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Decision 90-11-060 November 21, 1990

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ORIGINAL

Application of Southern California Edison Company (U 338-E) for Approval of Amended and Restated Wind Park Power Purchase and Sales Agreement Between The Arbutus Corporation and Southern California Edison Company.	Application 89-06-022 (Filed June 13, 1989)

Gloria Ing, for Southern California Edison Company, applicant.
Thomas P. Corr, for The Arbutus Corporation, interested party.
Ida Passamonti and Perry Rice, for Division of Ratepayer Advocates.

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OPINION

I. Summary

This decision dismisses without prejudice Southern California Edison Company's (Edison) "Application and Request for Ex Parte Relief" seeking the Commission's approval of the renegotiated power purchase agreement (Proposed Agreement) it signed with The Arbutus Corporation (Arbutus) on May 9, 1989.

Arbutus is a wind park qualifying facility (QF). It executed a power purchase agreement (PPA) with Edison in June of 1983. This nonstandard PPA entitled Arbutus to 8 cent per kilowatt per hour (kWh) floor payments. The difference between these floor payments and avoided cost, as defined by the agreement, was accumulated in a payment tracking account (PTA). Arbutus was to repay the balance in the PTA when the balance exceeded the value of security it had posted with Edison. The PTA balance is a loan from ratepayers to Arbutus. The QF claims that it cannot repay the PTA without facing bankruptcy.

The Proposed Agreement would have the effect of requiring ratepayers to forgive a debt of over $5 million which Arbutus owes Edison for payments in excess of avoided cost. $3.2 million of this sum represents the difference between floor payments and avoided cost, plus interest. The remainder consists of payments under the Proposed Agreement which Edison has made to Arbutus since June of 1988. The PTA debt would be extinguished because the price due to Arbutus would be recalculated retroactive to the inception of the PTA. Instead of being entitled only to posted avoided cost for 30 years, Arbutus would be entitled to retain payments equal to roughly 94% of Interim Standard Offer 4 (ISO 4) prices. Ratepayers would have paid 8 cents per kWh for all energy purchased from June 29, 1984 through May 31, 1988, they will pay 78% of ISO 4 fixed energy and the ISO 4 forecast price for as-available capacity from June 1, 1988 to June 1994. Thereafter, energy payments would be based on avoided cost and capacity payments would be based on the ISO 4 capacity provisions.

Ratepayers would pay a total of $8.3 million more over the 30-year term of the Proposed Agreement than they would have paid under the original contract in present value terms. In exchange for these financial benefits, which represented $5 million as of February 1990, Arbutus agreed to reduce its contract nameplate capacity from 37.5 megawatts (MW) to 27.5 MW.

We find that Edison has not met its burden of proof in that it has failed to demonstrate with actual financial and operational data that Arbutus is in need of a renegotiated contract. Nor has Edison made sufficient showing that the Proposed Agreement will maintain Arbutus' financial stability for the remaining term of the Proposed Agreement. Demonstration of Arbutus' actual financial condition with and without the Proposed Agreement is central to our policies on pioneer contract renegotiation.

II. Background

A. The QF

The Arbutus Corporation is the developer of the Pajuela Peak Wind Park (wind park), the QF in this application. It is wholly owned by Cormed Inc., which has no holdings or assets other than Arbutus. Arbutus was incorporated on September 8, 1982. All equity in Cormed Inc. is owned by three individuals. Arbutus acquired 4,214 acres of land at Tehachapi Pass, 308 acres of which have been developed as the wind park. Arbutus then sold wind turbines to investors. Arbutus manages the wind park.

Arbutus executed a PPA with Edison on June 22, 1983 acting for itself and as managing agent for persons investing in wind turbines at Arbutus' wind park (the Original Agreement). Arbutus testified that execution of a PPA was crucial because wind turbines were being sold and they would soon be capable of delivering energy. In fact, deliveries to Edison commenced on August 15, 1983.

Arbutus was represented by Independent Power Corporation in its PPA negotiations. Independent Power Corporation was a party to the QF-utility-Division of Ratepayer Advocates (DRA) negotiations that lead to the adoption of ISO 4 on September 7, 1983. Arbutus' president testified that the QF signed the Original Agreement because the parties believed on the basis of Decision (D.) 82-12-120 that Arbutus could switch to the final long-run standard offer when it became available.

Edison suggested that Arbutus was driven by the economic advantage provided by tax credits to execute a PPA when it did.[1] The potential tax credits were described and projected for 11 years in Arbutus' 1983 offering circular. Arbutus' counsel verified in the circular that a typical investor was more likely than not to realize an investment tax credit, federal energy credit,[2] and the

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1 "(A)ny 'pioneer' QF that was interested in getting into the industry wanted their projects on-line prior to the end of any given year in order to qualify for that year's tax benefits. Consequently, even though Arbutus may have been aware of the ISO 4 negotiations, it was imperative that they negotiate a nonstandard agreement during the same time frame because of uncertainty of ISO 4 being approved for use in time to get a project on-line by year-end 1983." (Ex. 2, Gallagher, p. 6.)

2 Prospective investors were told of an "energy percentage" tax credit equal to 15% of the cost of wind energy property in addition to the 10% investment tax credit. Only property placed in service by December 31, 1985 was eligible for the energy percentage.

state energy credit[3] totaling $66,250 on a purchase price of $132,500 during 1983. The portion of the credit in excess of the current year's net tax could be carried over to succeeding years. The circular also described a depreciation tax benefit commencing in the year of purchase. The circular shows a cumulative decrease in federal income taxes of $85,125 during the years 1983 through 1990 and a decrease in state income taxes of $42,743, assuming an initial investment of $32,500, financing at 14% of the balance of $100,000 over ten years, and taxation of the investor at the maximum rate.

The offering circular included a form of promissory note and a purchase agreement. With the proceeds of the offering, Arbutus was to purchase a wind turbine for resale to the investor, install it on the site, and connect it to the Edison power grid.

B. <u>The Original Power Purchase Agreement</u>

The Original Agreement was signed two and a half months before ISO 4 became available. QFs which had executed their PPAs before ISO 4 was authorized and were generating as of January 28, 1987 were described as "pioneer QFs" in D.87-01-049 (23 CPUC 2d 499, petition of Independent Energy Producers to modify D.83-09-054 to allow pioneers to switch to ISO 4, denied). Since Arbutus signed its PPA just two and a half months before the authorization of ISO 4 and commenced deliveries on August 15, 1983, Arbutus falls into the "pioneer" category of QFs.

The central feature of this nonstandard contract was the 8 cent/kWh floor payment. Edison would pay Arbutus this combined

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3 Arbutus advised prospective investors that California allowed a tax credit equal to 25% of the cost of a wind-driven electric generation system installed by December 31, 1983. The tax credit would be available in the year the system was installed so long as the taxpayer had placed funds for the purchase of a solar energy system in an escrow account by December 31, 1983.

energy-capacity price for deliveries. The difference between the 8 cent payments and payments calculated at Edison's posted avoided cost for energy and $127/kW-yr for capacity, subject to a hurdle factor,[4] would be accumulated in an interest-bearing PTA.

The balance in the PTA would be capped at the lowest of (a) the product of $300 times the number of kW of installed capacity, currently $6,600,000, (b) $8,000,000, or (c) the amount of security provided by Arbutus to secure repayment of the PTA to Edison.

The agreement also required Arbutus to procure a performance bond, letter of credit, or other security satisfactory to Edison in its sole discretion as security for Arbutus' repayment obligations under the terms and conditions of the PTA. This security was to be provided to Edison no later than the date of firm operation and was to be maintained in an amount equal to the maximum balance so long as there was a balance in the PTA. Under the contract, if Arbutus did not obtain the bond or other form of security, the 8 cent/kWh payment would not have been made. Instead, Edison would have paid Arbutus 95% of Edison's avoided cost of energy and capacity, subject to the capacity hurdle factor.

If the security was insufficient to cover the growing balance in the PTA, Edison's payments to Arbutus would consist of the lower of either: (1) Edison's avoided cost of capacity and energy less interest accrued in the PTA for that month, or (2) a percentage of Edison's actual avoided cost. If there were a balance in the PTA as of January 1, 1993, payments would be reduced to the lower of either 80% of Edison's posted avoided cost or

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4 $127/kW-yr was the price for firm capacity deliveries. Thus, if during any month Arbutus did not maintain a capacity factor of at least 51% for any time-of-use period, Edison's avoided cost of capacity was reduced by 50% for purposes of calculating the PTA balance and the capacity payments for that period.

8 cents/kWh. The entire PTA balance must be repaid no later than December 31, 1995.

1. Operation of the Wind Park

With the PPA in place, Arbutus carried on its sale of wind turbines. By June of 1984 Arbutus had sold 113 Wind Tech machines to investors; by the end of 1984, Arbutus had sold 115 Bonus wind machines; at the end of 1985, 356 wind turbines had been installed. Arbutus then owned 22 of them. All tolled, about 500 individuals had invested in the wind farm, but only 25 of those who had invested by 1985 are still turbine owners.

Despite the general optimism over alternative energy resources that prevailed when Arbutus commenced operations, some of the wind turbines suffered technical problems. Fourteen wind turbines manufactured by Danish Wind Technology were sold by Arbutus and installed at the wind park. However, these did not perform as expected so the financing institution has refused to pay the wind turbine manufacturer.

There was a lawsuit between Arbutus, the Wind Tech turbine owners, and a major insurance carrier over liability for the nonoperation of the Wind Tech turbines. As the result of settlement, Arbutus now owns 107 Wind Techs.[5] These represent a total of 8 MW of nameplate capacity, but the machines are inoperative. The court ruled them to be a total constructive loss having no value, they never have worked, and they will require extensive retrofitting in order to become productive. The Bonus machines, on the other hand, have operated reliably.

5 The insurance carriers settled after a court ruled that the insurance policies did provide coverage for the nonoperation of the machines. A total of $15 million will be paid by the insurance companies. As part of the settlement, Arbutus, which held a security interest in the machines, received title. In exchange, each Wind Tech owner was paid $90,000. Arbutus itself retained $2 million from the settlement.

The maximum nameplate rating of the wind turbine generating facilities covered by the Agreement was 37.5 MW. Only 22 MW of generating capacity has been installed. Currently, the wind park produces a maximum 16 MW of electricity. Edison, Arbutus, and DRA stipulated that the industry average capacity factor for a large wind park is 20 to 25%. Arbutus' operative machines have a historical capacity factor of about 20%.

The offering circular states that investors are liable for all costs incurred by Arbutus in the operation of the wind park. Arbutus retains 11% of each investor's net energy and capacity payments for rental of an easement for the wind turbine, maintenance of the wind turbines, and accounting and bookkeeping services.

2. The Issue of Adequate Security

Arbutus began deliveries to Edison on August 15, 1983, but received only 95% of published avoided cost for energy and capacity because it had not posted a bond as security for the PTA. Arbutus has never provided a cash form of security, such as a bond or letter of credit, to Edison. On June 15, 1984, Arbutus provided a deed of trust in the amount of $460,000 on the real property on which the wind park was situated. Edison began paying 8 cents/kWh for energy-capacity for deliveries on June 29, 1984.

By December 30, 1985 the PTA balance had reached $420,471, so Edison requested Arbutus to provide additional security. Arbutus did not do so.

In April of 1986, Edison realized that the amount of recorded liens on the property exceeded the appraised market value of the real estate, so that the deed of trust was worthless as security for the PTA balance. Edison informed Arbutus that the $460,000 deed of trust was not sufficient to cover the PTA. Edison advised Arbutus April 10, 1986 that it was deferring payment of the 8 cent/kWh payment until Arbutus submitted the proper security.

In May of 1986, Edison agreed to accept a security interest in the wind park land for an additional $800,000 as security for the PTA. By October of 1986 the PTA balance had reached a million dollars. Since Edison's avoided cost was declining and Arbutus' security was limited, the parties then agreed to work out a proposal to amend the Original Agreement.

At Arbutus' request, Edison agreed to reduce the floor payment to 6 cents/kWh, to keep the PTA balance from growing as rapidly as it had, beginning in September 1986 until the issue of the adequacy of security was resolved. In May of 1987 Edison suggested that Arbutus investigate the possibility of an insurance company bonding the PTA. At the end of May 1987, Arbutus provided Edison with another deed of trust on the property in the amount of $1,500,000 and the PTA limit was increased to $3,000,000. At Arbutus' request at the end of May 1987, Edison recalculated all payments made at the 6 cent rate and paid Arbutus the difference between the 6 cent and 8 cent rates, a total of $294,891. In June of 1987 Arbutus informed Edison that it could not acquire a bond. In the meantime, Edison had been paying Arbutus the floor price and the PTA account had accrued $1.9 million.

3. <u>Renegotiation of the Original Agreement</u>

Negotiations over the value of security continued. In June of 1987, Arbutus suggested that Edison accept the wind turbines as security for the PTA. Edison replied that it would do so only as part of a package wherein Arbutus would pay interest on the PTA on a monthly basis and the fixed payments would be reduced, which Arbutus would not accept.[6]

In June of 1988, Arbutus asserted that it was entitled to an ISO 4. Edison rejected this claim; Arbutus threatened to file a

6 We find that Edison's decision to reject the wind turbines as security was prudent.

complaint with the CPUC. The parties then met for three days and, based on Arbutus' estimated operating cost per kWh, developed economic assumptions that would form the basis for a renegotiated PPA. The renegotiated PPA was executed on May 9, 1989. Since June 1988, Edison has paid Arbutus based on the proposed settlement agreement because Edison believed Arbutus was having financial difficulties.

As of June 30, 1988, the PTA balance stood at $3,233,236. In September 1988, Edison received an "open-ended deed of trust dated August 5, 1988" from Arbutus "as additional security for the PTA until there is a ruling by the CPUC on the Application". As of February 1990, the amount owned ratepayers under the Original Agreement was over $5 million.

As the agent for the wind turbine investors, Arbutus received payments for deliveries of energy from Edison and distributed them to the investors. The PTA balance continued to grow while the parties wrestled with the adequacy of security. Despite this mounting liability, Arbutus did not establish any cash reserve from which the PTA can be repaid.

C. <u>The Proposed Agreement</u>

The Proposed Agreement extinguishes the PTA and substitutes a new payment structure effective retroactively to the date floor payments were first made. Since the proposed energy and capacity prices are higher than those contained in the Original Agreement, the amount Arbutus owes to Edison is extinguished. In effect, $5 million owing to Edison is "forgiven". Edison characterizes the difference between the 8 cent/kWh payments received by Arbutus from June 29, 1984 through May 31, 1988 and the lower payments to which Arbutus is entitled under the Proposed Agreement as "overpayments". The amount of overpayments totals $710,000. Edison has begun collecting $710,000, plus interest, by withholding an amount from Arbutus' monthly check as of June 1, 1988 and will continue to do so through 1991.

The Proposed Agreement has a ten-year fixed price period, beginning on June 29, 1984.

As to energy payments, during the first four years, Arbutus would receive the ISO 4 price; during the next six years, energy prices would be fixed at 78% of ISO 4 prices. Beginning in 1994, Arbutus would be paid posted avoided cost of energy for 6-1/2 years; for the last 13-1/2 years of the contract period, energy payments will be 90% of Edison's posted avoided cost of energy.

As for capacity payments, the capacity price for the first ten years is equal to the ISO 4 forecast of as-available capacity price (not subject to any hurdle factor). For the 20 years beginning on June 29, 1994, the capacity price would be equal to the greater of (a) the 1994 ISO 4 forecast of as-available capacity price, or (b) Edison's posted price of as-available capacity.

In addition, the term of the Proposed Agreement exceeds the term of the Original Agreement by ten months and the contract nameplate capacity is reduced from 37.5 MW to 27.5 MW.

1. <u>Evidence in Support of Proposed Agreement</u>

The only document produced at the hearing as the basis of the Proposed Agreement was Arbutus' estimate of operation and maintenance (O&M) expense for a typical wind turbine at the wind park. Essentially, these parties state that assuming output of 6,500 kWh per month,[7] the fixed cost of operation for each wind

7 Arbutus' president testified that a lower-than-average number was chosen to determine the cost per kWh to ensure that revenues would be sufficient to cover the operating costs of the less productive wind turbines. He stated that if the average number were used, and revenues did not cover operating costs, Arbutus would have to turn the machine off because it is doubtful that owners would agree to subsidize it.

turbine was 6.8 cents/kWh or $444 per month in 1988.[8] The DRA suggested that Arbutus' cost should be compared with the California Energy Commission's estimate of the cost to operate a utility-scale wind farm. This figure, 1.2 cents/kWh, was not proposed as the basis for pricing payments to Arbutus, but as a "benchmark".

Edison and Arbutus state that given the cash flows that Arbutus would experience under the terms of the Original Agreement, the QF would not be able to continue operations and would inevitably file for bankruptcy. Arbutus estimates that under the Original Agreement, monthly payments from Edison would total about $80,000. The interest due on the PTA would total $50,000. The difference is not sufficient to continue operation of the wind park, and Arbutus would declare bankruptcy, according to the applicant.

Operation is similarly uneconomical for individual investors, according to Arbutus. It states that the wind turbine owners were entitled to avoided costs of only 3.1 cents/kWh for deliveries during 1988. Based on 6,500 kWh per month of production, gross income was $207. The monthly ownership and maintenance expense charged by Arbutus was $444. Given the monthly difference of $237, Arbutus would cease operations and go bankrupt, claim Edison and Arbutus.

The foregoing income and expense figures relate only to the availability of cash energy payments from Edison to offset the

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8 (See Ex. 2, Attachment 6, "Estimated Operating Cost per Kwh"). The O&M expense was the average expense incurred for a pool of 90 Bonus wind turbines. Arbutus provided these numbers to Edison. These numbers formed the basis of three days' intense negotiations between Edison and Arbutus. Both parties testified that other figures were considered and tested through spreadsheets. No other assumptions or written material was introduced at the evidentiary hearing, however.

estimated O&M expense for each wind turbine. No monthly or annual income and expense statements were provided for a typical wind turbine. No balance sheet was provided for the typical owner of a wind turbine, even though Arbutus testified that repayment of the PTA balance was the obligation of the investors.

The renegotiation was intended to avert Arbutus' bankruptcy, but the applicants did not introduce evidence of Arbutus' financial position. The only evidence was presented by DRA, which submitted consolidated balance sheets for Arbutus and its subsidiary, Arbutus Energy Corporation, which is charged with the operation and maintenance of the wind park, as of August 31, 1988, March 31, 1989, and August 31, 1989. The statements of assets and shareholder equity and liabilities contained on those balance sheets do not describe Arbutus' monthly income and expenses.

Arbutus required its investors to execute security agreements in its favor to secure the investors' payment of O&M expenses to Arbutus. Arbutus did not explain why execution on its security would not provide it with the resources necessary to carry on its operations.

Arbutus and Edison maintain that the payments under the Proposed Agreement will ensure Arbutus' viability. The energy payment drops after the fixed price period so that Arbutus projects an annual loss in 1994, 1995, and 1996. While estimated cumulative income is positive in all years starting in 1989, no mechanism is provided to ensure that adequate reserves will cover those years in which losses are expected. Under the Proposed Agreement, estimated cumulative income from years 1989 through 1993 exceeds estimated cumulative losses from years 1994 through 1996 by only $154.95 per wind turbine.

2. <u>Comparison of Payment Streams</u>

At the hearing, Edison introduced the present values of payments under different scenarios: (a) an ISO 4 with energy and capacity prices forecasted in 1983, (b) an ISO 4 using forecasts of as-available energy prices as estimated in 1988, (c) a contract assuming $127/kW-yr for capacity at 100% capacity factor and the original energy payment terms, and (d) the Proposed Agreement. Edison assesses the ratepayer impact as the difference between (a) projections of actual avoided costs for energy based on forecasts made in 1988, and (b) $127/kW-yr for capacity and the costs under the Proposed Agreement.

DRA introduced the present value of payments under the Original Agreement reflecting the capacity hurdle factor and Arbutus' stipulated historic capacity factor, but without weighting capacity payments for time of delivery as provided for under the Original Agreement. Other than to establish the assumptions underlying the present values, no party seriously challenged these numbers.

The present value of payments expressed in 1988 dollars is $25.4 million under the Proposed Agreement. It appears that payments total approximately $17.8 million under the Original Agreement. $17.8 million is the average of Edison's figure, $18.9 million, and DRA's figure, $16.7 million. Neither party's figure is completely correct because Edison's number assumed a 100% capacity factor, and DRA's figure, which factors in the hours of delivery, did not recognize the significant price differential driven by the time of delivery. The adopted number is consistent with Edison's calculation that capacity payments to Arbutus were approximately $69/kW-yr under the Original Agreement. Edison's witness testified that the $710,000 of "overpayments" was not included in the $25.4 million. Thus, the total cost of purchases under the Proposed Agreement is $26.1 million. The cost of the Proposed Agreement exceeds the cost of the Original Agreement by $8.3 million in present value terms.

III. Positions of the Parties

A. Edison

Edison states that the Proposed Agreement is reasonable and prudent because the Commission has indicated that pioneer QFs in need should be helped, the level of proposed energy payments will enable Arbutus to remain in business, and Arbutus is clearly a pioneer.

Edison argues that ISO 4 is the appropriate benchmark for judging the reasonableness of a renegotiated pioneer QF contract and that it has struck a balance between ISO 4 and actual avoided cost prices. According to Edison, the Commission has recognized that payments near or above ISO 4 levels might be required for the financial viability of pioneer QFs, and that theoretically, ratepayers could be made indifferent to those payments by receiving significant discounts below avoided cost in later contract years. Since the present value of estimated payments under the Proposed Agreement is about 94% of estimated payments under an ISO 4 contract and they are sufficient to allow Arbutus to remain in business, the Proposed Agreement is reasonable, according to Edison.

Edison claims that Arbutus' O&M costs indicate that Arbutus would not survive if the Original Agreement was not renegotiated. Edison believes that it reasonably negotiated with Arbutus and relied on data provided by Arbutus because Arbutus is legally responsible for the obligations of the Original Agreement by virtue of its role as managing agent for the wind park investors.

Edison states that there is a minimal overall ratepayer impact of $6.4 million over what it would cost Edison to replace the energy and capacity if Arbutus ceased to operate. However, Edison believes that its ratepayers would be in a more secure position under the Proposed Agreement.

Edison claims that the Proposed Agreement represents a fair settlement of the disputes between Arbutus and Edison. The first dispute involves the adequacy of security for the PTA, specifically, the issue of whether Edison should have accepted the wind turbines or project equipment as security. The second dispute, whether Arbutus is entitled to switch to ISO 4, arose shortly after the Commission authorized ISO 4 for QF purchases.[9] The utility's objective in renegotiating the Original Agreement was to strike a balance between payments based on avoided cost and ISO 4.

Edison points out that settlements are favored by the Commission, and the dispute between Arbutus and Edison could have reached the Commission in three different forums: (1) Edison's ECAC proceeding, when Edison would be required to prove the reasonableness of its Agreements, (2) a complaint proceeding, and (3) a settlement proposal. Edison believes it has chosen the most reasonable course of action and seeks Commission approval of the settlement terms.

B. Arbutus

The QF argues that, "Renegotiated agreements reached as a result of arms-length bargaining undertaken pursuant to Commission orders and policies should be given a presumption of reasonableness."

Arbutus maintains that it would be driven out of business if the terms of the Original Agreement were enforced. In that

9 Edison advises that Arbutus claims that shortly after ISO 4 was approved, Arbutus called Edison and requested that the Original Agreement be switched to the ISO 4 Power Purchase Contract. Edison has no record of this telephone call. Edison states that pursuant to the Commission's direction, if it had received such a call, it would have rejected Arbutus' request.

case, not only would Arbutus' revenues be reduced, the PTA balance would go unpaid.

Arbutus characterizes the PTA as a safeguard against project abandonment, not as a device to "guarantee" avoided costs or to drive QFs out of business in the event that avoided costs declined. The QF argues that enforcement of the Original Agreement would have the effect of compelling Arbutus to guarantee the escalation of avoided cost forecasted in 1982-83, since Arbutus' financial ability to repay the PTA under the terms of the Original Agreement depends on avoided cost exceeding Arbutus' break-even level. According to Arbutus, since no other QF has been forced to guarantee avoided costs, denial of the Proposed Agreement would be unfair and discriminatory to Arbutus, as well as a repudiation of the decisions regarding pioneer relief.

Arbutus speculates that Edison's reliance on a PTA to permit Arbutus to take advantage of a floor payment structure might have created additional risks to ratepayers, "because of the threatened bankruptcy of Arbutus and the potential remedies available to Arbutus in Bankruptcy Court". Arbutus postulates that a bankruptcy court may require Edison to continue the 8 cent payment or payments under ISO 4 and compel Edison to accept the entire wind park, in which about $45 million has been invested, as security for a PTA. The PTA balance would grow to $8 million, the highest of the amounts allowed under the Original Agreement, or even up to the value of the security, at the discretion of the Bankruptcy Court, states Arbutus.

C. DRA

DRA argues that Arbutus is not entitled to special financial assistance because equitable factors preclude it from being treated as a pioneer. Arbutus negotiated its contract at the same time ISO 4 was being drafted. Arbutus did not propose to generate electricity at a time when the utilities' own central station capacity was in doubt. These differences in timing mean that Arbutus should not be granted the consideration due pioneer QFs, states DRA. Further, DRA maintains that even if Arbutus was a pioneer, it would not be entitled to an ISO 4 contract. Because the Proposed Agreement is but a 6% discount from ISO 4, the proposal of Edison and Arbutus is inconsistent with Commission policy on contract switching, according to DRA.

The new contract does not conform to the principles applied in D.87-08-047, the Commission-designated precedent for pioneer QF renegotiations, claims DRA. DRA asserts that there is no evidence of a balancing of risks and benefits between Arbutus and ratepayers in the proposed contract; there is no curtailment provision or any other provision to provide economic and operational benefits to the ratepayer. DRA maintains that Edison's wind turbine pro forma and Arbutus' spreadsheets showing a pro forma monthly income analysis for a typical wind turbine under the original versus new contract do not constitute the economic analysis needed to justify payments under the Proposed Agreement. Edison and Arbutus appear simply to be asking the Commission to bail out the three owners of Arbutus who claim financial distress and to rescue Edison from its imprudent agreement, according to DRA.

DRA challenges Edison's prudence in negotiating both the original contract and the new contract. DRA argues that in signing the Original Agreement, Edison should not have relied on a projection of avoided costs at very high levels beyond the year 2000 because even in 1983, oil prices had begun to decline. DRA charges Edison with failing to reasonably anticipate the possibility that Arbutus would be unable to reimburse Edison for the PTA, since it was not protected by a performance bond, and the utility continued to accommodate the QF by accepting deeds of trust for increasing amounts as the PTA balance grew.

Relying on its estimate of payment streams under the Original Agreement, DRA states that approval of the Proposed

Agreement will increase ratepayer costs by $9.3 million without any service or economic benefits.

In summary, DRA argues that the renegotiated agreement is unreasonable and contrary to Commission policy; that Edison and Arbutus have failed to show that the financial distress of Arbutus is the result of anything other than management error, both in negotiating the original contract and in developing the wind park.

IV. Discussion

Edison has asked the Commission to approve a nonstandard contract between itself and Arbutus that would replace the existing agreement between the contracting parties. In examining this application, we are mindful of the events which led to the renegotiation of the original PPA. In particular, we recognize that Edison and Arbutus dispute whether or not Arbutus is entitled to switch to an ISO 4, and that negotiations stemming from this dispute were conducted with awareness of our policies on pioneer contract renegotiation.

We note that our pioneer policies were developed, in part, in D.87-01-049, wherein we rejected Independent Energy Producers' petition to allow contract switching for all pioneers. In that decision, we determined that renegotiation of pioneer contracts would be allowed on a case-by-case basis. Furthermore, in our approval of two pioneer renegotiated contracts in D.87-08-047 and in our report to the Legislature pursuant to Senate Bill 2476 we developed the policy of basing the renegotiated contract terms on the QF's actual need as demonstrated by operating and capital cost data.

In this decision we address the basic question of whether or not the Proposed Agreement is reasonable, and in doing so we ask if the renegotiated contract is tailored to the QF's financial need. The increased costs to be borne by ratepayers under the Proposed Agreement are also considered.

A. Is the Proposed Agreement Reasonable?

The Proposed Agreement represents an accommodation between Edison and Arbutus. We have concluded that Arbutus is a pioneer QF.[10]

Several of our decisions and our SB 2476 report to the Legislature have focused on pioneer QFs. When considering the petition of Independent Energy Producers (IEP) to make ISO 4 available to pioneer QFs, the Commission held, "The potential for significant overpayments is, in our view, sufficient reason to deny IEP's request that pioneers be allowed to switch to interim Standard Offer 4 contracts." (23 CPUC 2d 502.) Lacking a middle ground between outright denial of IEP's petition and the grant of ISO 4 to all pioneers, the Commission stressed, "the potential of negotiated settlements to tailor relief more appropriately to the needs of specific projects is one of the reasons we prefer seeking negotiated agreements." (ibid.)

In D.87-08-047, the Commission emphasized the need for actual cost data and cash flow analyses to assure that the risks and benefits between QFs and ratepayers are balanced. The Commission noted that the pioneers had "opened their books to the utility, which made it possible to design solutions that sustained those projects without exposing ratepayers to undue risk." The

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10 As a pioneer, Arbutus is not directly subject to the criteria set out in the Commission's "QF Guidelines" (D.88-10-032, 29 CPUC 2d 415). Whether a bona fide dispute between the QF and the utility exists and whether or not the QF is "viable" are questions that need not be addressed here.

QF's disclosure of its financial data led to our approval of the renegotiated pioneer contracts in that precedent-setting case.

1. Relief Tailored to the QF's Financial Need

Two crucial elements of any renegotiation of a pioneer PPA are that (1) the pioneer is in financial distress, and (2) the economic terms of the renegotiated agreement expressly meet the financial needs of the pioneer and will enable it to continue its contribution to the utility system.

a. Is the QF in Financial Distress?

Arbutus claimed that its financial viability was at issue, stating that unless the renegotiated agreement is approved, it would face bankruptcy. Arbutus claims that it would receive roughly $80,000 per month under the existing contract (posted avoided cost prices) and that the interest payments on the PTA alone equal $50,000. The remaining income would not allow Arbutus to continue operations, and the company would file for bankruptcy.

Before we accept Arbutus' claim of financial distress, it is important to consider the larger financial picture. Arbutus is not the entire QF. It is only the managing agent for the individual turbine owners, of whom there are currently 25. We must look to the principals who own the 356 wind turbines to determine whether continued operation of the wind park under the Original Agreement is possible. We have noted that no financial information concerning the turbine owners was introduced. Arbutus has not shown that the payment stream under the PPA is the only resource available to either Arbutus or the individual turbine owners to meet their repayment obligations and operating expenses.

No pro forma of expenses and income for the entire wind park operation was provided by Arbutus. The only evidence concerning Arbutus' expenses consisted of excerpts of a "Consolidated Statement of Operations" dated August 1988 and March 31, 1989, introduced in evidence by DRA. Arbutus provided no explanation of how its net income would be insufficient to meet expenses.

The only evidence introduced by the applicant in support of the payment stream under the Proposed Agreement is a "wind turbine pro forma". This document itemizes the monthly cost of operating a wind turbine incurred by individual investors. All of the costs, except for the Edison interconnect and property taxes, are determined by Arbutus and must be paid to Arbutus pursuant to the terms of the offering circular. Although Arbutus testified that the individual owners are responsible for the PTA and thus put at issue the ability of the owners to operate under the original contract, the overall financial circumstances of the individual investors were not a factor in negotiating the Proposed Agreement.

The application asserts that the Proposed Agreement is needed to enable Arbutus to continue its operations, but the basis of the Proposed Agreement is the statement of expenses incurred by the individual wind turbine owners. The expense categories shown for each turbine differ from those shown for Arbutus.[11] Neither Edison nor Arbutus attempted to reconcile the expenses which the Proposed Agreement was designed to recover with the costs incurred by Arbutus on behalf of the turbine owners. We are concerned that because of its role as wind park developer, Arbutus may have incurred obligations not related to the physical

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11 Investor's expenses are: maintenance, common area cost, insurance, Arbutus utility fee, SCE interconnect, property taxes, easement fee, and accounting fee.

Arbutus' expenses vary, depending on the period for which data was provided. At times, Arbutus' expenses have included construction salaries, common area expenses, windmill repairs, selling expenses, and general and administrative expenses, as well as interest expense, penalties, and corporate income taxes.

operation of the park. Having no other source of income, Arbutus must collect those expenses through charges to wind turbines in order to remain a viable business. However, there is no reliable evidence of how the renegotiated agreement will guarantee Arbutus' viability because Arbutus never provided its audited financial statements to the DRA or on the record.

We conclude that Edison has failed to show with actual financial and operational data that QF operations as a whole are in financial distress.

b. Does Agreement Meet the QF's Needs?

One of the reasons this Commission favors renegotiations with financially troubled pioneer QFs is that a revised contract may assure the probability of the pioneer's continued contribution to the utility resource mix. The Proposed Agreement provides no such assurance. There is no assurance that the individual turbine owner has any incentive to operate the wind turbine pursuant to the Proposed Agreement, particularly since net losses are anticipated for certain years under the Proposed Agreement.

Arbutus states that it chose a lower forecast of output on which to base monthly fixed costs per kWh because otherwise operation of the turbine would not be attractive to an owner of a lower-producing machine; the owner would decide to shut the turbine down. This points out the difference in net income that can be experienced by the owners of the 356 wind turbines at the wind park. In some cases, the operating cost per kWh embedded in the contract price may not be sufficient to ensure the production of energy. In others, the cost assumption may exceed what is necessary for the individual turbine owner. There is no way of knowing, since the turbine owners did not open their books to the utility during negotiations. Moreover, Arbutus has no authority to require owners to continue operations if payments do not meet their expectations.

Even under the Proposed Agreement, the turbine owners are expected to incur net losses in certain years. Although earnings are positive on a cumulative basis, there is no reason to believe that investors would continue to operate the wind turbines at a loss for three consecutive years. We note that Arbutus has not provided any mechanism for assuring the investors of a positive cash flow through that period.

Edison and Arbutus stress that the wind turbine pro forma was not the only information the parties considered during their three-day negotiating session that produced the Proposed Agreement. Nonetheless, it is the only document produced on the record which the parties state formed the basis of the Proposed Agreement. Arbutus and Edison claim that many scenarios were evaluated, but they have not shown how the Proposed Agreement was derived from the pro forma figures. Edison has not carried its burden of coming forward with evidence to show how the renegotiated contract meets the QF's financial needs.

2. Increased Cost to Ratepayers

Edison asserts that the Proposed Agreement is the equivalent of the Original Agreement because the Original Agreement is 94.3% of the ISO 4 forecast of energy and capacity in 1983, and the Proposed Agreement is 93.7% of the 1988 forecast of ISO 4 payments for energy and capacity. As explained above, comparison of the Proposed Agreement with ISO 4 is not the test of reasonableness for a pioneer contract. We will use present value analysis to ascertain the difference between the two agreements in terms of cost to ratepayers as we did in D.87-08-047.

Edison calculates a negative present value of $6.4 million under the Proposed Agreement. Edison compares the payment streams under the renegotiated contract with the cost of replacement energy based on today's forecasts, thus ignoring the ratepayer's benefit of the bargain under the existing PPA. DRA believes the Proposed Agreement represents a negative present value of $9.3 million. The relevant comparison is between the cost to ratepayers under the status quo, i.e., the Original Agreement, and the cost incurred under the Proposed Agreement. As noted above, Edison has calculated the present value of payments under the Proposed Agreement to be $25.4 million. This figure does not include the $710,000 "overpayment". The total amount to be recovered in rates would be $26.1 million. DRA estimated the present value of payments under the existing contract as $16.7 million, but we increase that sum to $17.8 million to compensate for the fact that Arbutus' deliveries were not constant over all time of delivery periods. We conclude that the renegotiated contract has a negative $8.3 million present value to ratepayers.

V. Conclusion

Approval of the Renegotiated Agreement is dismissed without prejudice. Edison has not disclosed the financial circumstances of the QF sufficiently to enable the Commission to determine whether the QF is experiencing financial hardship, what relief is needed, and whether the Proposed Agreement provides financial relief or not. The contract has not been shown to be specifically tailored to meet the financial needs of the QF as a whole in such a way that the QF will continue to contribute its generation to the utility's resource system. Therefore, we invite Edison and Arbutus to bring to us a renegotiated contract which is clearly tailored to the actual financial needs of the QF and which will maintain the financial viability of the QF for the term of the contract. Demonstration of the QF's financial condition before and after renegotiation must rely on the actual financial and operational data of the entire wind park, as opposed to the estimated average cost of operating a typical wind turbine.

We conclude that our policy toward pioneer QFs does not guarantee energy and capacity payments at any price to encourage the pioneer to operate. Without sufficient bases upon which to determine that the higher prices in the Proposed Agreement are reasonable, and in consideration of our pioneer policies, we cannot approve or deny this application. Accordingly, the application is dismissed without prejudice.

<u>Findings of Fact</u>

1. Edison filed its "Application and Request for Ex Parte Relief" seeking the Commission's approval of its Proposed Agreement with Arbutus on June 13, 1989.

2. Edison sought a Commission finding that its execution of the Proposed Agreement is reasonable, that the Proposed Agreement protects the interests of Edison's ratepayers, and that Edison should recover all payments to Arbutus under the Proposed Agreement through the utility's ECAC, subject to later review of Edison's administration of the Proposed Agreement.

3. DRA protested the application and claimed that the Proposed Agreement would significantly increase the price to be paid by ratepayers relative to the Original Agreement with no offsetting operational enhancements or long-term economic benefits to the ratepayers; Edison had not shown that Arbutus would be viable should the Proposed Agreement be approved; ratepayers are being asked to assume a burden resulting from Edison's acceptance of inadequate security for the PTA; Arbutus is not entitled to ISO 4 prices; and it is unreasonable to rely on the threat of Arbutus' complaint against Edison for ISO 4 prices as a basis for granting ISO 4 prices in the renegotiated contract.

4. Evidentiary hearing was held during four days in San Francisco during which two witnesses testified on behalf of Edison, two on behalf of Arbutus, and one on behalf of DRA.

5. The Original Agreement was executed by Edison and Arbutus, acting as the managing agent for investors in the Pajuela Peak Wind Park under the terms of Arbutus' offering circular, on June 22, 1983.

6. The Original Agreement required Edison to pay Arbutus 8 cents/kWh for capacity and net energy until the present value of the total payments is no more than 95% of the present value of the prices Edison would have paid Arbutus pursuant to Standard Offer 2.

7. The excess of the 8 cent payments over payments based on Edison's posted avoided cost of energy and $127/kW-yr for firm capacity, with capacity payments subject to a hurdle factor, adjusted for actual deliveries and time of deliveries, was accrued in an interest-bearing PTA. Arbutus was to repay the balance in the PTA to Edison.

8. The balance in the PTA was limited to the lowest of (1) $300 per kW of installed capacity, (2) $8,000,000, and (3) the amount of security provided and maintained by Arbutus to secure repayment to Edison of payments in excess of Edison's avoided cost of energy and capacity.

9. The Original Agreement required Arbutus to procure no later than the date of firm operation a bond or other security satisfactory to Edison in its sole discretion in an amount equal to the maximum balance in the PTA. Arbutus was to maintain such security as long as there is a balance in the PTA. In the absence of such security, Edison was to pay 95% of its avoided cost for energy and capacity instead of the 8 cents per kWh.

10. If the amounts accrued in the PTA exceeded the lowest of the values described in Finding 8, above, Edison was to pay Arbutus Edison's actual avoided cost of capacity and energy less interest accrued in the PTA for the current month.

11. Edison commenced payments to Arbutus according to the schedule in the Proposed Agreement on June 1, 1988. The difference between these payments and the prices Arbutus would otherwise be entitled to, when added to the PTA balance as of June 1, 1988, results in Arbutus owing Edison over $5 million. The term "PTA balance" refers to all sums which Edison has paid to Arbutus in excess of posted avoided cost for energy and avoided cost of

capacity calculated at $127/kW-yr, subject to the hurdle factor described in the Original Agreement, plus interest.

12. Under the terms of the Original Agreement, when the PTA limit is reached, Arbutus shall be paid 95% of Edison's posted avoided cost of energy plus capacity payments as defined in the agreement, less current interest on the PTA. Thus, today Arbutus would earn approximately $80,000 for energy and capacity but have to remit approximately $50,000 to Arbutus as an interest payment each month.

13. Arbutus is liable to Edison as the party contracting under the Original Agreement. Arbutus' investors are responsible for the PTA pursuant to the terms and conditions of the offering circulars by which investors purchased their individual wind turbines from Arbutus. Approximately 500 individuals have at one time invested in Arbutus, although currently only about 25 of the original investors still have an interest. Arbutus would have to involve about 500 individuals in a lawsuit to recover the PTA balance from its investors.

14. Arbutus claims that the cash received under the Original Agreement is insufficient to cover its costs and that it would cease operations and file for bankruptcy.

15. There is no cash reserve established to repay the PTA balance.

16. Arbutus cannot repay the PTA balance under the terms of the Original Agreement out of the cash flow from energy and capacity payments.

17. Edison and Arbutus have been negotiating for over two and a half years over the type and amount of security that Arbutus must provide Edison in order to continue the 8 cent/kWh payment. The balance in the PTA continued to grow over the negotiating period because the differential between 8 cents and Edison's posted avoided cost did not lessen. Edison accepted deeds of trust on the wind park property so that the PTA ceiling increased from $460,000

in June of 1984, to $1,260,000 in May of 1986, to $1,500,000 in May of 1987, then finally, to an "open-ended" deed of trust as of August 1987.

18. Edison and Arbutus produced the Proposed Agreement after three days of negotiations where various financial scenarios were considered which would ensure Arbutus' continued operation. The only document introduced in evidence as the basis for payments to Arbutus under the Proposed Agreement is contained in a one-page sheet captioned "Estimated Operating Cost per KWH". The cost per kWh is calculated on a pro forma basis and is the average monthly fixed cost that would be incurred by an owner of one type of wind turbine. All of the costs, except for the Edison interconnect and property taxes, are set by Arbutus and must be paid to Arbutus pursuant to the terms of the offering circular. Two of the expense items vary as a percentage of the energy and capacity payments made by Edison.

19. No comparison between the individual owner's pro forma and Arbutus' costs of doing business can be made, since different information was provided for each party. There was no attempt to relate the expenses listed on the pro forma of operating cost to the costs incurred by Arbutus on behalf of the turbine owners.

20. The payments which are allegedly necessary to ensure Arbutus' continued operation are based on a pro forma of what each turbine investor is required to pay to Arbutus, as the wind park manager; they are not based on Arbutus' costs of operation.

21. The Proposed Agreement substitutes energy and capacity prices for the prices by which the PTA was calculated retroactive to the date floor payments were first made. Since the proposed energy and capacity prices are higher than those contained in the Original Agreement, the amount Arbutus would owe to Edison under the Proposed Agreement is reduced to $710,000. Under the Original Agreement, Arbutus now owes Edison over $5 million.

22. The Proposed Agreement has a term of 30 years, beginning on June 29, 1984. Prices are fixed during the first ten years. As to energy prices, during the first four years Arbutus would receive the ISO 4 price, during the next six years, energy prices would be fixed at 78% of ISO 4 prices. Arbutus would be paid the posted avoided cost of energy for years 10 through 16.5, then 90% of posted avoided cost during years 26.5 through 29. As for capacity payments, the ISO 4 forecast of as-available capacity would be paid the first ten years. For the next 20 years, Arbutus would have the ISO 4 option of the greater of the 1994 forecast or Edison's posted price of as-available capacity.

23. The payment stream under the Proposed Agreement shows negative net income during the years 1994, 1995, and 1996. There is no provision for reserves to cover those years. Since the decision to operate the wind turbines is made by the individual turbine owner, not Arbutus, there is no assurance that the wind park will continue in operation after 1993.

24. Edison claims that the renegotiated agreement is reasonable because the present value of payments under that agreement is 94% of payments under ISO 4, using the forecast of avoided cost that was made in 1988.

25. Edison states that the net present value of the Proposed Agreement is negative $6.4 million compared to the price of replacement energy and capacity. That is, ratepayers would have to pay $6.4 million more under the Proposed Agreement than they would if they sought replacement energy elsewhere.

26. The impact of the Proposed Agreement on ratepayers must be calculated as the difference in present values of payments under the Original Agreement and the Proposed Agreement in order to recognize the ratepayers' benefit of the bargain under the existing contract. Ratepayers would pay $8.3 million more under the Proposed Agreement than under the Original Agreement.

27. Arbutus is a pioneer QF.

28. It is not the policy of this Commission to require ratepayers to guarantee the operation of pioneer QFs at all costs.

Conclusions of Law

1. Edison did not sustain its burden of showing that the renegotiated agreement was tailored to the specific financial need of the QF and that the QF would continue operations under the Proposed Agreement.

2. Application 89-06-022 should be dismissed without prejudice.

ORDER

IT IS ORDERED that Application 89-06-022 is dismissed without prejudice to the parties' submittal of a different renegotiated agreement.

This order is effective today.

Dated November 21, 1990, at San Francisco, California.

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

Commissioner Frederick R. Duda, being necessarily absent, did not participate.

We will file a written concurrence.

/s/ G. MITCHELL WILK
President

/s/ JOHN B. OHANIAN
Commissioner

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

Neal J. Shulman
NEAL J. SHULMAN, Executive Director
pb

G. MITCHELL WILK AND JOHN B. OHANIAN, Commissioners, concurring:

This case is best understood by recalling the inception of the QF program by PURPA and the CPUC, and the history of QF "pioneers". This group of QFs entered into contracts with utilities after May of 1982, and before the Commission introduced our series of four "standard offers". The QF pioneers signed non-standard contracts prior to the availability of standard offer 4, and generally on less favorable terms.

PURPA was, in effect, an experiment to determine whether new, cheaper or more diverse electric generation options could be developed if the risk of the investment was transferred entirely from ratepayers to independent investors. This meant that ratepayers paid a certain price for the power and for the capacity, and investors took the investment gains and suffered the losses. As everyone knows, the experiment was a dramatic success. Thousands of megawatts of alternative generation now operate statewide, and numerous QFs have profited handsomely. Within the context of reasonable prices for purchased power, no upward limits on qualifying facility earnings have ever been imposed.

Sooner or later, however, a qualifying facility was going to fail. When it did, the circumstances were bound to be complicated, investors disappointed, and the advocates interested in rescuing the failed venture by means of a special dispensation at the expense of the ratepayers. However, the basic premise of of the program is that some QFs will fail, because such facilities are <u>not</u> utilities, and because investors bear the risk rather than ratepayers. If the Commission is unwilling to allow a qualifying facility to fail, then the fundamental compact between private QF investors and ratepayers is abrogated.

Ratepayers cannot be expected to allow unlimited profits for successful ventures, but to serve as the ultimate deep pocket for bankruptcies.

To let such a venture fail the Commission would have to consider and reject arguments by its proponents that unusual circumstances doomed a very worthwhile endeavor. Indeed, given the regulatory complexity of this business, portions of the Commission's own decisions would likely be cited as having offered assurances upon which investors reasonably relied and which now justify a bailout.

To preserve the integrity of the program and its benefits the Commission must be able to say "no" to such pleadings.

We appreciate the need to have a complete record to decide any important matter, and additional information regarding the finances of Arbutus and its investors would add to what is now available. However, even if we take Arbutus's representations of financial hardship at face value, it appears difficult to see how such arguments should be allowed to make a difference based on the foregoing observations. The primary issue is whether or not the renegotiated contract is reasonable for ratepayers and consistent with the basic philosophy of the QF program -- whether it leaves the investors as princes or paupers is irrelevant. We would have no difficulty approving a reasonable contract that enriches its proponents while rejecting another that would merely sustain the operation at too high a cost for ratepayers.

Arbutus is a QF pioneer. We agree with our prior decisions that include the QF pioneer's financial need in considering renegotiated contracts, at least in matters such as the timing and structure of payments to meet unique circumstances. But the overall cost of a renegotiated contract must be reasonable and in the best interests of the ratepayers.

When we reconsider this contract based on the fully developed record we will vote in accordance with these principles.

G. MITCHELL WILK, President

JOHN B. OHANIAN, Commissioner

November 21, 1990
San Francisco, California