BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for Approval of Contracts for Purchase of Firm Capacity and Energy between ECopeat Avon Park and Florida Power Corporation.	DOCKET NO. 910549-EQ ORDER NO. 24923 ISSUED: 8/19/91

The following Commissioners participated in the disposition of this matter:

THOMAS M. BEARD, Chairman
J. TERRY DEASON
BETTY EASLEY
MICHAEL McK. WILSON

NOTICE OF PROPOSED AGENCY ACTION

ORDER APPROVING FIRM CAPACITY AND ENERGY CONTRACTS

BY THE COMMISSION:

NOTICE is hereby given by the Florida Public Service Commission that the action discussed herein is preliminary in nature and will become final unless a person whose interests are adversely affected files a petition for a formal proceeding, pursuant to Rule 25-22.029, Florida Administrative Code.

BACKGROUND

In July, 1990, Florida Power Corporation (FPC) and Ecopeat Avon Park (Ecopeat) began negotiations on an agreement to provide that Ecopeat would lease FPC's Avon Park Unit No. 2, retrofit the unit to produce electricity, and then sell the firm capacity and energy to FPC. The lease agreement and the contract for the purchase of firm capacity and energy were signed on March 28, 1991.

The following table provides a brief description of the project and major contract terms:

Avoided Unit type	pulverized coal
Committed Capacity	36.5 MW
On-Peak Capacity Factor	85 percent
Contract Term	1/1/96 to 12/31/2025 (30 years)
QF's site	Avon Park Unit II
QF's technology	fluidized bed
QF's fuel type	peat

In addition to this contract, FPC signed nine other contracts against their 1991 need, for a total of 642.3 MW. See Order No 24734 and Order No. 24099.

NEED FOR CAPACITY

The ten QF projects are projected to avoid the 1991 need of 300 MW of coal and 150 MW of combustion turbine capacity that FPC identified in Docket No. 910004-EU, In Re: Planning Hearings on Load Forecasts, Generation Expansion Plans, and Cogeneration Prices for Florida's Electric Utilities. The 605.8 MW associated with the previously approved negotiated contracts, added to the 36.5 MW associated with the Ecopeat contract, exceed FPC's identified need. FPC states that it acquired the additional capacity, however, to provide it with contingent capacity to cover qualifying facility projects that may not come to fruition. FPC has already received requests from several QF's to delay their in-service dates by six months to two years. The amount of capacity that would thus be delayed is almost 300 megawatts. Because the Company is in need of capacity immediately, it will not have time to acquire more QF capacity to replace the capacity from facilities that do not come into service.

FPC's winter reserve margin for the 1996-2000 period ranges from 17.4% to 17.6% with the Ecopeat contract, and 16.9% to 17.1% without the Ecopeat contract. FPC's summer reserve margin for the same period ranges from 22.2% to 18.2% with the Ecopeat contract, and 21.6% to 17.7% without the Ecopeat contract.

CONTRACT TERMS AND CONDITIONS

The terms and conditions of the Ecopeat contract are similar to those of FPC's eight negotiated contracts recently approved by the Commission. A summary of the terms and conditions in the Ecopeat contract follows:

Security Guaranties

Within sixty days after the contract approval date, the QF must post a Completion Security Guarantee of $10 per KW of Committed Capacity, or $365,000, to ensure completion of the facility in a timely fashion. The Completion Security Guarantee will be reduced by the amount of lease payments the QF pays to FPC, plus the cost of certain engineering work, etc., which would be beneficial to FPC even if the QF fails to achieve commercial in-service status. The QF may delay commercial operation by up to 90 days if it agrees to pay FPC $0.15 per kW, or $5,475 per day of delay. FPC will refund to the QF any cash Completion Security Guarantee, with interest, if the facility achieves commercial in-service at or prior to the contract in-service date.

The contract also contains an Operational Security Guarantee of $20 per KW of committed Capacity, or $730,000, to ensure that the QF does not terminate the contract prior to December 31, 2025. FPC will reduce the Operational Security Guarantee by the cost of any site improvements performed that would be beneficial to FPC. The Operational Security Guarantee, with interest, will be refunded upon conclusion of the contract, so long as the contract is not terminated prematurely.

In addition to the security guarantees, the contract contains several milestones that the QF must meet:

Milestone	Date
submit Completion Security	60 days after contract approval
construction loan date	March 1, 1994*
construction commencement	60 days after construction loan date
in-service date	January 1, 1996*

* may be extended if PSC approval takes more than 120 days.

Changes in Committed Capacity

For the period ending one year immediately after the contract in-service date, the QF may, on one occasion, increase or decrease the committed capacity by no more than 10%. After the one year period, and continuing throughout the term of the Agreement, the QF may decrease its committed capacity without penalty by up to 20% if it provides at least three years written notice. The capacity payment will be prorated to the new capacity amount.

Capacity and Energy Payments

The capacity and estimated energy payments of this contract differ from those of FPC's avoided unit in two ways. First, the QF receives a monthly capacity payment based on the value of its committed on-peak capacity factor. Ecopeat committed to an on-peak capacity factor of 85% which is higher than the 83% on-peak capacity factor of FPC's avoided coal unit's. In order to reflect the additional value of higher availability and reliability to FPC, Ecopeat's payment stream is increased by the ratio of its committed on-peak capacity factor to that of the avoided unit (i.e. 85/83 = 1.024). Second, Ecopeat has chosen a payment option in which 20% of the estimated energy payment is added to the capacity payment. The energy payment the QF receives is then discounted by 20%. The effect is that 20% of the QF's energy payment is guaranteed at the price of FPC's fuel forecast, and 80% of the QF's energy payment is based on the actual price of the avoided unit's fuel.

The contract also includes a monthly capacity payment adjustment that will decrease the capacity payment in the event the monthly on-peak capacity factor is below the respective contractual minimum amount, but greater than or equal to 50%. No capacity payment will be made if the on-peak capacity factor falls below 50%.

Beginning with the contract in-service date, the QF will receive electric energy payments based upon the firm energy cost calculated on an hour-by-hour basis as follows:

(i) the product of the average monthly inventory chargeout price of fuel burned at the Avoided Unit Fuel Reference Plant, the 80% Fuel Multiplier, and the Avoided Unit Heat Rate, plus the Avoided Unit Variable O & M, if applicable, for each hour that the Company would have had a unit with these characteristics operating; and

(ii) during all other hours, the energy cost shall be equal to the As-Available Energy Cost.

Performance Criteria

Under the contract, Ecopeat must maintain an on-peak capacity factor of 85%. This compares favorably to the avoided unit's 83% capacity factor. The contract does not contain a minimum overall capacity factor. Instead, it has an hourly performance adjustment to the energy payment. The performance adjustment acts as a monetary reward or penalty mechanism which provides an incentive to Ecopeat to operate in a manner similar to the operation of the avoided unit.

LEASE AGREEMENT

Under Ecopeat's lease agreement with FPC, Ecopeat will lease FPC's Avon Park Steam Unit No. II, and Ecopeat will refurbish the unit into a fluidized bed steam powered generating unit. Prior to the execution of the lease agreement, the unit was in cold shutdown and FPC's 1990 Facility Plan showed no plans to reactivate it.

The lease contains provisions to ensure that the unit is refurbished and that FPC is not left with a unit that is partly completed and worth less than the unit they have now. During the development phase of the project, Ecopeat must submit a bond to FPC for at least $1 million, to provide security that the unit is restored to a condition equivalent to its current condition, should the lease be terminated by Ecopeat. The lease also contains milestones during the development phase which relate to the selection of an architectural firm, completion of a peat mining study, water permit application filing, fuel harvesting agreement, and construction loan date.

Under the lease agreement, FPC receives revenues two ways. It receives lease payments of approximately $1 million per year, and it will receive bonus payments if Ecopeat's return on its investment exceeds 13.7%. The net present value of lease payments is $7,218,002. This exceeds the total unrecovered costs of Avon Park Steam Plant Unit 2, which is $1,821,033, and it also exceeds the appraised value of the unit, which is $4,450,000. The bonus payment is structured so that FPC receives 25% of the portion of Ecopeat's return that exceeds 13.7%. FPC estimates that the bonus payments would increase its revenues by $8,147,542 on a net present value basis.

INTERCONNECTION AGREEMENT

The contract contains an interconnection agreement which provides that FPC will construct the interconnection and the QF will pay for its construction.

APPROVAL OF THE CONTRACT

Under the provisions of Sections 25-17.082 and 25-17.0832(2), Florida Administrative Code, we grant Florida Power Corporation's petition for approval of the contract with Ecopeat for the reasons discussed below.

Section 25-17.082, Florida Administrative Code, requires electric utilities to purchase electricity produced and sold by qualifying facilities at rates which have been agreed upon by the utility and qualifying facility, or at the utility's published tariff rate. Section 25-17.0832(2), Florida Administrative Code, states that in reviewing a negotiated firm capacity and energy contract for purposes of cost recovery, the Commission shall consider the following factors that affect the purchasing utility's general body of retail and wholesale customers:

a. Whether the additional firm capacity and energy is needed by the purchasing utility and by Florida utilities from a statewide perspective; and

b. The present worth of utility's payments for firm capacity and energy to the QF over the life of the contract are projected to be no greater than the present worth of the year-by-year deferral of the construction and operation of generation by the purchasing utility over the life of the contract; or the present worth of other capacity and energy costs that the contract is designed to avoid; and

c. To the extent that annual firm capacity and energy payments made to the QF in any year exceed that year's annual value of deferring the construction and operation of generation by the purchasing utility or other capacity and energy related costs, whether the contract contains provisions to ensure repayment of such payments exceeding that year's value of deferring that capacity in the event that the QF fails to deliver firm capacity and energy pursuant to the negotiated contract; and

d. Considering the technical reliability, viability and financial stability of the QF, whether the contract contains provisions to protect the purchasing utility's ratepayers if the QF fails to deliver firm capacity and energy as specified by the contract.

a. Need For Power

It is with certain reservations that we approve this contract, because the capacity bargained for here, combined with the capacity contracted for in the nine negotiated contracts recently approved by this Commission, amounts to 642.5 MW, when FPC has only identified a need for 450 MW. We do not believe, as a general rule, that utilities should sign up more capacity than they need. We can support such action in this case, however, because of the following circumstances:

1. FPC's need is immediate, and it cannot risk obtaining less than 450 MW because of possible QF defaults or delays. FPC has reason to believe that some of the QFs they have contracts with will not come on-line as projected.

2. FPC's need is probably greater than the 450 MW they identified in their 1990 plan, because that plan did not anticipate recently requested delays in existing QF projects, or the anticipated one-year delay in FPC's 500 kV transmission line.

3. If all of the existing QF project come on-line as anticipated in the contracts, and FPC has excess capacity, FPC can reduce its purchase from the Southern Company by 200 MW in 1994 and it can delay or cancel the construction of 1993 combustion turbines to mitigate any harmful effect to its ratepayers.

FPC needs the QF capacity from its existing contracts to meet reliability and reserve margin requirements. The purchase from Ecopeat will contribute to maintaining a loss of load probability of less than 0.1 days per year. The capacity provided by Ecopeat will improve the loss of load probability for the state and contribute to the capacity needs of the state.

b. Cost-Effectiveness

The present value of FPC's payments to Ecopeat for firm capacity and energy will be no greater than the present worth of the value of a year-by-year deferral of FPC's avoided costs. The Ecopeat contract has a present worth savings of $897,816 (in 1991 dollars) compared to FPC's full avoided costs. This represents 99.4 % of FPC's full avoided costs. FPC's avoided costs are derived from its 1991 need for 450 MW of pulverized coal and combustion turbine capacity as filed in Docket No. 910004-EU.

FPC's cost-effectiveness analysis did not consider the effects of the lease agreement, but effects of bonus and lease payments will eventually be passed on to the ratepayers, increasing the cost-effectiveness of this agreement. With the lease payment and the estimated bonus payment, the lease agreement provides FPC with $16,865,542 revenues (in 1991 dollars); this amount exceeds the appraised value of the property by $12,415,542. Considering the estimated revenues from the lease and the power purchase contract together, Ecopeat is being paid 91 percent of FPC's full avoided costs.

Ecopeat has chosen a payment option by which it is paid 20% of its energy cost based on FPC's fuel forecast, and 80% of its energy cost based on the actual fuel costs of the avoided unit. This provides the QF with higher fixed payments and lower variable payments than it would have had, had it chosen a normal payment stream. This provision could have a positive or a negative effect on FPC's ratepayers, depending on the accuracy of FPC's fuel forecast. If FPC's fuel forecast is low, Ecopeat's fuel payments will be lower than the actual fuel costs of FPC's avoided unit, but if FPC's fuel forecast is high, Ecopeat's fuel payments will be higher than the actual fuel costs of FPC's avoided unit. The FERC rules on cogeneration allow QFs to receive this option. Section 292.304 (d)(2) states:

> Each qualifying facility shall have the option...[t]o provide energy or capacity pursuant to a legally enforceable obligation...in which case the rates for such purchases shall, at the option of the qualifying facility...be based on either: (i) The avoided costs calculated at the time of delivery; or (ii) The avoided costs calculated at the time the obligation is incurred.

We do not object to this provision for four reasons: 1) the FERC rules allow QFs to receive payments based on the avoided costs at the time the obligation is incurred; 2) the possibility that the ratepayers will pay higher fuel costs is balanced by the possibility that they will pay lower fuel costs; 3) since only 20 percent of the fuel forecast is fixed, the exposure to the ratepayers is not excessive; and 4) the other terms and conditions of the agreement (including the lease agreement) balance any negative effect of this provision.

c. <u>Security for Early Payments</u>

Ecopeat will not be paid early or levelized capacity payments. Thus there is no need to establish a capacity credit account to ensure repayment of capacity payments exceeding that year's value of deferral.

d. <u>Security Against Default</u>

The contract contains security to protect FPC's ratepayers in the event the QF fails to deliver firm capacity and energy as required in the contract. The contract contains several performance milestone dates which would permit FPC to terminate the contract if the milestones are not achieved. In addition, the contract requires Ecopeat to submit a \$10/kW completion security deposit and a \$20/kW performance security deposit. These security deposits have two benefits. They provide a good faith indicator that Ecopeat will reach commercial in-service status and continue to operate through the contract term, and they will help to mitigate damages if Ecopeat does not deliver capacity and energy as contracted.

<u>CONCLUSION</u>

The negotiated cogeneration contract between FPC and Ecopeat is a viable generation alternative, and we approve it, for the following reasons:

1. The capacity and energy generated by the Ecopeat is needed by FPC and Florida's utilities;

2. The contract appears to be cost-effective to FPC's ratepayers;

3. FPC's ratepayers are reasonably protected from default by the terms of the contract; and,

4. The contract meets all the requirements and rules governing qualifying facilities.

It is therefore

ORDERED by the Florida Public Service Commission that the power purchase contract between Florida Power Corporation and Ecopeat is approved for the reasons set forth in the body of this order. It is further

ORDERED that this Order shall become final unless an appropriate petition for formal proceeding is timely filed herein. It is further

ORDERED that this docket be closed automatically when the protest period has expired.

By ORDER of the Florida Public Service Commission, this 19th day of AUGUST, 1991.

STEVE TRIBBLE, Director
Division of Records and Reporting

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NOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.59(4), Florida Statutes, to notify parties of any administrative hearing or judicial review of Commission orders that is available under Sections 120.57 or 120.68, Florida Statutes, as well as the procedures and time limits that apply. This notice should not be construed to mean all requests for an administrative hearing or judicial review will be granted or result in the relief sought.

The action proposed herein is preliminary in nature and will not become effective or final, except as provided by Rule 25-22.029, Florida Administrative Code. Any person whose substantial interests are affected by the action proposed by this order may file a petition for a formal proceeding, as provided by Rule 25-22.029(4), Florida Administrative Code, in the form provided by Rule 25-22.036(7)(a) and (f), Florida Administrative Code. This petition must be received by the Director, Division of Records and Reporting at his office at 101 East Gaines Street, Tallahassee, Florida 32399-0870, by the close of business on 9/9/91.

In the absence of such a petition, this order shall become effective on the day subsequent to the above date as provided by Rule 25-22.029(6), Florida Administrative Code.

Any objection or protest filed in this docket before the issuance date of this order is considered abandoned unless it satisfies the foregoing conditions and is renewed within the specified protest period.

If this order becomes final and effective on the date described above, any party adversely affected may request judicial review by the Florida Supreme Court in the case of an electric, gas or telephone utility or by the First District Court of Appeal in the case of a water or sewer utility by filing a notice of appeal with the Director, Division of Records and Reporting and filing a copy of the notice of appeal and the filing fee with the appropriate court. This filing must be completed within thirty (30) days of the effective date of this order, pursuant to Rule 9.110, Florida Rules of Appellate Procedure. The notice of appeal must be in the form specified in Rule 9.900(a), Florida Rules of Appellate Procedure.