BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for rate increase by Progress Energy Florida, Inc.

Docket No. 050078
Submitted for filing:
April 29, 2005

DIRECT TESTIMONY OF
E. MICHAEL WILLIAMS

ON BEHALF OF PROGRESS ENERGY FLORIDA

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DIRECT TESTIMONY OF
E. MICHAEL WILLIAMS

I. **Introduction.**

Q. State you name, position, and business address.

A. My name is E. Michael Williams. I am Senior Vice President of the Power Operations Group for Progress Energy. My business address is P. O. Box 1551, Raleigh, North Carolina 27602.

Q. What are your duties and responsibilities?

A. The Power Operations Group is a major component of the Energy Supply business unit. Power Operations includes: Fossil Generation, System Planning and Operations, Combustion Turbine ("CT") Operations, and Technical Services and Construction. These operations total over 16,740 megawatts ("MW") of generating capacity located at 30 plant sites in the Carolinas and Florida.

In this position, I must maintain a balanced and effective program to provide the most economical power from Progress Energy's fossil, hydro, and combustion turbine facilities, while maintaining well-equipped plants, complying with environmental regulations, maintaining the highest possible safety record, protecting assets, and leading Progress Energy to top levels of operating performance.

My major job duties and responsibilities include: developing and implementing strategic and tactical plans to accomplish operating objectives; managing and controlling fuel and operating expenditures; overseeing hundreds of employees and hundreds of millions of dollars in assets and operating budgets; and

providing a significant degree of leadership so as to lead, motivate, and influence a large workforce to achieve high operation performance levels.

Q. Please describe your educational background and work expertise.

A. I earned a Bachelor of Science degree in Nuclear Engineering from Texas A&M University in 1971. In 1982, I completed Louisiana State University's Executive Program. Then, in 1989, I graduated from Harvard Business School's Program for Management Development.

I have 33 years of power plant and production experience in various supervisory, managerial, and executive positions within the former Central and South West Corporation ("CSW") (now American Electric Power or AEP). I began my career in the electric utility industry at Southwestern Electric Power Company ("SWEPCO") a subsidiary of CSW, as a Staff Engineer in 1972. In 1974, I became a maintenance supervisor at SWEPCO's Lieberman Power Plant, a four-unit, gas-fired plant. I was moved to the Welsh Power Plant, a three-unit, coal-fired plant, as the Maintenance Superintendent in 1975. Then, in 1982, I became the Plant Superintendent at the H.W. Pirkey Power Plant, a single unit, lignite-fired plant. In 1988, I moved into the position of Manager of Production for SWEPCO and had responsibility for all SWEPCO plants. In 1989, I became a Division Manager. In this position, I was responsible for all transmission, distribution, marketing, and customer service activities with SWEPCO's Western Division, headquartered in Longview, Texas.

Then in 1992, I became the Vice President of Engineering and Production for Public Service Company of Oklahoma ("PSO"), another subsidiary of CSW. Shortly

thereafter, in 1993 I became CSW's Vice President of Fossil Generation in Dallas, Texas. In this position, I was responsible for the operation and maintenance of 34 fossil power plants in 4 states, including 5,000 MW of coal units, 9,000 MW of gas/oil units, and 500 MW of peakers. I was responsible for over 1,300 employees (both union and non-union), and annual budgets of approximately $150 million in operation and maintenance ("O&M"), and $130 million in capital.

I joined Carolina Power & Light Company in June of 2000 as Senior Vice President of its Power Operations Group.

II. Purpose and Summary of Testimony.

Q. What is the purpose of your testimony?

A. I appear on behalf of Progress Energy Florida ("PEF" or the "Company") to support the reasonableness of its power operation costs reflected in the Company's Minimum Filing Requirements ("MFRs").

Q. Have you prepared any exhibits to your testimony?

A. Yes, I have prepared or supervised the preparation of the following exhibits to my testimony:

- Exhibit No. ___ (EMW-1), a list of the MFR schedules I sponsor or co-sponsor.
- Exhibit No. (EMW-2), Graphs: Power Plant Performance – Florida Steam Equivalent Forced Outage Rate, Equivalent Availability, and Florida Simple Cycle CT Starting Reliability.
- Exhibit No.___ (EMW-3), Progress Energy Fossil Plant 2005 Dismantlement

Cost Study.

These exhibits are true and accurate.

Q. What schedules in PEF's MFRs do you sponsor?

A. I sponsor or co-sponsor the MFR schedules listed on Exhibit No. ___ (EMW-1). These schedules are true and correct, subject to their being updated in the course of this proceeding.

Q. Please summarize your testimony.

A. The Power Operations Group is committed to the highest standards for safety, environmental stewardship, corporate citizenship, and ethical conduct. PEF's forecasted capital and O&M expenses for power plant operations reflect its commitment to: (a) maintain a high degree of availability and reliability of its existing power plants at a reasonable cost; and (b) increase its generation supply by bringing into service new, cost effective, efficient, environmentally friendly, and operationally responsive combined cycle ("CC") units.

PEF has invested more than $110 million in its fossil steam, CT and CC power plants since 2002. We will spend an additional $100 million on improvements to our plants between 2005 and 2006. In addition to adding hard assets, we continue to operate our Florida fleet at the highest performance levels. Effective programs that identify, prioritize, and implement maintenance on these plants, including planned outages, are firmly in place. These have helped us minimize production costs. In addition, the Power Operations Group, in support of the corporate cost-management initiative, committed to effect organizational changes in 2005 that will reduce the

need for O&M in 2006. This savings is estimated to be approximately $2.5 million for Power Operations in Florida. As a result, we have been able to hold our production costs down to a modest 3.7% compound annual growth rate for the period 2002 through 2006 (Refer to MFR Schedules C-6 and C-37). Included in these production costs are the O&M expenses associated with new CC generating capacity.

To meet the growing demand for power in Florida and to meet the Company's commitment to increase reserve margins with hard assets, we will have added more than 1,000 MW of highly efficient and cost effective power plant capacity over the period 2003 through 2005. Following a competitive bid process, we added a second state-of-the-art 500MW natural gas fired CC unit, Hines 2, at our Hines Energy Complex in Polk County in 2003. Similarly, we will complete the construction of a third 500MW CC unit, Hines 3, at that site by the end of 2005. These intermediate units have enhanced the flexibility of PEF's power generation system and added fuel diversification to the Company's fleet. The combined cost of these units will be approximately $450 million.

We have accomplished these results while achieving a 44% reduction in the number of injuries in the workplace since 2002.

Our objective going forward is to enhance the value and improve the reliability and cost effectiveness of our generation fleet. To accomplish this, we will continue to prudently invest in the availability and reliability of our generating assets.

III. Power Operations Since 2001.

Q. Please describe the performance of PEF's fossil power generating fleet since 2001.

A. Since 2001, we have continued the excellent operations of our Florida fossil generating fleet, both in terms of plant operations and production costs.

Fossil Steam Generation

In 2001, Power Operations undertook an aggressive program to improve the performance of steam assets in Florida. This first included the completion of a formal material condition assessment for each of the steam units. Fossil Operations used the results of these assessments to prioritize work on selected units.

Initially, we completed a number of maintenance projects on PEF's Crystal River Unit 4 in the spring of 2002. By the end of 2004, we had completed similar maintenance work on each of the four Crystal River fossil steam units. We undertook additional maintenance work at the Anclote, Bartow, and Suwannee plants during this period. Between 2002 and 2004, Fossil Operations invested approximately $96.5 million in those plants. The formal Florida steam performance improvement plan will be completed by the end of 2007. Between 2005 and 2007 we will invest an additional $26 million on the Florida steam units to fully implement the plan.

In addition to the investment in these plants, we enhanced programs to support continued superior plant performance and efficiency of operation. This included, among other initiatives, enhancements to work management, project initiation and management, project prioritization, and outage planning and implementation processes and procedures. Power Operations also made significant investment in training to ensure the success of these initiatives, including the enhancement of Operator and Maintenance Education Programs and the purchase of new Plant Simulators.

Q. Have your improvements resulted in positive operating performance?

A. Yes. Our improvements have yielded excellent results. For example, we have significantly decreased the duration of planned outages. While a major planned outage at Crystal River Unit 4 lasted 64 days in the spring of 2002, a similar outage in scope at Crystal River 5 later that fall lasted only 42 days. Crystal River 2 completed its 2003 planned outage in 45 days. This is a credit to the significant improvements made to outage planning, preparations, and implementation. The intense focus on work management has enabled our group to more efficiently perform activities in a timely and cost-effective manner while assuring proper attention is devoted to safety, environmental compliance, personnel, plant operation, and quality maintenance.

Our efforts have also resulted in improved operating performance of our steam units that beats the national average. Fossil steam equivalent availability for the Florida fleet was a high 86.9% in 2002. We nonetheless improved reliability to 89.7% by 2004 (90.2% when adjusted for hurricane related events). For comparison, the fossil steam equivalent availability average in 2003 for the industry was 85.8% (based on NERC data). See Exhibit No. ____ (EMW-2).

Fossil steam equivalent forced outage rate for the Florida fleet was 3.94% in 2002. For the year 2004, the equivalent forced outage rate improved to 2.73% (2.27% when adjusted for hurricane related events.) The industry average in 2003 was 5.04%. See Exhibit No. ____ (EMW-2).

PEF's investment in the Florida steam units is producing results. This is most evident in the above average performance and trends discussed above. It is consistent with the commitment to increase the availability and reliability of existing power plants at a reasonable cost. Fossil steam production costs have been held to a 2.5%

compound annual growth rate for the period 2002 through 2006. See Schedules C-6 and C-37. PEF will continue to invest in these plants to ensure historical performance levels and to meet new performance goals.

CT and CC Generation

PEF's combustion turbine and combined cycle fleet also continues to operate at extremely high levels of reliability. The Florida CT starting reliability in 2004 was 99.5%, continuing a trend of outstanding performance with annual starting reliabilities consistently above 99%. This compares to an average of 80% in the industry based on NERC data. See Exhibit No. ____ (EMW-2). The Florida CC units (Hines 1 & 2 and Tiger Bay) completed 2004 with an equivalent availability factor of 90.9%, well above the industry average of 79.8% (2003 NERC data). Hines 2 completed its first full year of commercial operation with an outstanding equivalent availability of 96.4%.

The capacity factors and number of starts associated with the units in this fleet should continue at the levels we have experienced during the last several years. Maintenance costs are largely driven by the number of starts and run time on these units. Therefore the costs over the next few years will be similar to previous years except for increases associated with the new combined cycle units at Hines. Approximately $2 million of incremental O&M costs are included in the 2006 budget associated with the first full year of commercial operation at Hines 3. Based on a dollar per KW installed basis, we have reduced spending since 2002. In 2002 we spent approximately $11.14/KW compared to $10.03/KW budgeted in 2006. Similar to the fossil steam division, robust work management, project initiation and management, and outage planning and execution have enabled this level of operating

and financial performance. The Combustion Turbine Operations Department is committed to operating and maintaining these plants to the highest operating performance and efficiencies.

IV. Budgeting.

Q. Please describe your budgeting process and the measures you take to monitor and control costs.

A. Throughout the Company, including the functional areas under my management, we engage in rigorous cost evaluation and control for all capital expenditures and O&M costs. Our overall goal is to deliver top quartile reliability while maintaining top quartile cost control. Within each business unit, including Power Operations, O&M budgets and recommendations are developed by plant management based on targets keyed to historical spending and, increasingly, by metrics designed to drive functional units to top quartile performance levels. Capital budgets and project recommendations are developed by plant management and engineering staff based on equipment assessments and financial analysis of the individual capital projects. All capital and O&M proposals and requests must be supported and defended through a peer review process, subject to management approval. The monitoring of costs throughout each year is accomplished by monthly reporting of year-to-date budget versus actual spending, analysis of variances, and projected spending for the balance of the year.

V. Power Plant Additions.

Q. Please describe the power plant additions to PEF's fleet since 2002 and how they

were selected.

A. As noted above, PEF has added one 500MW CC plant, Hines 2, in 2003 and will add another 500MW CC plant, Hines 3, by the end of 2005. Progress Energy's System Planning & Operations Department made the decision to build the Hines 2 and Hines 3 plants through its integrated resource planning process and after a competitive bidding process. The integrated resource planning process essentially matches PEF's projected load growth with the most cost-effective power plant additions. The cost effectiveness of both plants was evaluated and affirmed by the Florida Public Service Commission (the "Commission") in the respective Hines 2 and Hines 3 need proceedings. (See Commission Orders PSC-01-0029-FOF-EI; PSC-03-0175-FOF-EI).

Q. What impact will these plant additions have on O&M going forward?

A. The base O&M costs for these units will be approximately $2 million per year per unit. As discussed earlier, the incremental costs included in the 2006 budget associated with the first full year of commercial operation at Hines 3 is approximately $2 million. Significant other costs will be incurred when the operation of these units necessitate outage maintenance activities to be planned. For example, Hines 2, which went into service in December 2003, will have a planned maintenance outage performed in 2006 at a cost of approximately $3.5 million. The actual operation of the units over time will dictate the timing and scope of the outages going forward.

VI. Fossil Dismantlement Cost Study.

Q. Please describe PEF's Fossil Dismantlement Cost Study filed with your testimony.

A. PEF commissioned Sargent & Lundy to prepare a fossil dismantlement study (the "Study") to determine the ultimate cost to dismantle and decommission the Company's fossil power plant fleet. Sargent & Lundy is a nationally recognized consulting firm with extensive expertise in preparing studies, such as the one commissioned by PEF. A copy of the Study is attached as Exhibit No. ____ (EMW-3). As the Study indicates, PEF will need to accrue $9,651,668 annually (retail) beginning in 2006 in order to assure that it will have enough funds to cover the costs of dismantlement and decommissioning of its fossil generating sites.

Q. Does this conclude your testimony?

A. Yes.

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PROGRESS ENERGY FLORIDA
EXHIBIT NO. ____ (EMW-1)
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MINIMUM FILING REQUIREMENT SCHEDULES

Sponsored, All or In Part, by Mike Williams

Schedule #	Schedule Title
B-7	Plant Balances by Account and Sub-Account
B-8	Monthly Plant Balances Test Year - 13 Months
B-9	Depreciation Reserve Balances by Account and Sub-Account
B-10	Monthly Reserve Balances Test Year - 13 Months
B-13	Construction Work in Progress
B-24	Leasing Arrangements
C-6	Budgeted Versus Actual Operating Revenues and Expenses
C-8	Detail of Changes in Expenses
C-9	Five Year Analysis - Change in Cost
C-15	Industry Association Dues
C-16	Outside Professional Services Contributions
C-19	Amortization / Recovery Schedule - 12 Months
C-33	Performance Indices
C-36	Non-Fuel Operation and Maintenance Expense Compared to CPI
C-37	O & M Benchmark Comparison by Function
C-38	O & M Adjustments by Function
C-39	Benchmark Year Recoverable O & M Expenses by Function
C-41	O & M Benchmark Variance by Function
C-42	Hedging Costs
C-43	Security Costs

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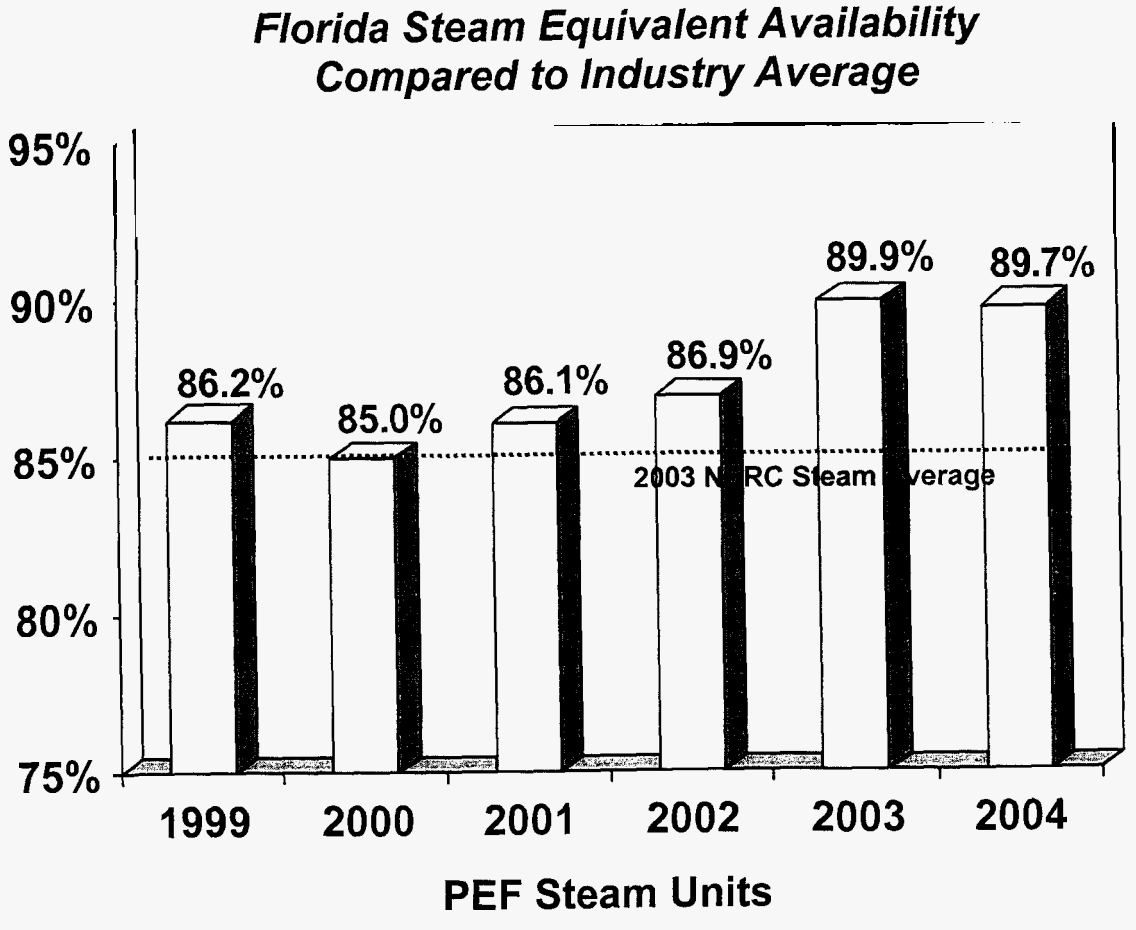
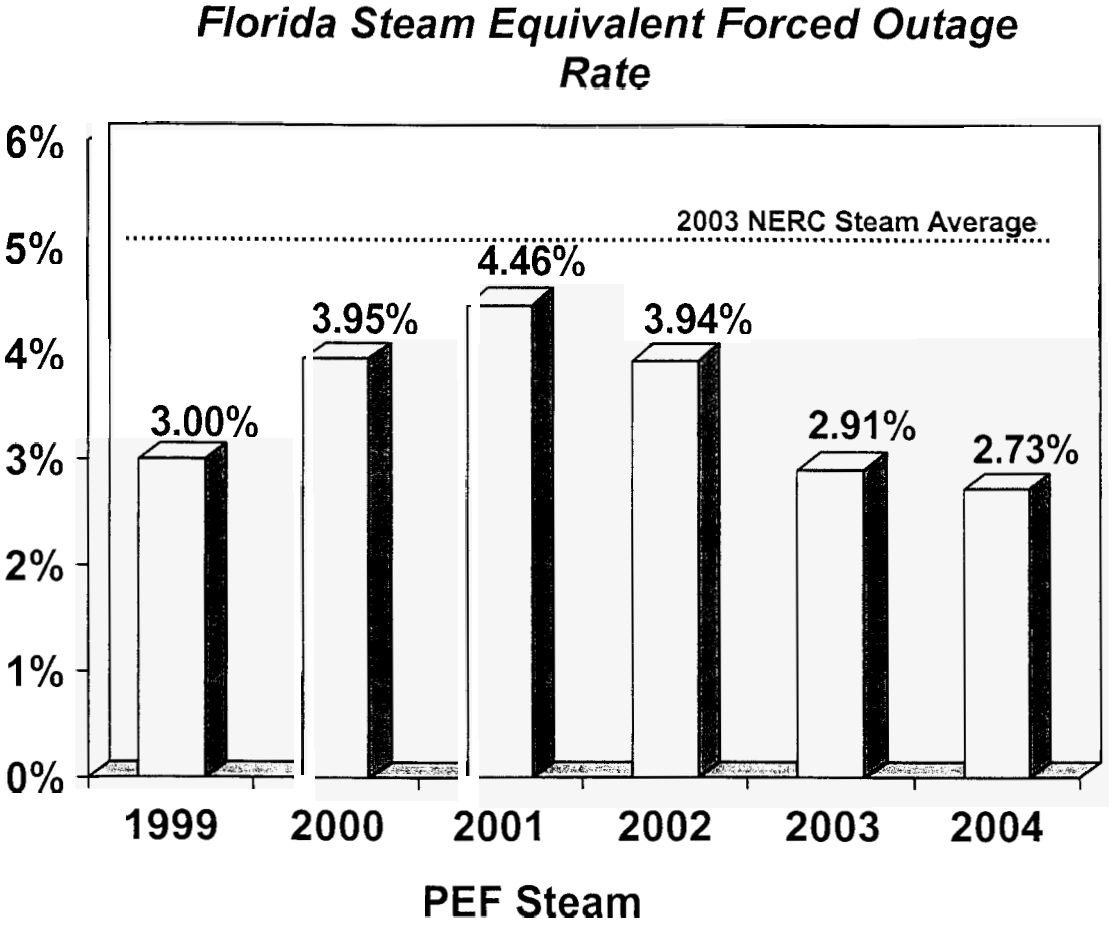
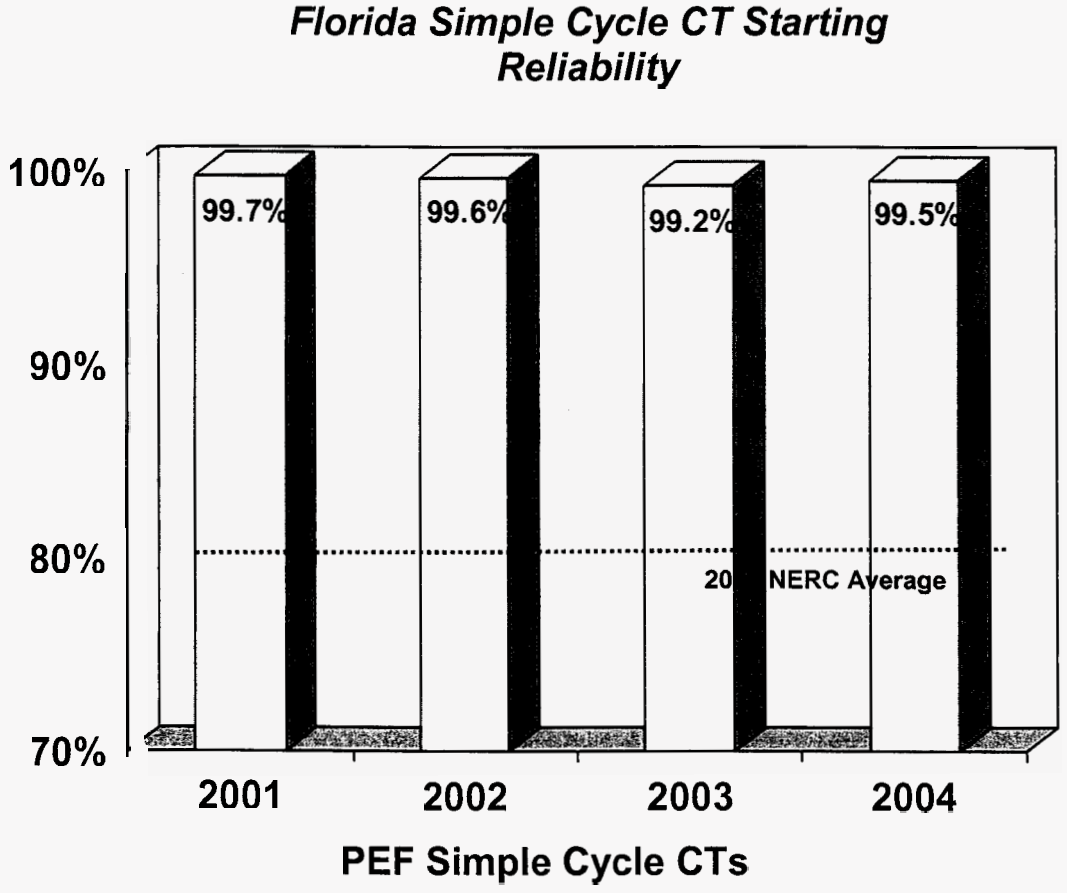



Florida Steam Equivalent Forced Outage Rate
6%
5%
4%
3%
2%
1%
0%
2003 NERC Steam Average
3.00%
3.95%
4.46%
3.94%
2.91%
2.73%
1999
2000
2001
2002
2003
2004
PEF Steam


Florida Simple Cycle CT Starting Reliability
100%
90%
80%
70%
99.7%
99.6%
99.2%
99.5%
NERC Average
2001
2002
2003
2004
PEF Simple Cycle CTs

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PROGRESS ENERGY FLORIDA
EXHIBIT NO. ____ (EMW-3)

DUE TO VOLUME THIS EXHIBIT HAS BEEN

FILED SEPARATELY AS A TWO VOLUME

SET IDENTIFIED AS:

Exhibit No. ___ (EMW-3)
FOSSIL PLANT 2005 DISMANTLEMENT COST STUDY
Volumes 1 AND 2