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DATE: September 4, 2003

TO: DIRECTOR, DIVISION OF THE COMMISSION CLERK
ADMINISTRATIVE SERVICES (BAYÓ)

FROM: DIVISION OF ECONOMIC REGULATION (COLSON, BAXTER, SICKEL)
OFFICE OF THE GENERAL COUNSEL (BROWN) MCB

RE: DOCKET NO. 030459-EQ - PETITION OF PROGRESS ENERGY
FLORIDA, INC. FOR APPROVAL OF AMENDMENT TO EXISTING
COGENERATION CONTRACT WITH LAKE COGEN, LTD.

AGENDA: 09/16 /03 - REGULAR AGENDA - PROPOSED AGENCY ACTION -
INTERESTED PERSONS MAY PARTICIPATE

CRITICAL DATES: NONE

SPECIAL INSTRUCTIONS: NONE

FILE NAME AND LOCATION: S:\PSC\ECR\WP\030459.RCM

CASE BACKGROUND

Progress Energy Florida, Inc. (PEF) and Lake Cogen Ltd. (Lake), a qualifying facility (QF), entered into a negotiated cogeneration contract (contract) on March 13, 1991. The term of the contract is for 20 years, beginning July 1, 1993, when the facility began commercial operation, and expiring July 31, 2013. Committed capacity under the contract is 110 megawatts, with capacity payments based on a 1991 pulverized coal-fired avoided unit. The contract was one of eight QF contracts that were originally approved for cost recovery by the Florida Public Service Commission (Commission) in Order No. 24734, issued July 1, 1991, in Docket No. 910401-EQ.

The contract has been the subject of much litigation, which resulted in a decision by the Fifth District Court of Appeals¹ interpreting the contract to entitle Lake to the same firm energy price for the facility's output during Off-Peak hours as during On-Peak hours. Presently, because of the poor economics associated with operating the plant during Off-Peak hours, Lake has voluntarily reduced the facility's Off-Peak output by approximately 50% during the winter period. Also, the On-Peak hours during the winter period are split into two segments, from 6:00 A.M. to Noon and from 5:00 P.M. to 10:00 P.M. The voluntary reduction of Off-Peak sales has created an operational problem for, and imposes additional operating costs on Lake. The facility must ramp down and back up twice a day for the entire winter period. PEF filed a Petition on May 27, 2003, that modifies the contract to realign On-Peak hours to better match Lake's operational constraints, and removes the requirement to pay firm energy rates during Off-Peak and weekend hours.

Commission jurisdiction and the substantive considerations of this case are governed by Sections 350.127(2), and 366.05(1), Florida Statutes. Pursuant to Commission Rule 25-22.036(4), Florida Administrative Code, PEF's petition includes the attached letter agreement between PEF and Lake, which amends the existing cogeneration contract.

¹See NCP Lake Power, Inc. v Florida Power Corporation, 781 So. 2d 531 (Florida 5th DCA 2001).

DISCUSSION OF ISSUES

ISSUE 1: Should the Commission approve the Letter Agreement between Progress Energy Florida, Inc. (PEF) and Lake Cogen, Ltd. (Lake) which modifies the Negotiated Contract for Purchase of Firm Capacity and Energy from a Qualifying Facility between Lake and Florida Power Corporation (FPC) d.b.a. PEF, dated March 13, 1991?

RECOMMENDATION: Yes, the proposed amendment will provide greater operational flexibility to both Lake and PEF, and it will minimize the purchase of energy by PEF from Lake during Off-Peak periods when less expensive energy is available. The amendment is expected to save PEF ratepayers approximately \$11.0 million over the remaining term of the contract. (COLSON, SICKEL)

STAFF ANALYSIS: As stated in the case background, PEF purchases capacity and energy from Lake's facility under the negotiated cogeneration contract dated March 13, 1991. The Lake facility is fueled by natural gas, has a committed capacity of 110 megawatts and a contract term that extends through July 31, 2013. The committed capacity shall be made available at the point of delivery from the contract in-service date through the remaining term of the agreement at a committed On-Peak capacity factor of 90%. According to the agreement, capacity payments paid to Lake are based on a pulverized coal unit and are made on an accelerated (early payments) schedule. The amendment does not affect the capacity payments paid to Lake by PEF. In accordance with the decision issued by the Fifth District Court of Appeals, Lake is entitled to the same firm energy price for the Facility's output during Off-Peak hours and On-Peak hours.

The existing contract specifies eleven (11) split daily On-Peak hours and a total of 4015 yearly On-peak hours. The contract's On-Peak and seasonal periods are:

- (1) For the calendar months of November through March,
All days: 6:00 A.M. to 12:00 Noon, and
5:00 P.M. to 10:00 P.M.
- (2) For the calendar Months of April through October,
All days: 11:00 A.M. to 10:00 P.M.

Presently, Lake has voluntarily reduced its Facility's Off-Peak output by approximately 50%, but is under no obligation to continue if it chooses not to.

The proposed amendment will provide greater operational flexibility to both Lake and PEF by eliminating, to the extent possible, the purchase of energy by PEF from Lake during Off-Peak periods when less expensive energy is available.

GREATER OPERATIONAL FLEXIBILITY

According to the petition, PEF is currently required to purchase the energy from Lake during Off-Peak conditions and at a firm energy price, which at times is higher than other sources of power. This could require cycling or shutdown of PEF's low cost base load generating units. The current contract allows Lake to provide up to 521,850 MWH of energy during the Off-Peak periods annually. Even with Lake's reduction of its Off-Peak energy by 50%, PEF must still purchase substantial amounts of Off-Peak energy despite the availability of lower cost alternatives. Also, the contract establishes the same On-Peak hours for weekends as for weekdays, even though customer demand during these weekend hours is often similar to Off-Peak Conditions.

Therefore, to address these problems, the parties have negotiated an amendment to the contract (Attachment C) which contains the following provisions:

- Realignment of the On-Peak hours and seasonal periods by redefining the winter period and providing for one continuous daily period of operation as follows;

For the period from December 16 through March 15 - 6:00 A.M. to 5:00 P.M.
For the period from March 16 through May 31 - 11:00 A.M. to 10:00 P.M.
For the period June 1 through October 15 - Noon to 11:00 P.M.
For the period October 16 through December 15 - 11:00 A.M. to 10:00 P.M.

- Allows PEF and Lake to shift the 11-hour On-Peak period from time to time when warranted by unusual operational or peak demand conditions.

- Lake will use commercially reasonable efforts to not deliver energy from its facility during Off-Peak hours, except for one-hour ramp periods immediately before and after On-Peak hours, or when necessary to comply with permitting or testing requirements, or for prudent operation of the facility.

REDUCES PURCHASE OF ENERGY FROM LAKE DURING OFF-PEAK PERIODS

As stated above, the requirement to purchase the Lake facility's Off-Peak energy during low load conditions may potentially require cycling or even the shutdown of PEF's low cost base load generating units. The problem will be exacerbated when Hines Unit 3 comes on-line in late 2005. Also, reduced energy demand during weekend hours is often similar to Off-Peak conditions. PEF believes that the amendment will minimize purchases of uneconomic Off-Peak energy. In a meeting with staff and employees for PEF, PEF stated that for the calendar year July 2002 through June 2003, PEF would have paid \$3,183,318 less to Lake in energy payments than under the proposed amendment (see Attachment D).

In response to this concern PEF and Lake have negotiated an amendment to the Agreement that contains the following provisions:

- PEF will have the right to request additional hours of Off-Peak operation from the Lake facility upon at least 24 hours advance notice and agreement upon a mutually acceptable dispatch schedule. The price of such additional Off-Peak energy will be based on the Facility's average heat rate of 8,600 BTU/kWh, multiplied by a published \$/MMBTU price of natural gas with a \$0.49 adder and a \$4.00 floor, plus \$5.00 per MWH. In a meeting with staff and employees for PEF, PEF stated that they would only purchase this energy if it is cost-effective based on current market conditions.
- Upon the request of PEF by 9:00 A.M. on a Friday and Lake's acceptance by 1:00 P.M. the same day, Lake will make reasonable efforts not to deliver energy to PEF during On-Peak hours the following Saturday and Sunday.

\$11.0 MILLION SAVINGS AS A RESULT OF THE AMENDMENT

PEF stated that based on the results of two ProSym production cost simulations comparing its system cost under the existing contract and the proposed Amendment, PEF and its customers would have a net present value (NPV) savings of approximately \$11.0 million during the remaining term of the agreement (see Attachment A). The following states how the savings will be realized:

- Reduced energy costs from Lake's facility by minimizing Off-Peak hours.
- The avoidance of cycling of PEF's base load units during low load conditions.
- Reduced energy costs from Lake's facility during On-Peak weekend periods.

Staff believes that because of current natural gas prices, it is not economical for Lake to generate during Off-Peak hours under its current contract. Staff also believes that if Lake elects to generate Off-Peak, it will replace less expensive generation on PEF's system. Therefore, according to documents presented at the meeting between staff and employees for PEF (see Attachment D), Lake has decided not to generate during the Off-Peak hours for the calendar months of April through October. But for the calendar months of November through March (winter period) which have a split in the daily 11 hour On-Peak period, Lake has elected to generate at reduced generation (50% output of facility) during the Off-Peak hours. According to the petition, this split in the daily On-Peak hours is both inefficient and costly for Lake because it has to ramp its facility down and back up twice a day.

Staff's analysis (see Attachment B) shows the potential savings to PEF and its ratepayers if the amendment is approved. Staff used PEF's projected average system Off-Peak energy price and Lake's contract price to calculate the NPV of savings through 2012. Staff assumed that Lake would only operate its facility at 50% during the Off-Peak hours for the winter period and would shutdown during Off-Peak at all other times. Staff also assumed that Lake would follow the same trend for the weekends. The savings calculated in staff's analysis were very close to the savings projected by PEF.

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Staff believes that the parties' letter agreement amending the existing cogeneration contract between PEF and Lake will provide for flexibility in assigning the On-Peak hours, will avoid the cycling of PEF's base load unit during low load conditions, and will minimize the purchase of more expensive Off-Peak energy, thereby providing savings to PEF and its ratepayers. Therefore, staff recommends that PEF's petition for approval of the letter agreement be granted.

ISSUE 2: Should this docket be closed?

RECOMMENDATION: Yes if no protest is filed within 21 days of the issuance of the PAA order, this docket should be closed upon the issuance of a Consummating Order. (BROWN)

STAFF ANALYSIS: If no protest is timely filed by a person whose substantial interests are affected by the Commission decision, this docket should be closed upon the issuance of a Consummating Order. If a protest is timely filed the docket should remain open to address the protest.

Lake Cogen Savings

PROSYM Savings compared to BASE CASE

<u>Year</u>	<u>Total Savings (000)</u>
2003	65
2004	18
2005	306
2006	919
2007	1,460
2008	2,313
2009	3,623
2010	4,414
2011	3,070
2012	2,793
2013	2,574
NPV @ 9.17%	10,952

Staff's Calculation of Lake Cogen Savings

A	B	C	D	E	F	G	H	I
Year	Winter Off-Peak Hours	Weekends On-Peak Hours	PEF's Projected Off-Peak Costs \$/MWH	Lake's Projected Contract Price for Fuel & O&M \$/MWH	Total Projected MWH Column B * 55 mw + Column C * 99 mw	Projected Energy Payments to Lake for Off-Peak Energy	PEF's Cost for Off-Peak Power	Savings
2004	1963	1056	23.58	29.33	224125	\$6,573,586.25	\$5,284,867.50	\$1,288,718.75
2005	1963	1056	24.09	29.27	224125	\$6,560,138.75	\$5,399,171.25	\$1,160,967.50
2006	1963	1056	24.18	30.03	224125	\$6,730,473.75	\$5,419,342.50	\$1,311,131.25
2007	1963	1056	24.24	30.74	224125	\$6,889,602.50	\$5,432,790.00	\$1,456,812.50
2008	1963	1056	24.09	31.50	224125	\$7,059,937.50	\$5,399,171.25	\$1,660,766.25
2009	1963	1056	24.77	32.32	224125	\$7,243,720.00	\$5,551,576.25	\$1,692,143.75
2010	1963	1056	24.56	33.14	224125	\$7,427,502.50	\$5,504,510.00	\$1,922,992.50
2011	1963	1056	25.96	33.97	224125	\$7,613,526.25	\$5,818,285.00	\$1,795,241.25
2012	1963	1056	26.41	35.35	224125	\$7,922,818.75	\$5,919,141.25	\$2,003,677.50
							NPV@	\$9,098,555.75
							9.17%	

Saving does not include PEF's avoided cycling costs.
 PEF's projected coal prices are a response to staff's data request.

May 1, 2003

Lake Cogen, Ltd.
c/o Aquila East Coast Generation
20 West 9th Street
Kansas City, MO 64105

This Letter Agreement (Agreement) memorializes our understanding with regard to the restructuring of the operation of Lake Cogen, Ltd. ("Lake") and modifies the Negotiated Contract for the Purchase of Firm Capacity and Energy from a Qualifying Facility between Lake and Florida Power Corporation dated March 13, 1991 (the "Contract"). All capitalized terms used but not defined herein shall have the respective meanings given to such terms in the Contract.

Specifically, Lake and Florida Power Corporation d.b.a. Progress Energy Florida, Inc. ("FPC"), who may be individually referred to as a "Party" and jointly referred to as the "Parties", for mutual consideration, the receipt and sufficiency of which are hereby acknowledged, and intending to be legally bound, hereby agree with respect to the Contract as follows:

1. A. Appendix C of the Contract is hereby amended to specify the On-Peak Hours as follows:
 - For the period from December 16 through March 15 – 6:00 A.M. to 5:00 P.M.
 - For the period from March 16 through May 31 – 11:00 A.M. to 10:00 P.M.
 - For the period from June 1 through October 15 – Noon to 11:00 P.M.
 - For the period from October 16 through December 15 – 11:00 A.M. to 10:00 P.M.
- B. The On-Peak Capacity Factor calculation shall include only the On-Peak Hours.
2. The Off-Peak Hours shall be defined as the hours in a day that are not On-Peak hours. Lake shall use commercially reasonable efforts to not deliver electrical energy from the Facility to FPC except for ramp periods for the one-hour period immediately preceding and after the On-Peak hours. Deliveries to FPC shall also be permitted during those periods when Lake is required to provide deliveries to FPC in order to comply with its permits and testing requirements, or that may be required for the prudent operation of the Facility. In the event that Lake intends to deliver electrical energy from the Facility to FPC during Off-Peak Hours in accordance with the

preceding sentence, it shall make commercially reasonable efforts to notify FPC at least 24 hours in advance of such deliveries via email or facsimile.

3. The Parties upon mutual agreement may, from time to time, alter the On-Peak Hours. The altered On-Peak Hours must be eleven (11) consecutive hours per day.
4. FPC shall have the right to request that Lake operate during the Off-Peak Hours. FPC shall request such additional hours of operation via email or fax at least 24 hours in advance of such operation. Lake's obligation to operate shall be conditioned upon the mutual agreement of the Parties to the dispatch schedule and the parties agree to the Off-Peak energy price as set forth below. In the event that additional starts are requested, the Parties shall mutually agree on the price for such a start.

The price for the energy delivered during such Off-Peak Hours shall be calculated as:

$$\text{Off-Peak Price (\$/MWH)} = [(8,600 \text{ BTU/kWh} \cdot \text{Gas Price}) / 1,000] + \$5.00/\text{MWh}$$

Where the Gas Price = The daily gas price in \$/MMBTU as published in Platts Gas Daily of the Florida Zone 2 Midpoint gas price in the "Daily Price Survey" section plus \$0.49, but not less than \$4.00/MMBTU. Upon mutual agreement of the Parties, the adder of \$0.49 and the floor price of \$4.00 shall be adjusted. In the event that the gas price as published above is no longer available, the Parties may replace the published gas price above with a mutually agreeable published gas price.

5. In the event of notice by FPC delivered to Lake via email or facsimile on or before 9:00 am on a Friday during the Term of the Contract and if Lake agrees via notice delivered via email or facsimile to FPC by 1:00 pm on that same Friday, Lake shall make reasonable efforts not to deliver electricity to FPC during the On-Peak Hours on the following Saturday and Sunday. Any such Saturday and Sunday referred to in the preceding sentence shall be considered Off-Peak periods and shall not be included in the calculation of the On-Peak Capacity Factor.
6. The Parties acknowledge that this Agreement is contingent upon (i) the approval of the General Partner of Lake, (ii) the consent of Lake's lenders, (iii) the approval of the Board of Directors of FPC, and (iv) the issuance of a final, non-appealable order by the Florida Public Service Commission approving this Agreement and authorizing the recovery of costs associated with this Agreement in a manner that is acceptable to FPC in its sole discretion. FPC shall make reasonable efforts to obtain Commission approval by August 30, 2003.

7. The Parties agree that this Agreement shall become effective upon the completion of the conditions in paragraph 6.

All e-mail and fax notifications in this Agreement shall be made pursuant to Section 28 of the Contract. All other provisions of the Contract not otherwise amended by this Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, each of the undersigned Parties has caused this Agreement to be executed by its duly authorized representative as of May 1, 2003.

**Florida Power Corporation d.b.a.
Progress Energy Florida, Inc.:**



Robert Caldwell
Vice President - Regulated Commercial Operations

5/7/03
Date

Lake Cogen, Ltd.:
By: NCP Lake Power Incorporated, General Partner



Kevin Calhoon
Vice President

5-1-03
Date

Lake Cogen Historical Bills Recalculated According to Proposed Amendment
Per FPSC Staff's Request

Month	Existing			Proposed Change			Reduction in Payment
	Energy	Capacity	Total	Energy	Capacity	Total	
Jun-03	1,067,579	2,305,627	3,373,205	1,066,708	2,305,627	3,372,335	870
May-03	1,191,952	2,305,627	3,497,579	1,191,952	2,305,627	3,497,579	-
Apr-03	2,140,228	2,305,627	4,445,854	2,140,228	2,305,627	4,445,854	-
Mar-03	1,359,565	2,300,521	3,660,086	1,174,609	2,300,625	3,475,235	184,852
Feb-03	1,215,950	2,263,142	3,479,092	1,041,501	2,263,570	3,305,071	174,020
Jan-03	1,554,511	2,273,604	3,828,115	1,288,399	2,273,794	3,562,194	265,921
Dec-02	1,744,088	2,174,703	3,918,792	1,323,206	2,170,033	3,493,239	425,553
Nov-02	1,814,887	2,164,224	3,979,111	1,435,309	2,164,100	3,599,409	379,702
Oct-02	1,741,442	2,167,376	3,908,818	1,261,628	2,166,069	3,427,697	481,121
Sep-02	1,416,612	2,121,442	3,538,054	1,013,307	2,120,941	3,134,248	403,806
Aug-02	1,617,369	2,144,818	3,762,187	1,157,679	2,144,818	3,302,497	459,690
Jul-02	1,492,221	2,137,080	3,629,300	1,084,439	2,137,080	3,221,518	407,782
Total							\$ 3,183,318

Note: Lake Cogen began daily shutdowns starting April 2003