Exhibit B REDACTED

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FPSC-COMMISSION CLERK

REDACTED

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition of Progress Energy, Florida, Inc. for approval of a negotiated purchase power contract with Florida Biomass Energy Group, LLC. Docket No. 060387-EQ

Submitted for filing:

May 25, 2006

PETITION

Progress Energy Florida, Inc. ("PEF", or "the Company"), pursuant to Rule 25-17.0832, F.A.C., hereby petitions the Florida Public Service Commission ("the Commission") for approval of a negotiated power purchase contract for the purchase of firm capacity and energy between Florida Biomass Energy Group, LLC ("Florida Biomass") and PEF, dated April 28, 2006 ("the Contract"). A copy of the Contract has been previously filed with the Commission pursuant to Rule 25-17.0832(1)(b), F.A.C., and a redacted copy of the Contract is attached hereto as Exhibit A. In support of this petition, PEF states as follows:

- 1. Petitioner, PEF, is an investor-owned utility subject to the jurisdiction of the Commission under Chapter 366, Florida Statutes. PEF's general offices are located at 100 Central Avenue, St. Petersburg, Florida, 33701.
- 2. All notices, pleadings and other communications required to be served on petitioner should be directed to:

John T. Burnett, Esquire Post Office Box 14042 St. Petersburg, FL 33733-4042 Telephone: (727) 820-5184

Facsimile: (727) 820-5249

For express deliveries by private courier, the address is as stated in paragraph 1.

- 3. Pursuant to the terms of the Contract, Florida Biomass will construct, own, and operate a biomass-based fuel fired electrical generating plant ("the Facility") located in Florida, which it will operate as a Qualifying Facility ("QF") pursuant to regulations of the Commission. The Facility is expected to have a maximum nominal generating capability of approximately 145 megawatts ("MW"), using a liquid fuel produced from biomass grown on the Facility site as its primary fuel. Florida Biomass will sell firm capacity and energy from the Facility to PEF for a term of twenty-five (25) years, to begin no later than December 1, 2009 with a committed capacity between 116.6 MW and 134 MW. The expected annual energy from the Facility is 868,204 MWh, with expected on-peak energy being 397,927 MWh, and expected off-peak energy being 470,277 MWh. Under the performance provisions of the Contract, the capacity payment rate is reduced if the twelve-month rolling capacity factor drops below. If the twelve-month rolling capacity factor drops below then no capacity payment is due.
- 4. Exhibit B to this petition summarizes a comparison of projected capacity and energy costs under the Contract against the costs of the comparative avoided unit, a nominal 528 megawatt combined cycle gas-fired plant with an estimated in-service date of December, 2009. The comparison in Exhibit B was modeled at a committed capacity of 116.6 megawatts and a capacity factor of 85%. The comparison shows that the Contract provides savings with a net present value of \$39 million over the 25-year base term of the Contract based on current fuel forecasts. Therefore, the cumulative present worth of the firm capacity and energy payments to Florida Biomass pursuant to the Contract are projected to be

less than the cumulative present worth of costs associated with the Company's Hines 5 unit.

5. The rates, terms, and conditions of the Contract can reasonably be expected to contribute toward the deferral or avoidance of additional capacity construction or other capacity-related costs by PEF at a cost to PEF's ratepayers which does not exceed full avoided costs, giving consideration to the characteristics of the capacity and energy to be delivered by Florida Biomass under the Contract. Additionally, considering the technical reliability, viability, and financial stability of Florida Biomass, the Contract contains provisions that will effectively protect the Company's customers in the event that Florida Biomass fails to deliver firm capacity and energy as specified in the Contract.

WHEREFORE, PEF respectfully requests that the Commission grant this petition and approve the Contract as set forth in Exhibit A for cost recovery purposes.

Respectfully submitted,

PROGRESS ENERGY FLORIDA, INC.

John T. Burnett

Fla. Bar No. 173304

Post Office Box 14042

St. Petersburg, FL 33733-4042

Telephone: (727) 820-5184

Facsimile: (727) 820-5249

Counsel for Progress Energy Florida, Inc.

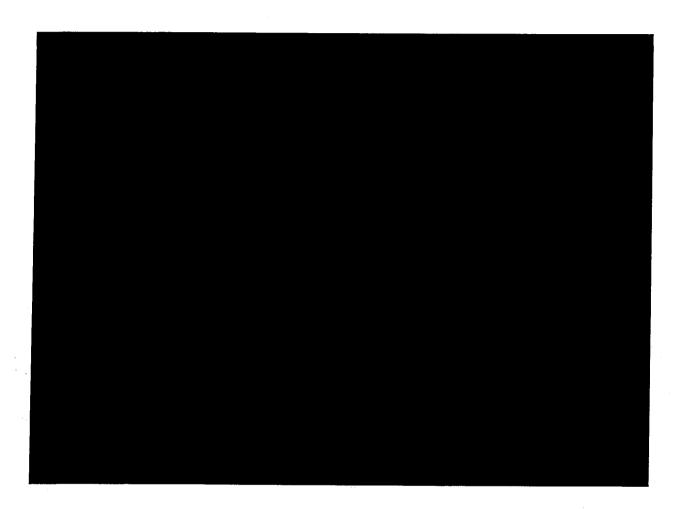
<u>EXHIBIT A</u>

THE FLORIDA BIOMASS CONTRACT (REDACTED)

<u>EXHIBIT B</u>

CALCULATION OF COST SAVINGS FROM THE FLORIDA BIOMASS CONTRACT

Florida Biomass Energy



Progress Energy Florida Standard Offer Contract Economic Assumptions

AFUDC RATE

8.31%

CAPITALIZATION RATIOS DISCOUNT RATE

48.0% Debt 8.31%

Preferred 0.0% Equity

52.0%

RATE OF RETURN BOOK DEPRECIATION LIFE

Debt 6.17% 25 Years 0.0% Preferred

Equity 12.0%

INCOME TAX RATE TAX DEPRECIATION LIFE

State 3.58% 20 Years

Federal 35.0%

OTHER TAXES & INS.

38.58%

2.00%

Effective

Progress Energy Florida Standard Offer Contract Economic Escalation Assumptions

	Plant	Fixed	Variable
General	Construction	O & M	O & M
Inflation	Cost	Cost	Cost
2.5%	2.5%	2.5%	2.5%

Progress Energy Florida Standard Offer Contract Unit Information

PLANT TYPE:

Combined Cycle Unit

NET CAPACITY:

20 MW Portion of a 548 MW Combined Cycle Unit

BOOK LIFE:

25 Years

INSTALLED COST (IN-SERVICE YEAR 2008)

TOTAL INSTALLED COST (\$/KW):

506.37

DIRECT CONSTRUCTION COST (\$/KW):

391.82

AFUDC AMOUNT (\$/KW):

73.88

FIXED O & M (\$/KW-YR):

2.96

VARIABLE O & M (¢/KWH)

1.63

ASSUMED CAPACITY FACTOR

57%

K FACTOR

1.591