed the economic costs and benefits of the Agreement by giving PG&E assumptions to input into its computer model. The model after receiving a set of assumptions computes the avoided cost price and the contract price specified in the Agreement. The model then determines the present worths of the two price streams and the difference of the cumulative present worths. The resulting data show the cumulative economic cost or benefit of the Agreement from paying USW the contract price rather than the avoided cost price.

Under all assumptions used by Knecht, if the project operates for a minimum of six years, the expected benefits exceed the expected costs for the 9¢ per kWh fixed price. Knecht noted that the Commission's recent D.82-01-103 which provides for a 100% capacity payment in the avoided cost calculation makes the Agreement's pricing provisions very attractive.

Although Knecht endorses the nonstandard pricing provisions of the Agreement, he opposes ECAC recovery of all contract payments. Knecht recommends that PG&E's cost recovery should be set equal to its avoided cost over the life of the Agreement. Even though the Agreement calls for contract payments above and below PG&E's avoided cost, PG&E would be allowed to recover through ECAC its avoided cost at the time energy is delivered, whether this avoided cost is greater or less than the amount paid to USW. In Knecht's opinion, this alternative method is preferable because it allocates the risks and the benefits of the Altamont project to PG&E rather than the ratepayer.

To summarize, witness Knecht, representing the Revenue Requirements Division, recommends approval of pricing terms in the Agreement but authorization to PG&E only of avoided cost recovery.

V. Issues

This application raises the following issues:

1. Do the benefits of the Agreement equal or exceed the risks posed by the nonstandard pricing provisions?
2. Should the ratepayers rather than PG&E accept the risks and benefits posed by this type of nonstandard contract?

VI. Discussion

All parties, PG&E, USW, staff, and CCSF urge our approval of this Agreement, except for staff witness Knecht who accepts the pricing terms but not the recovery mechanism. In addition, a letter endorsing the staff's recommendations supporting the application has been received from the Environmental Defense Fund, which did not file an appearance.

We are persuaded by the substantial evidence and testimony analyzing the possible economic outcomes of the Altamont project. Under the most likely scenarios, the Agreement clearly is advantageous. Additionally, the Agreement contains several provisions which effectively offset a loss under a "worst case" analysis. If the Altamont project should work well and then fail, leaving a large balance in the PTA, USW or its assignees is liable for the balance. If payment is not forthcoming, PG&E has a first lien on the wind facilities, whose appraised value exceeds the probable PTA balance. These safeguards ensure that PG&E or its ratepayers will not be burdened by the nonstandard pricing provisions.

As compensation for the levelized payment of 9¢ or 10¢ in the Agreement's early years, we note that PG&E has negotiated discounts of 3%, 5%, and 10% from the avoided cost price as well as interest payments on the PTA balance. Thus, the contract terms provide for an overall cost for electricity well below PG&E's avoided cost over the life of the Agreement.

Additionally, we are influenced by the need to attract investors to a new and emerging technology such as wind power. As explained by USW witnesses, the uncertainties surrounding a windfarm installation will prevent the rapid development of wind technology unless some assurance can be given to investors about the price of electricity. The availability of substantial tax benefits alone is not sufficient to attract investors who instead may choose proven equipment financing deals whose returns and tax benefits are much more predictable. As wind technology is tested and proven, we expect that levelized payments of this type, or other financing guarantees, will no longer be necessary. However, at this early stage of the wind power industry, we find it reasonable to promote the development of this clean, low cost, alternative energy source by approving this nonstandard Agreement.

A more troublesome issue is the question of whether PG&E's ratepayers should bear the risks and benefits presented by the Agreement. As pointed out by witness Knecht, PG&E traditionally has been expected to accept the risks and benefits of developing its energy resources. Shifting the burden and rewards from PG&E to its ratepayers would insulate PG&E from the risks and rewards it should encounter firsthand. Additionally, Knecht argues PG&E will not gain the skills and experience it must have to negotiate small power supply contracts in the future if the ratepayer assumes the economic consequences of the Agreement.

In response, PG&E asserts that as a regulated utility it may be required to accept the risks and at the same time pass through all the benefits resulting from the Agreement. Furthermore, witness Ikemoto stated that PG&E's current cash flow situation is such that it may not invest capital in a project of this type. Lastly, Ikemoto contends that since PG&E's revenues are taxable, PG&E would receive one-half of the benefits that PG&E's ratepayers would receive from the Agreement.

This matter was debated at some length in our OIR 2 proceeding. In D.82-01-103, we decided that nonstandard offers will be reviewed for a period of two years. As we indicated there, we expect the standard offer to be the appropriate price in most cases. However, at the same time, we anticipated a demand for nonstandard offers such as the instant Agreement, due, for example, to the need of some small power producers for higher or assured payments in the early years of their contracts. We noted in that decision that unless a utility receives assurance of advance approval of such nonstandard contract payments, it may not choose to negotiate any nonstandard contracts. For that reason, we provided for a nonstandard contract review procedure, and this proceeding involves the first such proposed contract.

As the record here shows, there remain some unresolved issues raised by nonstandard contracts. However, considering the specifics of this proposal, we do not find it necessary to consider and resolve all those issues here. The Agreement appears to offer the ratepayers high potential rewards at little risk; the fixed price is only slightly above current avoided costs, and there are significant safeguards written into the contract to avoid ratepayer losses should the project experience early failure. In all the failure cases examined by the staff, the ratepayers were protected from losses by these safeguards. Accordingly, we will authorize ECAC recovery by PG&E of all contract payments under the Agreement, as requested. This recovery will be accomplished through accounting for the energy purchased in CPUC Account No. 555, Purchased Power. Therefore, it appears that no revisions to existing tariffs will be necessary.

Findings of Fact

1. PG&E and USW have negotiated a power sales agreement with nonstandard pricing provisions calling for levelized payments above avoided costs.

2. Economic analyses of the contract terms show that the payments above avoided cost are offset by expected discounts to avoided cost in later years as well as interest payments.

3. The risk of project failure in the early years of the Agreement is mitigated by several provisions limiting the timing and the amount of the payments above PG&E's avoided cost.

4. The appraised salvage value of the Altamont windfarm is sufficient to cover all probable losses to the ratepayer or PG&E due to project failure in the early years.

5. A levelized payment guarantee is necessary to attract investors to a project with the Altamont windfarm's technical uncertainties.

Conclusions of Law

1. The power sales agreement between PG&E and USW is reasonable and prudent although some contract provisions differ from the standard offers authorized in D.82-01-103.

2. The interests of the ratepayer are adequately protected by the Agreement's provisions.

3. Recovery by PG&E of all contract payments through ECAC proceedings is reasonable and appropriate.

O R D E R

IT IS ORDERED that:

1. The provisions set forth in Appendix B of Exhibit A of the application, Schedule of Power Purchase Prices of PG&E's Power Sales Agreement with U.S. Windpower, Inc., are declared to be prudent and reasonable.

2. Pacific Gas and Electric Company (PG&E) shall recover through its Energy Cost Adjustment Clause all payments made under the above-mentioned provisions.

This order becomes effective 30 days from today.

Dated April 21, 1982, at San Francisco, California.

JOHN E. BRYSON
President
RICHARD D. GRAVELLE
LEONARD M. GRIMES, JR.
VICTOR CALVO
PRISCILLA C. GREW
Commissioners

We will file a concurring opinion.

/s/ RICHARD D. GRAVELLE
/s/ LEONARD M. GRIMES, JR.
Commissioners

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

Joseph E. Bodovitz

Joseph E. Bodovitz, Executive Director

A.61073
D.82-04-087

RICHARD D. GRAVELLE, Commissioner and
LEONARD M. GRIMES, JR., Commissioner, Concurring:

This is the first non-standard contract that the Commission has considered since the issuance of our decision on small power pricing procedures in D.82-01-103. As envisioned in that decision, the primary feature of the present contract which differentiates it from a standard QF price offer is the particular distribution of project risk that is achieved by the contract, in this case, through a levelized purchased power price. We concur with the advance approval of this contract because the project was the subject of rigorous staff scrutiny and because the staff's analysis indicated that the allocation of project risk to the ratepayers under the terms of the contract was more than compensated for by expected ratepayer benefits derived from this facility. The amount of ratepayer risk that is involved is limited to prudent levels by the provisions of the contract. We expect this QF project to be a cost-effective addition to the state's electric generation resources.

While there will be instances such as this where ratepayers can benefit by sharing QF project risk, in general we feel that it is more appropriate for the utilities (or other investors) to share risks and benefits with QF's in cases where QF's seek to spread project risks to facilitate financing. Utilities are in a better position to evaluate the technical risk associated with a particular project than are regulators. Utilities are thus capable of making more fully informed judgments as to when it is desirable to participate in the unregulated risks and returns of the QF market.

We indicated in D.82-01-103 (pp.11-12) that utility "below the line" diversification into QF projects raises troublesome issues such as the potential for anticompetitive effects in the QF market and the difficulty in maintaining the separation between regulated and unregulated company activities. While these issues require this Commission to take a cautious stance toward utility financial involvement with QF's, it is nevertheless our view that in instances where QF's seek to share risks and returns, it is the utility investor, rather than the ratepayer, that is the more appropriate partner in such endeavors.

Richard D. Gravelle
RICHARD D. GRAVELLE, Commissioner

Leonard M. Grimes Jr.
LEONARD M. GRIMES, JR., Commissioner

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This application is our first review of a nonstandard offer since issuance of Decision (D.) 82-01-103 in Order Instituting Rulemaking (OIR) 2. The procedure followed here is a good example of the "nonstandard review process" contemplated in D.82-01-103. ~~We expect all utilities to be guided by this opinion when determining whether advance approval of other nonstandard offers is essential.~~

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Two days of hearing before Administrative Law Judge R. Wu were held in San Francisco. PG&E offered one witness, Glenn Ikemoto, formerly a senior resource planner and now a consultant. USW sent three representatives: Stanley Charren, chairman of the board of USW; James Connelly, vice president of TXL Corporation; and Herbert Weiss, vice president for engineering at USW. The staff showing coordinated by Brian T. Cragg consisted of a technical witness, Thomas Beach; a policy witness, Charlotte Ford; and a financial witness, Ron Knecht. The City and County of San Francisco (CCSF) did not present any witnesses but participated through cross-examination. The matter was submitted on February 26, 1982, after the receipt of oral argument from the parties.

III. Applicant's Showing

PG&E and USW combined to explain why the nonstandard provisions of the Agreement are essential to the developer USW, are attractive to investors such as TXL Corporation, and are beneficial to PG&E's ratepayers. A brief description of the Agreement and its nonstandard pricing provisions is appropriate before we review the arguments offered by PG&E and USW.

electricity. The availability of substantial tax benefits alone is not sufficient to attract investors who instead may choose proven equipment financing deals whose returns and tax benefits are much more predictable. As wind technology is tested and proven, we expect that levelized payments of this type, or other financing guarantees, will no longer be necessary. However, at this early stage of the wind power industry, we find it reasonable to promote the development of this clean, low cost, alternative energy source by approving this nonstandard Agreement.

A more troublesome issue is the question of whether PG&E's ratepayers should bear the risks and benefits presented by the Agreement. As pointed out by witness Knecht, PG&E traditionally has been expected to accept the risks and benefits of developing its energy resources. Shifting the burden and rewards from PG&E to its ratepayers would insulate PG&E from the risks and rewards it should encounter firsthand. Additionally, Knecht argues PG&E will not gain the skills and experience it must have to negotiate small power supply contracts in the future if the ratepayer assumes the economic consequences of the Agreement.

In response, PG&E asserts that as a regulated utility it may be required to accept the risks and at the same time pass through all the benefits resulting from the Agreement. Furthermore, witness Ikemoto stated that PG&E's current cash flow situation is such that it may not invest capital in a project of this type. Lastly, Ikemoto contends that since PG&E's revenues are taxable, PG&E would receive one-half of the benefits that PG&E's ratepayers would receive from the Agreement.

This matter was debated at some length in our OIR 2 proceeding. In D.82-01-103, we decided that nonstandard offers will be reviewed for a period of two years. As we indicated there, we expect the standard offer to be the appropriate price in most cases. However, at the same time, we anticipated a demand for nonstandard offers such as the instant Agreement, due, for example, to the need of some small power producers for higher or assured payments in the early years of their contracts. We noted in that decision that unless a utility receives assurance of advance approval of such nonstandard contract payments, it may not choose to negotiate any nonstandard contracts. For that reason, we provided for a nonstandard contract review procedure, and this proceeding involves the first such proposed contract.

As the record here shows, there remain some unresolved issues raised by nonstandard contracts. However, considering the specifics of this proposal, we do not find it necessary to consider and resolve all those issues here. The Agreement appears to offer the ratepayers high potential rewards at little risk; the fixed price is only slightly above current avoided costs, and there are significant safeguards written into the contract to avoid ratepayer losses should the project experience early failure. In all the failure cases examined by the staff, the ratepayers were protected from losses by these safeguards. Accordingly, we will authorize ECAC recovery by PG&E of all contract payments under the Agreement, as requested. This recovery will be accomplished through accounting for the energy purchased in CPUC Account No. 555, Purchased Power. Therefore, it appears that no revisions to existing tariffs will be necessary.

<u>Findings of Fact</u>

1. PG&E and USW have negotiated a power sales agreement with nonstandard pricing provisions calling for levelized payments above avoided costs.

2. Economic analyses of the contract terms show that the payments above avoided cost are offset by expected discounts to avoided cost in later years as well as interest payments.

3. The risk of project failure in the early years of the Agreement is mitigated by several provisions limiting the timing and the amount of the payments above PG&E's avoided cost.

4. The appraised salvage value of the Altamont windfarm is sufficient to cover all probable losses to the ratepayer or PG&E due to project failure in the early years.

2. Pacific Gas and Electric Company (PG&E) shall recover through its Energy Cost Adjustment Clause all payments made under the above-mentioned provisions.

This order becomes effective 30 days from today.

Dated APR 21 1982, at San Francisco, California.

JOHN E. BRYSON
President
RICHARD D. GRAVELLE
LEONARD M. GRIMES, JR.
VICTOR CALVO
PRISCILLA C. GREW
Commissioners

We will file
a concurring opinion
Gravelle & Grimes