

April 6, 1983

Docket No.: 50-389

Dr. Robert E. Uhrig, Vice President
Advanced Systems and Technology
Florida Power & Light Company
Post Office Box 14000
Juno Beach, Florida 33408

Dear Dr. Uhrig:

Subject: St. Lucie Plant, Unit 2 - Issuance of Facility Operating License

The U. S. Nuclear Regulatory Commission has issued the enclosed Facility Operating License No. NPF-16 to Florida Power & Light Company, Orlando Utilities Commission of the City of Orlando and Florida Municipal Power Agency for the St. Lucie Plant, Unit 2 located in St. Lucie County, Florida. License No. NPF-16 authorizes operation of the St. Lucie Plant, Unit 2 at five percent power (128 megawatts thermal). Authorization to operate beyond five percent power (128 megawatts thermal) is still under consideration and will require Commission approval.

A copy of a related Federal Register notice, the original of which has been forwarded to the Office of the Federal Register for publication, is enclosed. An assessment of the effect of 40 years license duration from license issuance date with respect to environmental matters is also enclosed.

Four signed copies of Amendment No. 10 to Indemnity Agreement No. B-76 which covers the activities authorized under License No. NPF-16 are also enclosed. Also enclosed are copies of Amendment No. 8 and 9 which reflect the additions of Orlando Utilities Commission of the City of Orlando and Florida Municipal Power Agency as licensees. Please have each licensee sign all copies and return one copy of each amendment to this office.

Sincerely,

15/

Darrell G. Eisenhut, Director
Division of Licensing
Office of Nuclear Reactor Regulation

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PDR ADDCK 05000389
P PDR

Enclosures:

1. Facility Operating License No. NPF-16
2. Federal Register Notice
3. Amendments No. 8, 9 and 10 to Indemnity Agreement B-76
4. Assessment of License Duration

*See previous concurrence.

OFFICE ▶	cc w/encls.:	DL:LB#3*	OELD*	DL:LB#3*	DL:AD/L	DL:DIR
SURNAME ▶	DNurses/yt	JLee	BPaton	GWknighton	Novak	DGEisenhut
DATE ▶	3/ /83	3/ /83	3/ /83	3/ /83	4/1 /83	4/6 /83

APR 6 1983

DISTRIBUTION FOR OPERATING LICENSE NO. NPF-16
ST. LUCIE, UNIT NO. 2

* Document Control 50-389

* NRC PDR

* L PDR

* PRC System

* NSIC

LB#3 Reading File

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* T. Barnhart (4 cys per docket)

B. Cotter, ASLBP

A. Rosenthal, ASLAP

ACRS (16)

F. Pagano, IE

* D. Hoffman

* D. Sells

*W/Technical Specifications

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OFFICE	DL:LB#3	DL:LB#3	OELB	DL:LB#3	DL:AD/L	DL:DIR
SURNAME	Wenzel	Green	BPaton	GWKnighton	Novak	DGEisenhut
DATE	3/ /83	3/ /83	3/2/83	3/30/83	4/ /83	3/ /83

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cc w/encls.: See next page

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SURNAME	V. Nersisyan	J. L. ...	B. Paton	G.W. Knighton	T.M. Novak	D.G. Eisenhut	
DATE	3/21/83	3/22/83	3/7/83	3/7/83	3/7/83	3/7/83	

Dr. Robert E. Uhrig, Vice President
Advanced Systems and Technology
Florida Power & Light Company
P. O. Box 14000
Juno Beach, Florida 33408

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Administrator
Department of Environmental Regulation
Power Plant Siting Section
State of Florida
2600 Blair Stone Road
Tallahassee, Florida 32301

Chairman
Florida Public Service Commission
700 South Adams Street
Tallahassee, Florida 32304

County Administrator
St. Lucie County
2300 Virginia Avenue - Room 104
Ft. Pierce, Florida 33450

FLORIDA POWER AND LIGHT COMPANY

ORLANDO UTILITIES COMMISSION

OF THE CITY OF ORLANDO, FLORIDA

AND

FLORIDA MUNICIPAL POWER AGENCY

DOCKET NO. 50-389

ST. LUCIE PLANT, UNIT 2

FACILITY OPERATING LICENSE

License No. NPF-16

1. The Nuclear Regulatory Commission (the Commission or the NRC) has found that:
 - A. The application for license filed by the Florida Power and Light Company, Orlando Utilities Commission of the City of Orlando, Florida and Florida Municipal Power Agency (licensees) complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter 1, and all required notifications to other agencies or bodies have been duly made;
 - B. Construction of the St. Lucie Plant, Unit 2 (facility), has been substantially completed in conformity with Construction Permit No. CPPR-144 and the application as amended, the provisions of the Act, and regulations of the Commission;
 - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission;
 - D. There is reasonable assurance: (i) that the activities authorized by this operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;
 - E. The Florida Power & Light Company* is technically qualified to engage in the activities authorized by this operating license in accordance with the Commission's regulations set forth in 10 CFR Chapter I.

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~~*Florida Power & Light Company is authorized to act as agent for the Orlando~~

OFFICE	Utilities Commission of the City of Orlando, Florida and Florida Municipal
SURNAME	Power Agency and has exclusive responsibility and control over the physical
DATE	construction, operation and maintenance of the facility.

- F. The licensees have satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements", of the Commission's regulations;
 - G. The issuance of this license will not be inimical to the common defense and security or to the health and safety of the public;
 - H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of this Facility Operating License No. NPF-16, subject to the conditions for protection of the environment set forth in the Environmental Protection Plan attached as Appendix B, is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied; and
 - I. The receipt, possession, and use of source, byproduct, and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40 and 70.
2. Based on the foregoing findings, Facility Operating License No. NPF-16 is hereby issued to the Florida Power and Light Company, Orlando Utilities Commission of the City of Orlando, Florida and Florida Municipal Power Agency (licensees) to read as follows:
- A. This license applies to the St. Lucie Plant, Unit 2, a pressurized water reactor and associated equipment, owned by the licensees. The facility is located on the licensees' site in St. Lucie County, Florida, and is described in the Florida Power and Light Company's Final Safety Analysis Report as amended through Amendment 13, Florida Power & Light Company's letter L-83-207 and the Environmental Report as amended through Amendment 5.
 - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:
 - 1. Pursuant to Section 103 of the Act and 10 CFR Part 50, Florida Power and Light Company (FP&L), Orlando Utilities Commission of the City of Orlando, Florida and Florida Municipal Power Agency to possess, and FP&L to use and operate the facility at the designated location in St. Lucie County, Florida, in accordance with the procedures and limitations set forth in this license;
 - 2. Pursuant to the Act and 10 CFR Part 70, FP&L to receive, possess, and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as amended through Amendment 13 and FP&L's letter L-83-207;

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- 3. Pursuant to the Act and 10 CFR Parts 30, 40, and 70, FP&L to receive possess, and use at any time any byproduct, source and special nuclear material as sealed sources for reactor startup, as sealed sources for reactor instrumentation and radiation monitoring equipment calibration, as fission detectors in amounts as required;
 - 4. Pursuant to the Act and 10 CFR Parts 30, 40, and 70, FP&L to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
 - 5. Pursuant to the Act and 10 CFR Parts 30, 40, and 70, FP&L to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
- C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

1. Maximum Power Level

Florida Power and Light Company is authorized to operate the facility at reactor core power levels not in excess of 2560 megawatts thermal (100% power) in accordance with the conditions specified herein and in Attachment 1 to this license. The preoperational tests, startup tests and other items identified in Attachment 1 to this license shall be completed as specified. Attachment 1 is hereby incorporated into this license. Pending Commission approval, this license is restricted to power levels not to exceed 5 percent of full power (128 megawatts thermal).

2. Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in the attached Appendix A and the Environmental Protection Plan contained in the attached Appendix B, are hereby incorporated in this license. The licensees shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. Antitrust Conditions

Florida Power and Light Company shall comply with the antitrust conditions in Appendices C and D to this license.

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4. Environmental Qualification of Mechanical and Electrical Equipment (Section 3.11.5, SSER 3)*

Prior to exceeding 5% of rated thermal power, the licensees shall complete and submit for NRC staff review and approval the analysis required by 10 CFR 50.49(i).

5. Axial Growth (Section 4.2.3.1(g), SSER 3)

Prior to startup following the first refueling outage, the licensees shall provide an analysis and/or make hardware modifications to assure that the shoulder gap clearance between fuel rods and fuel assembly end fittings is adequate.

6. Inservice Inspection Program for Class 1, 2 and 3 Components (Section 5.2.4, 6.6, SER)

Within six (6) months from the date of this license, the licensees shall submit a revised inservice inspection program for Class 1, 2 and 3 components for NRC approval.

7. Natural Circulation Cooldown and Boron Mixing Test (Section 5.4.3, SSER 3)

Prior to exceeding fifty (50) percent of rated thermal power, the licensees shall either a) provide a report of the San Onofre Unit 2 test justifying that the test data is applicable to St. Lucie 2 assuring adequate boron mixing during natural circulation cooldown or b) perform the test to demonstrate adequate boron mixing during natural circulation cooldown.

8. Continuous Containment Purge System (Section 6.2.4, SSER 3)

Prior to exceeding 5% of rated thermal power, the licensees will make the necessary modifications to assure the operability of the Continuous Purge System in the event of a loss of coolant accident.

Prior to startup following the first refueling outage, the licensees shall install testing capability for the 8 inch purge valves which would allow for testing to the Standard Technical Specifications requirements of every 92 days.

9. Barrier for High Energy Equipment (8.4.1, SSER 3)

Prior to startup following the first refueling outage, the licensees shall have installed a barrier around the transformer in the cable spreading area that is acceptable to the NRC. Prior to installation, the licensees shall submit for NRC review and approval the barrier design to be used and justification for its acceptability.

*The parenthetical notation following the title of many license conditions denotes the section of the Safety Evaluation Report and/or its supplements wherein the license condition is discussed.

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10. Non-Safety Loads on Emergency Power Sources (Section 8.4.2, SER, SSER 3)

Prior to startup following the first refueling outage, the licensees shall implement the design modification to disconnect four-kilovolt loads on detection of a safety injection signal and provide two isolation devices in series for those non-safety electrical loads that are not disconnected by a safety injection signal or loss of offsite power.

11. Containment Electrical Penetrations (Section 8.4.3, SER)

Prior to startup following the first refueling outage, the licensees shall complete the design modifications to provide independent primary and backup fault protection for each electrical conductor penetrating containment.

12. Heavy Loads (Section 9.1.4, SSER 3)

Prior to startup following the first refueling outage, the licensees shall conform to the guidelines of Section 5.1.1 of NUREG-0612 and prior to thirty days of startup following the second refueling outage, the licensees shall have made commitments acceptable to the NRC regarding the guidelines of Section 5.1.2 through 5.1.6 of NUREG-0612.

13. Fire Protection (Section 9.5.1.11(a) and (b), SSER 3)

The licensees shall implement the fire protection program on a schedule specified in Section 9.5.1.11(a) and (b) of Supplement No. 3 to the Safety Evaluation Report.

14. Emergency Diesel Generator Modifications (Section 9.5.4.1, SER)

Prior to startup following the first refueling outage, the licensees shall a) install and have fully operational the automatic prelube pump and b) relocate instruments and controls located on the diesel engine skid to the floor-mounted panel.

15. Radioactive Waste Management (Section 11.2, 11.5, SER, SSER 3)

Within 14 months after core load, the licensees shall a) implement the design modifications to automatically shut off the waste management condensate and boric acid condensate pumps prior to the level reaching the overflow nozzle of the Primary Water Storage Tank and b) implement the design modification to automatically isolate the Low Pressure Safety Injection pump discharge to the Refueling Water Tank upon receipt of a refueling water tank high water level alarm.

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Prior to startup following the first refueling outage, FP&L shall
a) install waste concentrator bottom tanks and, b) install a second continuous oxygen analyzer.

16. Initial Test Program (Section 14, SER)

The licensees shall conduct the post-fuel loading initial test program (set forth in Section 14 of the St. Lucie 2 Final Safety Analysis Report, as amended through Amendment 13 and FP&L's letter L-83-207) without making any modifications to this program unless such modifications are in accordance with the provisions of 10 CFR Section 50.59. In addition, the licensees shall not make any major modifications to this program unless modifications have been identified and have received prior NRC approval. Major modifications are defined as:

- a. Elimination of any test identified as essential in Section 14 of the Final Safety Analysis Report, as amended through Amendment 13 and FP&L's letter L-83-207;
- b. Modification of test objectives, methods, or acceptance criteria for any test identified as essential in Section 14 of the Final Safety Analysis Report, as amended through Amendment 13 and FP&L's letter L-83-207;
- c. Performance of any test at a power level different from that described in the program as limited by this license authorization; and
- d. Failure to complete any tests included in the described program (planned or scheduled) for power levels up to the authorized power level.

17. NUREG-0737 Conditions (Section 22, SER, Section 13.3, SSER 3)

- a. Emergency Response Capability (I.D.1, I.D.2, 13.3.2.8, SSER 3)
 - 1) By April 15, 1983, the licensees shall submit a response to NRC generic letter 82-33, dated December 17, 1982, related to emergency response capabilities.
 - 2) The licensees shall maintain interim emergency support facilities (Technical Support Center, Operations Support Center and the Emergency Operations Facility) until the upgraded facilities are completed.

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b. Control Room Design Review (I.D.1, Appendix E, Also Part A of Appendix C, SSER 1, SSER 3)

Prior to exceeding five (5) percent of rated thermal power, the licensees shall complete correction of the human engineering discrepancies as noted in Appendix E of this license.

Prior to startup following the first refueling outage, the licensees shall rearrange the instruments described in Appendix F.

c. Reactor Coolant System Vents (II.B.1, SSER 2)

Prior to exceeding five (5) percent of rated thermal power, FP&L shall have the reactor coolant system vents installed and operational.

d. Post Accident Sampling System (II.B.3, SSER 3)

Prior to exceeding initial criticality, FP&L shall have installed and operational the Post Accident Sampling System.

Prior to startup following the first refueling outage, the licensees shall submit for NRC approval a revised core damage assessment procedure which incorporates, as a minimum, hydrogen levels, reactor coolant system pressure, core exit thermocouple temperatures and containment radiation levels in addition to radionuclide data.

e. In-Containment High Range Radiation Monitors (II.F.1(2c), SSER 3)

Prior to exceeding five (5) percent of rated thermal power, FP&L shall have the in-containment high range radiation monitors installed and operational.

f. Inadequate Core Cooling Instrumentation (II.F.2, SSER 1)

The licensees shall have:

- 1) The final design core exit thermocouple (CET) system installed with displays in the Qualified Safety Parameter Display System (QSPDS) cabinets, by initial criticality.
- 2) The instrumentation necessary to monitor and display subcooling margin installed in the QSPDS cabinets and operable by initial criticality.
- 3) The heated junction thermocouples (HJTC) installed in the QSPDS cabinets and operable by June 1983.

4) The final Inadequate Core Cooling System checkout and test report completed and submitted by January 15, 1984.

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- D. The licensees shall fully implement and maintain in effect all the provisions of the Commission-approved physical security, guard training and qualification and safeguards contingency plans including amendments made pursuant to the authority of 10 CFR Section 50.54(p). The approved plans, which contain information described in 10 CFR Section 73.21, are collectively entitled "Florida Power and Light Company, St. Lucie Plant Security Plan," Revision 6, dated August 9, 1982; St. Lucie Plant Safeguards Contingency Plan" dated June 19, 1980; and "St. Lucie Plant Training and Qualification Plan" dated April 29, 1981, as revised by pages dated June 23, 1981. Prior to initial criticality, the licensees shall satisfy the commitments in FP&L's letters L-83-215 dated April 5, 1983 and L-83-217 dated April 6, 1983. Also prior to initial criticality, the licensees shall perform a reevaluation of vital areas with due regard to the safety-safeguards interface, and provide the NRC the results of their reevaluation.
- E. Before engaging in additional construction or operational activities which may result in a significant adverse environmental impact that was not evaluated or that is significantly greater than that evaluated in the Final Environmental Statement dated April 1982, the licensees shall provide written notification to the Office of Nuclear Reactor Regulation.
- F. The licensees shall report any violations of the requirements contained in Section 2, Items C.(1), C.(3) through C.(17), D. and E. of this license within 24 hours by telephone and confirm by telegram, mailgram, or facsimile transmission to the NRC Regional Administrator, Region II, or his designee, no later than the first working day following the violation, with a written followup report within fourteen (14) days.
- G. The licensees shall notify the Commission, as soon as possible but not later than one hour, of any accident at this facility which could result in an unplanned release of quantities of fission products in excess of allowable limits for normal operation established by the Commission.

OFFICE ▶	.....	.....	.....	.....	.....	.....	.....
SURNAME ▶	.....	.....	.....	.....	.....	.....	.....
DATE ▶	.....	.....	.....	.....	.....	.....	.....

- H. The licensees shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.
- I. In accordance with the Commission's direction in its Statement of Policy, Licensing and Regulatory Policy and Procedures for Environmental Protection; Uranium Fuel Cycle Impacts, October 29, 1982, this license is subject to the final resolution of the pending litigation involving Table S-3. See, Natural Resources Defense Council v. NRC, No. 74-1586 (D.C. Cir. April 27 1982).
- J. This license is effective as the date of issuance and shall expire at midnight on April 6, 2023.

FOR THE NUCLEAR REGULATORY COMMISSION

151

Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Enclosures:

- 1. Attachment 1
- 2. Appendix A (Technical Specifications)
- 3. Appendix B (Environmental Protection Plan)
- 4. Appendix C (Antitrust Conditions)
- 5. Appendix D (Antitrust Conditions)
- 6. Appendix E (Human Engineering Discrepancies)
- 7. Appendix F (Control Board 206 Equipment Rework)

Date of Issuance: April 6, 1983

DL:LB#3*	DL:LB#3*	DE*
VNerses/yt	JLee	WRegan
3/ /83	3/ /83	3/ /83

*See previous concurrences.

OFFICE	DST*	OELD	OELD*	DL:LB#3*	DL:AD/L	DL:DIR	NRR:DIR
SURNAME	IDinitz	BPaton	JRutberg	GWknighton	GMNovak	DGEisenhut	HRDenton
DATE	4/ /83	4/ /83	4/ /83	4/ /83	4/ /83	4/ /83	4/ /83

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FOR THE NUCLEAR REGULATORY COMMISSION

Harold R. Denton, Director
Office of Nuclear Reactor Regulation

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- 6. Appendix E (Human Engineering Discrepancies)

Date of Issuance:

*subject to change
works on transmittal letter*

DL:LB#3
VNerses/yt
V. Nerses
3/21/83

DL:LB#3
JLee
JL
3/20/83

*DE 23 - correction
P3 of license*

DL:AD/L
WRagan
WR
3/15/83

OFFICE	DST	OELD	OELD	DL:LB#3	DL:AD/L	DL:DIR	NRR:DIR
SURNAME	IDinitz	BPaton	JRutberg	GWKington	TMNovak	DGEisenhut	HRDenton
DATE	3/18/83	3/ /83	3/3/83	3/20/83	3/ /83	3/ /83	3/ /83

J. This license is effective as the date of issuance and shall expire at midnight on April 1, 2023.

FOR THE NUCLEAR REGULATORY COMMISSION

Harold R. Denton, Director
Office of Nuclear Reactor Regulation

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DATE ▶	3/ /83	3/ /83	3/ /83	3/ /83	3/ /83	3/ /83	3/ /83



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

FLORIDA POWER AND LIGHT COMPANY

ORLANDO UTILITIES COMMISSION

OF THE CITY OF ORLANDO, FLORIDA

AND

FLORIDA MUNICIPAL POWER AGENCY

DOCKET NO. 50-389

ST. LUCIE PLANT, UNIT 2

FACILITY OPERATING LICENSE

License No. NPF-16

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 - A. The application for license filed by the Florida Power and Light Company, Orlando Utilities Commission of the City of Orlando, Florida and Florida Municipal Power Agency (licensees) complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I, and all required notifications to other agencies or bodies have been duly made;
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 - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission;
 - D. There is reasonable assurance: (i) that the activities authorized by this operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;
 - E. The Florida Power & Light Company* is technically qualified to engage in the activities authorized by this operating license in accordance with the Commission's regulations set forth in 10 CFR Chapter I.

*Florida Power & Light Company is authorized to act as agent for the Orlando Utilities Commission of the City of Orlando, Florida and Florida Municipal Power Agency and has exclusive responsibility and control over the physical construction, operation and maintenance of the facility.

- F. The licensees have satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements", of the Commission's regulations;
 - G. The issuance of this license will not be inimical to the common defense and security or to the health and safety of the public;
 - H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of this Facility Operating License No. NPF-16, subject to the conditions for protection of the environment set forth in the Environmental Protection Plan attached as Appendix B, is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied; and
 - I. The receipt, possession, and use of source, byproduct, and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40 and 70.
2. Based on the foregoing findings, Facility Operating License No. NPF-16 is hereby issued to the Florida Power and Light Company, Orlando Utilities Commission of the City of Orlando, Florida and Florida Municipal Power Agency (licensees) to read as follows:
- A. This license applies to the St. Lucie Plant, Unit 2, a pressurized water reactor and associated equipment, owned by the licensees. The facility is located on the licensees' site in St. Lucie County, Florida, and is described in the Florida Power and Light Company's Final Safety Analysis Report as amended through Amendment 13, Florida Power & Light Company's letter L-83-207 and the Environmental Report as amended through Amendment 5.
 - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:
 - 1. Pursuant to Section 103 of the Act and 10 CFR Part 50, Florida Power and Light Company (FP&L), Orlando Utilities Commission of the City of Orlando, Florida and Florida Municipal Power Agency to possess, and FP&L to use and operate the facility at the designated location in St. Lucie County, Florida, in accordance with the procedures and limitations set forth in this license;
 - 2. Pursuant to the Act and 10 CFR Part 70, FP&L to receive, possess, and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as amended through Amendment 13 and FP&L's letter L-83-207;

3. Pursuant to the Act and 10 CFR Parts 30, 40, and 70, FP&L to receive possess, and use at any time any byproduct, source and special nuclear material as sealed sources for reactor startup, as sealed sources for reactor instrumentation and radiation monitoring equipment calibration, as fission detectors in amounts as required;
 4. Pursuant to the Act and 10 CFR Parts 30, 40, and 70, FP&L to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
 5. Pursuant to the Act and 10 CFR Parts 30, 40, and 70, FP&L to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
- C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:
1. Maximum Power Level

Florida Power and Light Company is authorized to operate the facility at reactor core power levels not in excess of 2560 megawatts thermal (100% power) in accordance with the conditions specified herein and in Attachment 1 to this license. The preoperational tests, startup tests and other items identified in Attachment 1 to this license shall be completed as specified. Attachment 1 is hereby incorporated into this license. Pending Commission approval, this license is restricted to power levels not to exceed 5 percent of full power (128 megawatts thermal).
 2. Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in the attached Appendix A and the Environmental Protection Plan contained in the attached Appendix B, are hereby incorporated in this license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.
 3. Antitrust Conditions

Florida Power and Light Company shall comply with the antitrust conditions in Appendices C and D to this license.

4. Environmental Qualification of Mechanical and Electrical Equipment (Section 3.11.5, SSER 3)*

Prior to exceeding 5% of rated thermal power, the licensees shall complete and submit for NRC staff review and approval the analysis required by 10 CFR 50.49(i).

5. Axial Growth (Section 4.2.3.1(g), SSER 3)

Prior to startup following the first refueling outage, the licensees shall provide an analysis and/or make hardware modifications to assure that the shoulder gap clearance between fuel rods and fuel assembly end fittings is adequate.

6. Inservice Inspection Program for Class 1, 2 and 3 Components (Section 5.2.4, 6.6, SER)

Within six (6) months from the date of this license, the licensees shall submit a revised inservice inspection program for Class 1, 2 and 3 components for NRC approval.

7. Natural Circulation Cooldown and Boron Mixing Test (Section 5.4.3, SSER 3)

Prior to exceeding fifty (50) percent of rated thermal power, the licensees shall either a) provide a report of the San Onofre Unit 2 test justifying that the test data is applicable to St. Lucie 2 assuring adequate boron mixing during natural circulation cooldown or b) perform the test to demonstrate adequate boron mixing during natural circulation cooldown.

8. Continuous Containment Purge System (Section 6.2.4, SSER 3)

Prior to exceeding 5% of rated thermal power, the licensees will make the necessary modifications to assure the operability of the Continuous Purge System in the event of a loss of coolant accident.

Prior to startup following the first refueling outage, the licensees shall install testing capability for the 8 inch purge valves which would allow for testing to the Standard Technical Specifications requirements of every 92 days.

9. Barrier for High Energy Equipment (8.4.1, SSER 3)

Prior to startup following the first refueling outage, the licensees shall have installed a barrier around the transformer in the cable spreading area that is acceptable to the NRC. Prior to installation, the licensees shall submit for NRC review and approval the barrier design to be used and justification for its acceptability.

*The parenthetical notation following the title of many license conditions denotes the section of the Safety Evaluation Report and/or its supplements wherein the license condition is discussed.

10. Non-Safety Loads on Emergency Power Sources (Section 8.4.2, SER, SSER 3)

Prior to startup following the first refueling outage, the licensees shall implement the design modification to disconnect four-kilovolt loads on detection of a safety injection signal and provide two isolation devices in series for those non-safety electrical loads that are not disconnected by a safety injection signal or loss of offsite power.

11. Containment Electrical Penetrations (Section 8.4.3, SSER 3)

Prior to startup following the first refueling outage, the licensees shall complete the design modifications to provide independent primary and backup fault protection for each electrical conductor penetrating containment.

12. Heavy Loads (Section 9.1.4, SSER 3)

Prior to startup following the first refueling outage, the licensees shall conform to the guidelines of Section 5.1.1 of NUREG-0612 and prior to thirty days of startup following the second refueling outage, the licensees shall have made commitments acceptable to the NRC regarding the guidelines of Section 5.1.2 through 5.1.6 of NUREG-0612.

13. Fire Protection (Section 9.5.1.11(a) and (b), SSER 3)

The licensees shall implement the fire protection program on a schedule specified in Section 9.5.1.11(a) and (b) of Supplement No. 3 to the Safety Evaluation Report.

14. Emergency Diesel Generator Modifications (Section 9.5.4.1, SER)

Prior to startup following the first refueling outage, the licensees shall a) install and have fully operational the automatic prelube pump and b) relocate instruments and controls located on the diesel engine skid to the floor-mounted panel.

15. Radioactive Waste Management (Section 11.2, 11.5, SER, SSER 3)

Within 14 months after core load, the licensees shall a) implement the design modifications to automatically shut off the waste management condensate and boric acid condensate pumps prior to the level reaching the overflow nozzle of the Primary Water Storage Tank and b) implement the design modification to automatically isolate the Low Pressure Safety Injection pump discharge to the Refueling Water Tank upon receipt of a refueling water tank high water level alarm.

Prior to startup following the first refueling outage, FP&L shall
a) install waste concentrator bottom tanks and, b) install a second continuous oxygen analyzer.

16. Initial Test Program (Section 14, SER)

The licensees shall conduct the post-fuel loading initial test program (set forth in Section 14 of the St. Lucie 2 Final Safety Analysis Report, as amended through Amendment 13 and FP&L's letter L-83-207) without making any modifications to this program unless such modifications are in accordance with the provisions of 10 CFR Section 50.59. In addition, the licensees shall not make any major modifications to this program unless modifications have been identified and have received prior NRC approval. Major modifications are defined as:

- a. Elimination of any test identified as essential in Section 14 of the Final Safety Analysis Report, as amended through Amendment 13 and FP&L's letter L-83-207;
- b. Modification of test objectives, methods, or acceptance criteria for any test identified as essential in Section 14 of the Final Safety Analysis Report, as amended through Amendment 13 and FP&L's letter L-83-207;
- c. Performance of any test at a power level different from that described in the program as limited by this license authorization; and
- d. Failure to complete any tests included in the described program (planned or scheduled) for power levels up to the authorized power level.

17. NUREG-0737 Conditions (Section 22, SER, Section 13.3, SSER 3)

- a. Emergency Response Capability (I.D.1, I.D.2, 13.3.2.8, SSER 3)
 - 1) By April 15, 1983, the licensees shall submit a response to NRC generic letter 82-33, dated December 17, 1982, related to emergency response capabilities.
 - 2) The licensees shall maintain interim emergency support facilities (Technical Support Center, Operations Support Center and the Emergency Operations Facility) until the upgraded facilities are completed.

b. Control Room Design Review (I.D.1, Appendix E, Also Part A of Appendix C, SSER 1, SSER 3)

Prior to exceeding five (5) percent of rated thermal power, the licensees shall complete correction of the human engineering discrepancies as noted in Appendix E of this license.

Prior to startup following the first refueling outage, the licensees shall rearrange the instruments described in Appendix F.

c. Reactor Coolant System Vents (II.B.1, SSER 2)

Prior to exceeding five (5) percent of rated thermal power, FP&L shall have the reactor coolant system vents installed and operational.

d. Post Accident Sampling System (II.B.3, SSER 3)

Prior to exceeding initial criticality, FP&L shall have installed and operational the Post Accident Sampling System.

Prior to startup following the first refueling outage, the licensees shall submit for NRC approval a revised core damage assessment procedure which incorporates, as a minimum, hydrogen levels, reactor coolant system pressure, core exit thermocouple temperatures and containment radiation levels in addition to radionuclide data.

e. In-Containment High Range Radiation Monitors (II.F.1(2c), SSER 3)

Prior to exceeding five (5) percent of rated thermal power, FP&L shall have the in-containment high range radiation monitors installed and operational.

f. Inadequate Core Cooling Instrumentation (II.F.2, SSER 1)

The licensees shall have:

- 1) The final design core exit thermocouple (CET) system installed with displays in the Qualified Safety Parameter Display System (QSPDS) cabinets, by initial criticality.
- 2) The instrumentation necessary to monitor and display subcooling margin installed in the QSPDS cabinets and operable by initial criticality.
- 3) The heated junction thermocouples (HJTC) installed in the QSPDS cabinets and operable by June 1983.
- 4) The final Inadequate Core Cooling System checkout and test report completed and submitted by January 15, 1984.

- D. The licensees shall fully implement and maintain in effect all the provisions of the Commission-approved physical security, guard training and qualification and safeguards contingency plans including amendments made pursuant to the authority of 10 CFR Section 50.54(p). The approved plans, which contain information described in 10 CFR Section 73.21, are collectively entitled "Florida Power and Light Company, St. Lucie Plant Security Plan," Revision 6, dated August 9, 1982; St. Lucie Plant Safeguards Contingency Plan" dated June 19, 1980; and "St. Lucie Plant Training and Qualification Plan" dated April 29, 1981, as revised by pages dated June 23, 1981. Prior to initial criticality, the licensees shall satisfy the commitments in FP&L's letters L-83-215 dated April 5, 1983 and L-83-217 dated April 6, 1983. Also prior to initial criticality, the licensees shall perform a reevaluation of vital areas with due regard to the safety-safeguards interface, and provide the NRC the results of their reevaluation.
- E. Before engaging in additional construction or operational activities which may result in a significant adverse environmental impact that was not evaluated or that is significantly greater than that evaluated in the Final Environmental Statement dated April 1982, the licensees shall provide written notification to the Office of Nuclear Reactor Regulation.
- F. The licensees shall report any violations of the requirements contained in Section 2, Items C.(1), C.(3) through C.(17), D. and E. of this license within 24 hours by telephone and confirm by telegram, mailgram, or facsimile transmission to the NRC Regional Administrator, Region II, or his designee, no later than the first working day following the violation, with a written followup report within fourteen (14) days.
- G. The licensees shall notify the Commission, as soon as possible but not later than one hour, of any accident at this facility which could result in an unplanned release of quantities of fission products in excess of allowable limits for normal operation established by the Commission.

- H. The licensees shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.
- I. In accordance with the Commission's direction in its Statement of Policy, Licensing and Regulatory Policy and Procedures for Environmental Protection; Uranium Fuel Cycle Impacts, October 29, 1982, this license is subject to the final resolution of the pending litigation involving Table S-3. See, Natural Resources Defense Council v. NRC, No. 74-1586 (D.C. Cir. April 27 1982).
- J. This license is effective as the date of issuance and shall expire at midnight on April 6, 2023.

FOR THE NUCLEAR REGULATORY COMMISSION



Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Enclosures:

- 1. Attachment 1
- 2. Appendix A (Technical Specifications)
- 3. Appendix B (Environmental Protection Plan)
- 4. Appendix C (Antitrust Conditions)
- 5. Appendix D (Antitrust Conditions)
- 6. Appendix E (Human Engineering Discrepancies)
- 7. Appendix F (Control Board 206 Equipment Rework)

Date of Issuance:

ATTACHMENT 1ITEMS TO BE COMPLETED PRIOR TO INITIAL CRITICALITY

- I. The licensee will complete to the satisfaction of NRC Region II the following open items:
 - A. Completion of Fe-55, Sr-89/90 radiochemical analysis procedures (82-72-01)
 - B. Modification of particulate sampling collector on plant vent so isotopic analysis can be performed (82-72-03)
 - C. Resolve remote shutdown demonstration test followup items (82-63-04).
 - D. Resolve undervoltage relay settings for emergency bus transfer (83-30-01)

- II. The licensee will resolve to the satisfaction of NRC Region II the following Construction Deficiency Reports (50.55(e) items):
 - A. PORV Solenoids Long Term Reliability Deficiency (CDR-83-01).
 - B. Westinghouse Gate Valves - Premature Indication of Closure (CDR-83-03).
 - C. Boric Acid Makeup (BAM) System Safety Injection Actuation System (SIAS) Pump Start Logic (CDR-83-06).
 - D. HPSI Pump Bearing Bracket Drain Deficiency (CDR-83-07)
 - E. Condensate Storage Tank Implosion (CDR-83-09).

- III. The licensee will inspect and clean as necessary, the electrical cabinets associated with safety-related equipment to verify that conditions are acceptable and consistent with the jumper/lifted lead records.

ITEMS TO BE COMPLETED PRIOR TO EXCEEDING 5% RATED POWER

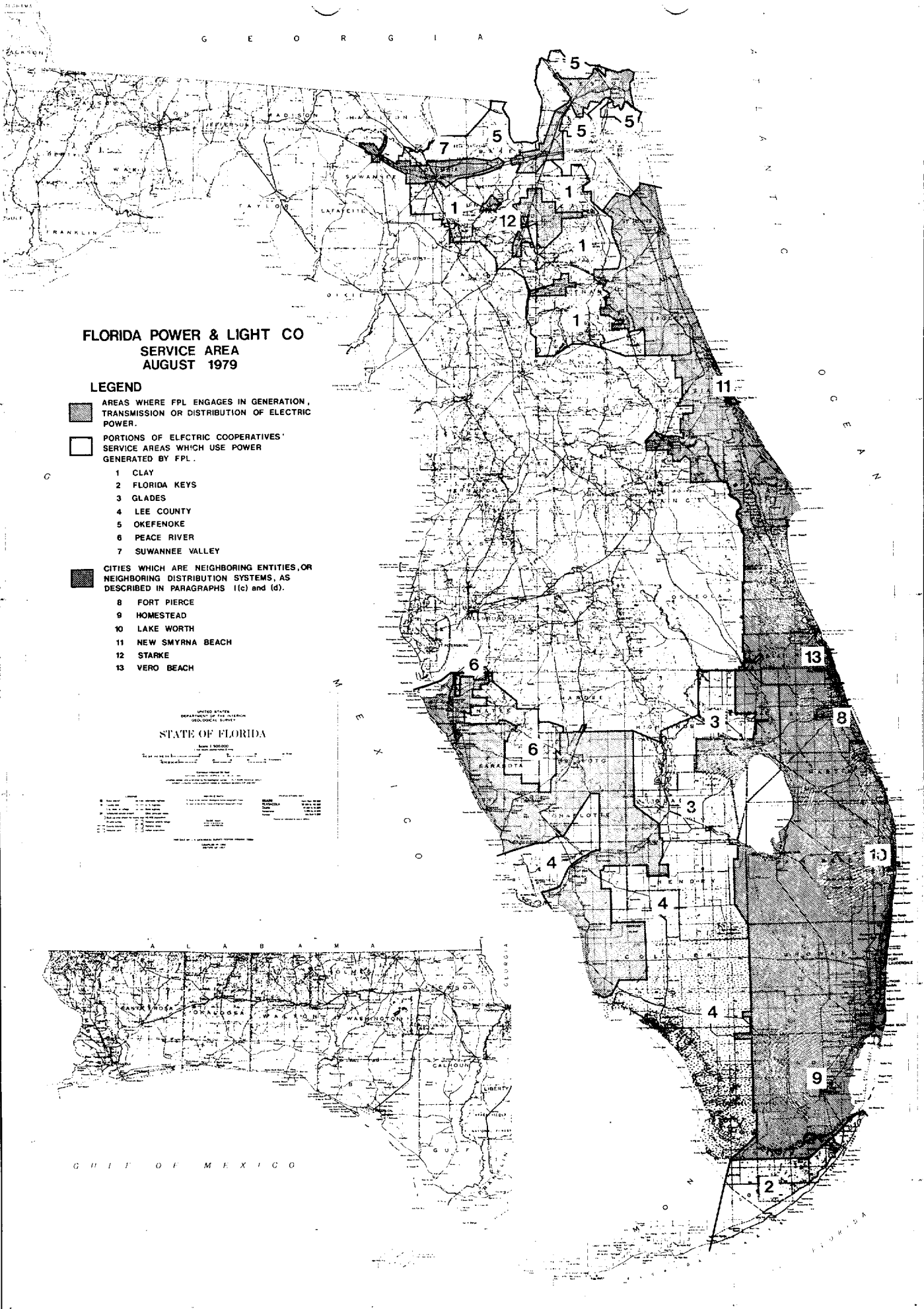
- I. The licensee will complete to the satisfaction of NRC Region II the requirements of the following bulletins:
 - A. Pipe support base plate designs using concrete expansion anchor bolts (79-BU-02).
 - B. Seismic analysis for as-built safety-related piping systems (79-BU-14).
 - C. Engineered Safety Feature (ESF) reset controls (80-BU-06)
 - D. Decay Heat Removal system operability (80-BU-12).
 - E. Electrical connector assemblies (77-BU-05) (77-BU-05A).
 - F. Masonary wall design (80-BU-11) (CDR 82-24).
 - G. Possible loss of emergency notification system (ENS) with loss of off-site power (80-BU-15).

- II. The licensee will resolve to the satisfaction of NRC Region II the following IE Notices:
 - A. Design misapplication of Bergen-Paterson standard strut restraint clamp (IEN 83-13).
 - B. Failure of General Electric type HFA relays (IEN-82-13).

- III. The licensee will resolve to the satisfaction of NRC Region II the following open items:
 - A. Review shielding adequacy of CVCS letdown monitor sample lines (82-70-02).
 - B. Conduct an accountability drill for both Units 1 and 2 following implementation of the Unit 2 Security Plan (82-05-10).
 - C. Program to review and document 10 CFR 50.59 evaluations for unreviewed safety questions for tests and experiments (82-64-01).
 - D. Evaluate need for shielding of penetrations in ion exchange cubicle and spent resin tank valve gallery (82-70-05).


- IV. The licensee will resolve to the satisfaction of NRC Region II the issue of proper labeling and accessibility control of motor operated valve thermal overload protection bypass switches and control room/remote shutdown panel control diversion switches.


G E O R G I A




**FLORIDA POWER & LIGHT CO
SERVICE AREA
AUGUST 1979**

LEGEND

 AREAS WHERE FPL ENGAGES IN GENERATION, TRANSMISSION OR DISTRIBUTION OF ELECTRIC POWER.

 PORTIONS OF ELECTRIC COOPERATIVES' SERVICE AREAS WHICH USE POWER GENERATED BY FPL.

- 1 CLAY
- 2 FLORIDA KEYS
- 3 GLADES
- 4 LEE COUNTY
- 5 OKEFENOKE
- 6 PEACE RIVER
- 7 SUWANNEE VALLEY

 CITIES WHICH ARE NEIGHBORING ENTITIES, OR NEIGHBORING DISTRIBUTION SYSTEMS, AS DESCRIBED IN PARAGRAPHS 1(c) and (d).

- 8 FORT PIERCE
- 9 HOMESTEAD
- 10 LAKE WORTH
- 11 NEW SMYRNA BEACH
- 12 STARKE
- 13 VERO BEACH

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
STATE OF FLORIDA

Scale 1:500,000

Symbol	Description
	State Boundary
	County Boundary
	Service Area Boundary
	Cooperative Service Area Boundary
	Major Road
	Minor Road
	Railroad
	Waterway
	City
	Town
	Village
	Unincorporated Community
	Water
	Marsh
	Swamp
	Barren Land
	Forest
	Open Land
	Water
	Marsh
	Swamp
	Barren Land
	Forest
	Open Land

GULF OF MEXICO

APPENDIX CANTITRUST CONDITIONSLICENSE NO. NPF-16

The Florida Power & Light Company shall comply with the following antitrust conditions:

I DEFINITIONS

- (a) "Applicable area" means the area shown on the map which is Attachment A and any other area in the state of Florida in which, in the future, the Company will engage in generation, transmission or distribution of electric power; provided, however, that an area shall not be deemed to be included within the "applicable area" solely because the Company acquires an ownership interest of less than 50% in a generating facility located in such area.
- (b) "The Company" means Florida Power & Light Company or any successor corporation, or any assignee of the Company.
- (c) "Neighboring entity" means a private or public corporation, governmental agency or authority, municipality, rural electric cooperative, or lawful association of any of the foregoing, which owns, contractually controls, or operates, or in good faith proposes to own, contractually control, or operate facilities for the generation or transmission of electricity, which meets each of the following criteria: (1) its existing or proposed facilities are actually interconnected or technically feasible of interconnection with those of the Company; (2) its existing or proposed facilities are fully or partially within the applicable area; (3) it is, or upon commencement of operations, will be subject to regulation as a public utility with respect to rates or service under applicable state law, or under the Federal Power Act, or it is legally exempted from such regulation by law.
- (d) "Neighboring distribution system" means a private or public corporation, governmental agency or authority, municipality, rural electric cooperative, or lawful association of any of the foregoing, which engages or in good faith proposes to engage in the distribution of electric energy at retail, whose existing or proposed

facilities are connected or technically feasible of connection with those of the Company, and which meets each of the criteria numbered (2) and (3) in paragraph (c) above.

- (e) "Costs" means all appropriate costs, including a reasonable return on investment, which are reasonably allocable to an arrangement between two or more electric systems under coordination principles or generally accepted industry practices. In determining costs, no value shall be included for loss of revenues from a sale of power by one party to a consumer which another party might otherwise serve.
- (f) The cities of Gainesville, Key West, Jacksonville Beach, Green Cove Springs, Clewiston, Lake Helen, Orlando and Moore Haven and the Fernandina Beach Division of the Florida Public Utilities Company are considered to be neighboring entities or neighboring distribution systems for the purpose of these license conditions, without regard for whether their facilities are technically feasible of interconnection with the Company. This provision creates specific exceptions to the definition of applicable area and shall not be construed to bring within the applicable area any system not located within the area shown on Attachment A or not listed here.

II INTERCONNECTIONS

- (a) The Company shall interconnect at any technically feasible point on its system and operate in parallel pursuant to a written agreement with any neighboring entity requesting such interconnection.
- (b) To the extent it is technically feasible, interconnections shall not be limited to lower voltages when higher voltages are requested and available and shall not be limited to higher voltages when lower voltages are requested and available. Voltages "available" means existing on the Company's system at the desired point of interconnection. Company may include in its rate schedule provisions for conversion of interconnection voltage and relocation of interconnection points to accommodate load growth and design changes consistent with continuing development of Company's transmission system.
- (c) Interconnection agreements shall provide for the necessary operating procedures and control equipment as required for the safe and prudent operation of the interconnected systems.

- (d) Interconnection agreements shall not embody provisions which impose limitations upon the use or resale of capacity and energy except as may be necessary to protect the reliability of the Company's system.
- (e) Interconnection agreements shall not prohibit the parties from entering into other interconnection agreements, but may include appropriate provisions to protect the reliability of the Company's system and to ensure that the Company is compensated for additional costs resulting from such other interconnections.

III RESERVE COORDINATION AND EMERGENCY POWER

- (a) The Company shall sell emergency power to any neighboring entity with which it is interconnected, provided that the neighboring entity has applied good utility practices to plan, operate and maintain a reasonable installed reserve margin for the load that it is meeting with its own resources. Such installed reserve margin, which may include the purchase of reserves from other systems, shall consist of capacity which is as reliable as reserve capacity generally maintained in the electric utility industry, and which is maintained and operated in a manner consistent with good utility practice. The Company shall engage in such emergency sales when requested if and when capacity and energy are available from its own generating resources or from those of interconnected electric systems, but only to the extent that it can do so without jeopardizing service to its customers. Emergency power shall be furnished to the fullest extent available from the supplying party and required by the other party's emergency.
- (b) The parties to reserve coordination transactions pursuant to this section shall maintain such amounts of operating reserves as may be adequate to avoid the imposition of unreasonable demands on any other party(ies) in meeting the normal contingencies of operating their systems. However, Company shall not impose upon any party an operating reserve requirement which is unreasonable in light of such party's minimum reserve obligations under paragraph (a) above.

- (c) The Company, if it has generating capacity in excess of the amount called for by its own reserve criteria, shall offer such excess to a neighboring entity to meet such entity's own minimum reserve margin. In lieu of selling such capacity, Company may waive (to the extent of the capacity which would otherwise be offered in accordance with this paragraph) the minimum reserve obligation under paragraph (a) above as to a party requesting to purchase capacity which Company would be required by this paragraph to sell.
- (d) Company's obligations under this section apply only as to neighboring entities which agree to assume reciprocal obligations to Company.

IV MAINTENANCE POWER AND ENERGY

Company, when it can reasonably do so, shall exchange maintenance schedules and shall engage in purchases and sales of maintenance power and energy with any neighboring entity which so requests. Power shall be supplied to the fullest extent practicable for the time scheduled and in accordance with generally accepted industry practice for maintenance power and energy sales. Company shall be required to sell maintenance power and energy only to the extent that it can do so without jeopardizing service to its customers. Company's obligations under this section apply only as to neighboring entities which agree to assume reciprocal obligations to Company.

V ECONOMY ENERGY

Company shall exchange data on costs of energy from generating resources available to it and, consistent with system security, sell or purchase economy energy (when appropriate to do so under principles of economic dispatch and good system operating practices) to or from a requesting neighboring entity on a basis that will apportion the savings from such transactions equally between Company and such entity. This provision shall not be construed to preclude arrangements for economy energy transactions on a regional basis or to require Company or neighboring entity to forego a more attractive opportunity to sell or purchase economy energy. Company's obligations under this section apply only as to neighboring entities which agree to assume reciprocal obligations to Company.

VI SHARING OF INTERRUPTIONS AND CURTAILMENTS

Company may include reasonable provisions in any inter-connection agreement or contract or schedule for sale of wholesale power requiring a neighboring entity or neighboring distribution system to implement an emergency program for the reduction of customer load, with the objective that Company and the other party shall equitably share the interruption or curtailment of customer load, provided that such provisions are consistent with Company's general emergency criteria filed with any appropriate regulatory authorities. This emergency program would provide for automatic under-frequency load shedding or for load reduction by manual switching or other means, when and to the extent Company reasonably determines such to be necessary to maintain the adequacy of bulk electric power supply.

VII ACCESS TO ST. LUCIE PLANT UNIT 2

(a) Company will afford to the neighboring entities and neighboring distribution systems listed below the opportunity to participate in the ownership of St. Lucie Plant, Unit 2 (hereinafter designated St. Lucie 2) in the percentage shares listed below:

Clewiston	.19387
Ft. Pierce	1.02793
Fernandina Beach Division of Florida Public Utilities Co.	.45410
Gainesville	2.09359
Green Cove Springs	.13011
Homestead	.44499
Jacksonville Beach	.64538
Key West	.74946
Lake Helen	.03121
Lake Worth	.89520
Moore Haven	.03382
New Smyrna Beach	.40336
Orlando	6.08951
Starke	.11970
Vero Beach	1.03963
Florida Keys Cooperative	.79371

(b) As promptly as practicable, but not later than 30 days after these conditions take effect, Company shall transmit to the entities described above copies of (i) the construction permit for St. Lucie 2, (ii) the orders of the NRC and its subsidiary tribunals authorizing issuance of the construction permit, (iii)

the final environmental impact statement prepared by the NRC staff, (iv) the final safety evaluation report prepared by the NRC staff, (v) a statement of the costs incurred for St. Lucie 2 through the most recent date for which an accounting is then available, (vi) Company's most current estimates of the total cost of St. Lucie 2 (including estimates of cash requirements by calendar quarter through the date of commercial operation) and the schedule for completion of construction thereof, (vii) the participation agreement Company has executed with Seminole Electric Cooperative, Inc. (or if no such agreement has been executed, the most recent draft of such agreement), (viii) Company's estimate of annual capacity factors for St. Lucie 2 and (ix) Company's estimate of operating and maintenance expenses to be associated with St. Lucie 2. No such estimates shall bind Company, and Company shall provide such information in good faith. In addition, Company shall make available to such entities at Company's offices copies of the preliminary safety analysis report and environmental report submitted by Company to the NRC. Company shall respond fully within 30 days to reasonable requests for additional information received from said entity within 35 days of said entity's receiving the documents enumerated in (i) through (ix) of this paragraph. If the NRC finds that the Company has failed to respond fully within 30 days to any such reasonable requests, the entity shall be allowed to participate in accordance with such time schedule as the NRC deems appropriate.

- (c) Within 120 days after transmittal of the information enumerated in paragraph (b), each such entity which desires to participate in St. Lucie 2 by ownership shall provide Company with a written commitment (i) that it intends to participate in St. Lucie 2 and to negotiate in good faith with the Company as to the terms of a participation agreement, (ii) that, in the event agreement is reached as to terms of a participation agreement, it will assist the Company as requested in obtaining the required approval of the NRC, and (iii) that it will in good faith seek to obtain the necessary financing for its participation. Such commitment shall be accompanied by a payment equal to ten percent (10%) of the amount stated pursuant to paragraph (b) (v) multiplied by the participation share to which the commitment applies (expressed as a decimal fraction). Upon receiving

such payment, the Company shall agree in writing to negotiate in good faith as to the terms of a participation agreement with the entities which provide the written commitments and payments described above. Such written agreement shall also provide that in the event that the Company fails to execute the participation agreement reached between the Company and such entity as provided in paragraph (d) below, each such entity shall have the right to initiate an enforcement action before the NRC, and to initiate an action against the Company in an appropriate court and/or agency for any relief that may otherwise be available to such entity under law. The Company shall have no obligation under this section to any entity which fails to provide within the time specified herein the written commitment and payment described above, except as may otherwise be provided for in these conditions or be agreed upon in writing by the Company and each such entity.

(d) (1) If, within 120 days after providing the written commitments and payments described in paragraph (c), any entities providing such written commitments and payments and the Company agree as to the terms of a participation agreement, the Company and such entities shall execute the participation agreement, and the Company shall seek the required approval of the NRC for transfer of an ownership interest to such entity. The participation agreement shall provide for closing 60 days after NRC approval of participation, contingent upon such entity's having obtained the necessary financing for its participation, at which time an ownership interest would be conveyed to the participant, and the participant would pay its (percentage) share of all costs incurred in connection with St. Lucie Unit 2 to the date of closing, less any payment made by such entity pursuant to paragraph (c) hereof.

(2) If NRC approval is not obtained or if, by a date 60 days after NRC approval is obtained, such entity has not been able to obtain the necessary financing, the payment made by such entity pursuant to paragraph (c) shall be refunded by Company to such entity, and Company shall have no further obligation under this section to such entity. Notwithstanding the foregoing, if an entity is unable to close at the time specified solely by reason of its inability, despite a good faith effort, to obtain necessary financing

such entity shall be allowed a 100-day extension of time for closing. If, for whatever reason, it fails to close within the 100-day extension period, Company shall refund to the entity the payment made by it pursuant to paragraph (c) and Company shall have no further obligation under this section to such entity; provided, however, that if a proceeding with respect to the validity of obligations to be issued by the entity to obtain the necessary financing is pending before the Florida Supreme Court at the conclusion of the 100-day extension period, then such period shall be extended until 60 days after entry of a final judgement in such proceeding.

(3) If a neighboring entity or neighboring distribution system eligible for participation under these conditions is prevented from making the 10% commitment payment required by Section VII(c) due to operation of a state or federal statute or constitutional provision or because it is impossible for it to obtain funds within the required time period through any of the commercial channels ordinarily available to municipalities to finance payments required in advance of obtaining long-term financing (but excluding in all instances any impediment which can be removed by action of the municipality within the required time period), such neighboring entity will not be obligated to make such commitment payment; provided, however; that the neighboring entity or neighboring distribution system failing to make the commitment payment in reliance on this provision shall have the burden of establishing in any enforcement proceeding the existence of one of the conditions specified herein as a basis for being relieved of the obligation to make such payment and if it fails to do so shall have no right to participation in St. Lucie No. 2 under this section.

(4) If any entity described in paragraph (d)(1) or (d)(2) does not close by the time specified herein, for any reason other than failure to obtain NRC approval or failure to obtain the necessary financing (having made a good faith effort to do so), Company shall refund to the entity the payment made by it pursuant to paragraph (c), and Company shall have no further obligation under this section to such entity.

- (e) (1) If, within 120 days after providing the written commitments and payments described in paragraph (c), any entities providing such written commitments and payments and Company are unable to agree as to the terms of a participation agreement, any such entity may make a written request to Company that their dispute with respect to the terms of the participation agreement be submitted to arbitration. Upon the making of such a request by any such entity, Company and each such entity shall enter into an agreement that the arbitration shall be final and binding as between the Company and such entity. If no written request for arbitration is made within the 120-day period specified in this paragraph by an entity that provided the written commitment and payment described in paragraph (c), the payment made by such entity pursuant to paragraph (a) shall be refunded by Company to such entity, and Company shall have no further obligation under this section to such entity. Within ten days after the making of any such request, Company and all entities making such request shall confer and attempt to agree upon the appointment of a single arbitrator. If such agreement is not reached, either Company or any such entity may request the American Arbitration Association to appoint an arbitrator, who shall be an attorney with knowledge of the electric utility industry. The arbitrator shall conduct a hearing to determine reasonable terms for the disputed provisions of the participation agreement giving due regard to the context of participation agreements negotiated among comparable parties in the electric utility industry and the particular business situation confronting Company and the entities requesting arbitration, and shall resolve all disputes in accordance with this section and the terms of the agreement to arbitrate; provided, however, that the provisions proposed by the Company as to its liability to the other participants, and as to sharing the cost of discharging uninsured third party liability, */ in connection with the design, construction, operation, maintenance and decommissioning of St. Lucie 2 shall be approved by

*/ Any such liability provision shall not be intended to relieve Company or any other owner of the plant from any liability which it may have to any third party under any federal, state or other law, nor shall such provision provide the basis for any defense by Company, or any other owner of the plant, or any impediment to or delay in any payment, cost, expense or obligation arising from a claim of liability to a third party made against the Company or any other owner of the plant. To the extent that such provision concerns liability to third parties, such provision shall relate solely to subrogation rights as between Company and participants.

the arbitrator unless he determines that the provisions proposed by the Company constitutes an unreasonable proposal which renders meaningless the Company's offer of participation in St. Lucie 2. The decision of the arbitrator shall be rendered within 30 days of the conclusion of the hearing, unless such time is extended by all of the parties, and shall be final and binding as between the Company and each such entity. Nothing herein shall be construed to deprive the NRC of its jurisdiction to enforce the terms of this license under the Atomic Energy Act.

(2) Promptly after the arbitrator renders his decision, the Company and any such entity shall execute the participation agreement, containing the provisions for subsequent closing described in paragraph (d) (1), and Company shall seek the required approval of the NRC for transfer of an ownership interest to such entity. If any such entity does not execute the participation agreement, Company shall refund to the entity the payment made by it pursuant to paragraph (c) and, Company shall have no further obligation under this section to such entity. If Company does not execute the participation agreement, each such entity shall have the right to request the NRC to initiate an enforcement action and to institute an action against the Company in an appropriate court and/or agency for any relief that may otherwise be available to such entity under law. Upon execution of the participation agreement, the provisions of paragraph (d) (2) shall apply.

(f) In the event that any entity described in paragraph (a) hereof does not participate in the ownership of St. Lucie 2 or participates in the ownership of St. Lucie 2 in an amount less than the amount provided for in paragraph (a) hereof, it shall be permitted by Company to transfer all or a portion of its participation rights under this section to Florida Municipal Power Agency or any successor thereof (together hereinafter referred to as "FMPA") or to any other entity entitled to participate under this license conditions, provided that FMPA or such other entity agrees to assume all of the transferring entity's obligations to Company in connection with the participation rights transferred. Unless otherwise agreed to by Company and FMPA or such other entity, in no event shall FMPA or such other entity be entitled to any greater periods of time for the performance of its obligations under this section than its transferor would have been entitled to prior to the transfer.

- (g) (1) Company may, in its unilateral discretion, extend the time for any of the actions required by this section to be taken by an entity desiring to participate in St. Lucie 2. Any such extension shall be in writing. No extension permitted by Company to any entity shall require Company to permit further extensions of time to such entity or similar extensions to other entities.
- (2) Any entity which is named in the construction permit for Florida Power & Light St. Lucie 2 (dated May 2, 1977) and which elects to participate in St. Lucie 2 pursuant to this section does so in lieu of any participation rights provided in the license conditions contained in the construction permit as issued.
- (h) In no event shall the Company be obligated to provide participation in St. Lucie 2 under this section to any entity unless and until the Company and such entity execute a participation agreement and such entity pays the Company its percentage share of all costs incurred to the date of execution of the participation agreement in connection with St. Lucie 2.
- (i) Company may retain complete control and act for the other participants with respect to the design, engineering, construction, operation and maintenance of St. Lucie 2, and make all decisions relevant thereto insofar as they deal with the relationship between the Company and the other participants, including (but not limited to) decisions regarding adherence to NRC health, safety and environmental regulations, changes in construction schedule, modification or cancellation of the unit and operation at such time and such capacity levels as it deems proper, all without the consent of any participant. Consistent with the foregoing, the participation agreement shall provide for an advisory committee as a vehicle for communication and consultation among all of the owners, and except where the public interest requires immediate unilateral action, Company shall promptly inform participants of actions which may materially affect them.
- (j) Nothing contained herein shall preclude the Company from instituting an action against any entity, with respect to its participation or commitment to participate in St. Lucie 2, in an appropriate court for any relief that may be available to it under law.

- (k) Any refund made by Company to any entity pursuant to this section shall be of the full amount paid by such entity. Company shall not be required by this section to pay interest on any such refund.
- (l) Any entity shall have the right, subject to NRC approval, to sell or otherwise alienate its ownership share in St. Lucie 2 after it has taken title to said ownership share to an electric utility which agrees to and is financially qualified to assume the obligations of the seller with respect to St. Lucie 2. Any right to contest the prospective buyer's financial qualifications will be waived by Company unless Company informs the prospective seller, prospective buyer, and the NRC of Company's objections within thirty (30) days of Company's receipt of notice of the prospective sale.

VIII ACCESS TO FUTURE NUCLEAR PLANTS

Company will afford to: (a) those neighboring entities and neighboring distribution systems entitled under any St. Lucie Unit 2 license conditions to any opportunity to participate in the ownership of St. Lucie 2, and (b) to any other neighboring entity or neighboring distribution system not in existence on January 1, 1980, but which operates generation, transmission, or distribution facilities in the applicable area as of the date that a construction permit application is submitted to the NRC by Company, the opportunity to participate in the ownership of all nuclear units for which the Company files a construction permit application with the NRC prior to January 1, 1990, provided, however, that no opportunity to participate need be afforded to any neighboring entity or neighboring distribution system in an amount, if any, which would, in the aggregate, result in its owning nuclear generating capacity, or enjoying direct access thereto by unit power purchase or participation through a joint agency, as a percentage of its peak load in excess of what Company's percent of same would be after the addition of the proposed plant. If a joint power agency qualifies for participation hereunder as a neighboring entity, its nuclear generating capacity and peak load shall be deemed to be the aggregate of the nuclear generating capacities and peak loads of its members within the applicable area, excluding any such members which elect to exercise direct participation rights hereunder. In no event shall this license condition be construed to require Company to provide ownership interest in any such nuclear unit in a total amount exceeding 20 percent of the Company's interest in such unit. Where ownership in a nuclear unit is shared between the Company and one or more other utilities, the Company's obligation hereunder with respect to that nuclear unit shall be reduced to the extent that any utility to which participation would

be afforded under this condition has been afforded an opportunity to obtain access to the nuclear unit, either directly or through a joint agency.

IX WHOLESALE FIRM POWER SALES

- (a) Subject to the limitations contained in paragraphs (c) and (d), Company, upon timely request, shall sell firm wholesale power on a full or partial requirements basis to (1) any neighboring entity up to the amount required to supply electric service to its retail customers, to those wholesale customers which are supplied by the neighboring entity and which were so supplied on January 2, 1979, and to those wholesale customers which were previously supplied by Company and which are now supplied by such neighboring entity, and (2) any neighboring distribution system up to the amount required to supply electric service to its retail customers. Any sales made under subsection (a) (1) or (a) (2) above may be decreased by the sum at any one time of (i) power made available to such neighboring entity or neighboring distribution system as a result of participation in (or purchase of unit power from) one of Company's generating units and (ii) other power transmitted to such neighboring entity or neighboring distribution system by Company.
- (b) For neighboring entities which supply power to one or more neighboring entities or neighboring distribution systems eligible to directly request service under this condition, Company will alternatively make sales to such supplying entities to the extent that such service would be available under the previous paragraph (a) to such neighboring entities or neighboring distribution system(s), provided that such sales can be made on terms and conditions which do not expand Company's obligations to supply wholesale power beyond the quantities otherwise referred to in this section.
- (c) Company may require such advance notice of the intention to take service and of the service contract demands as is reasonable for Company's power supply planning, and may impose reasonable limitations upon the increases in such service contract demands, provided that no such limitation shall be imposed to prevent a neighboring entity or neighboring distribution system from assuming a load which has been served directly by Company or a load which Company has sought to serve. Company shall not establish rates, terms or conditions (other than the advance notice provision described above) for the sale of firm wholesale power which differentiate among customers on the basis of whether or not an entity has historically been a wholesale firm power customer of the Company.
- (d) Company shall not have any obligation to provide wholesale power to: (1) any electric utility which existed on January 1, 1979, and which was not a neighboring entity

or neighboring distribution system as of that date; (2) any rural electric cooperative (or membership corporation) in a quantity greater than that required to serve such cooperative (or any distribution cooperative served by such cooperative) for loads in the area which has historically been supplied at wholesale or at retail by the Company; or (3) a neighboring entity which on January 1, 1979, owns or controls electric facilities with nominal capacity in excess of 200Mwe, provided that this item (d) (3) shall not relieve the Company from the alternative obligation, provided in paragraph (b), to make sales to a neighboring entity which supplies power to a neighboring entity or neighboring distribution system in lieu of making such sales directly to the eligible neighboring entity or neighboring distribution system.

- (e) Wholesale power sales agreements shall not restrict use or resale of power sold pursuant to such agreements except as may be necessary to protect the reliability of Company's system. Delivery point voltages shall be established consistent with the provisions of section II(b).

X TRANSMISSION SERVICES

- (a) The Company shall transmit power (1) between Company power sources and neighboring entities or neighboring distribution systems with which Company is connected, (2) between two or among more than two neighboring entities, or sections of a neighboring entity's system which are geographically separated, with which, now or in the future, Company is interconnected, (3) between any neighboring entity with whom, now or in the future, Company is interconnected and one or more neighboring distribution system(s) with whom, now or in the future, it is connected, (4) between any neighboring entity or neighboring distribution system(s) and any other electric utility outside the applicable area, and (5) from any qualifying cogeneration facility or small power production facility (as defined by the Federal Energy Regulatory Commission in 18 CFR Part 292, Subpart B) with which Company is interconnected to a neighboring entity or neighboring distribution system, where both the owner of the qualifying cogeneration facility and the neighboring entity or neighboring distribution system to which such transmission service is provided agree that such neighboring entity or neighboring distribution system will make, during the time and to the extent of its purchases from the cogeneration facility, any sales of "backup power" and "maintenance power" (as these terms are defined in applicable Federal Energy Regulatory Commission regulations) to the qualifying cogeneration facility or small power production facility; provided however that nothing in this item (5) shall diminish

Company's obligations under Section IX hereof. Company shall provide transmission service under this paragraph only if (1) Company's and other connected transmission lines form a continuous electric path between the supplying and the recipient systems; (2) permission to utilize other systems' transmission lines can be obtained by the proponent of the arrangement; (3) the services can reasonably be accommodated from a technical standpoint without significantly jeopardizing Company's reliability or its use of transmission facilities; (4) reasonable advance request is received from the neighboring entity or neighboring distribution system seeking such services to the extent that such notice is required for operating or planning purposes, provided that Company distributes a written timetable setting forth reasonable periods of time within which such advance notice must be received for transmission services over existing company facilities; and (5) a reasonable magnitude, time and duration for the transactions is specified prior to the commencement of the transmission.

- (b) Company's provisions of transmission service under this section shall be on the basis which compensates for its costs of transmission reasonably allocable to the service in accordance with a transmission agreement, transmission tariff or on another mutually agreeable basis. Company shall file such transmission agreements or transmission tariffs with the Federal Energy Regulatory Commission or its successor agency. In the event that the Company and a requesting entity are unable to agree regarding transmission services required to be provided under this section X, Company shall, upon the request of such entity, immediately file a service agreement at the Federal Energy Regulatory Commission or its successor agency providing for such service. Nothing in this license shall be construed to require Company to wheel power and energy to or from a retail customer.
- (c) Company shall keep requesting neighboring entities and neighboring distribution systems informed of its transmission planning and construction programs and shall include therein sufficient transmission capacity as required by such entities, provided that such entities provide the Company sufficient advance notice of their requirements and contract in a timely manner to reimburse the Company for costs, as allowed by the regulatory agency having jurisdiction, appropriately attributable to compliance with the request. However, Company shall not be required to construct any transmission facility (1) which will be of no demonstrable present or future electrical benefit to Company, unless the facility cannot reasonably be constructed by the requesting entity solely by reason of the Company's unreasonable refusal to grant an easement or license, or refusal to cooperate in

removing impediments to the siting of any such transmission facility, (2) which would jeopardize Company's ability to finance or construct, on reasonable terms, facilities to meet its own anticipated system requirements or to satisfy existing contractual obligations to other electric systems, or (3) which could reasonably be constructed by the requesting entity without duplicating any portion of Company's transmission system. In such cases where Company elects not to construct transmission facilities, the requesting system shall have the option of constructing and owning such facilities and interconnecting them with Company's facilities. For the purposes of section X, upgrading present transmission facilities shall be considered always to have some demonstrable present or future electrical benefit to Company.

- (d) Notwithstanding the foregoing, Company shall not decline to cooperate in transmitting power produced from any neighboring entity's (including FMPA's) or neighboring distribution system's ownership share, or the ownership share of any other Florida electric utility for which Company's transmission system is necessary to deliver such power, of the Alvin W. Vogtle Nuclear Units from a point or points of interconnection between Company and Georgia Power Company to points of connection described in (a) hereof between Company and other utilities. This condition shall not be construed to require Company to construct transmission facilities within the State of Georgia. Company shall not be precluded from requiring such neighboring entities, neighboring distribution systems and other utilities to make reasonable financial arrangements to pay for the construction of those portions of facilities to be utilized by them and which are constructed for this purpose.

XI ACCESS TO POOLING ARRANGEMENTS

Company shall sponsor the membership of any neighboring entity in any pooling arrangement to which Company is presently a party or to which, during the term of this license, Company becomes a party; provided, however, that the neighboring entity satisfies membership qualifications which are reasonable and not unduly discriminatory. To the extent that Company enters into pooling arrangements during the term of the license, it shall use its best efforts to include provisions therein which permit requesting neighboring entities the opportunity to participate in the arrangement on a basis that is reasonable and not unduly discriminatory.

XII JURISDICTION OF OTHER REGULATORY AGENCIES

Rate schedule and agreements, as required to provide for the facilities and arrangements needed to implement the bulk power supply policies herein, are to be submitted by the Company to the regulatory agency having jurisdiction thereof.

The Company agrees to include a provision in new rate schedule submissions associated with these license conditions to the effect that, if the rates become effective prior to the resolution of contested issues associated with the new rate schedules and are thereafter reduced in accordance with the regulatory proceedings and findings, appropriate refunds (including interest) would be made to retroactively reflect the decrease.

XIII IMPLEMENTATION

- (a) These license conditions do not preclude Company from seeking such changes in these conditions, including but not limited to section VIII, as may be appropriate in accordance with the then existing law or factual situation.
- (b) These conditions do not preclude Company from offering additional wholesale power, access to generating units or coordination services to other electric entities.
- (c) Nothing herein shall be construed to affect the jurisdiction of FERC or any other regulatory agency.

APPENDIX D
ANTITRUST CONDITIONS
LICENSE NO. NPF-16

I. With regard to Clay County Electric Coperative, Inc. Florida Keys Electric Cooperative, Inc., Glades Electric Cooperative, Inc., Lee County Electric Cooperative, Inc., Okefenokee Rural Electric Membership Cooperative, Inc., Peace River Electric Cooperative, Inc., and Suwannee Valley Electric Cooperative, Inc. 1/ and the municipalities of New Smyrna Beach and Homestead:

(a) Florida Power & Light Company (Company) will offer each the opportunity to purchase, at the Company's costs, a reasonable ownership share (hereafter, "Participant's Share") of the St. Lucie Plant Unit No. 2 (the facility).

The "Company's costs" will include all costs associated with development, construction and operation of the facility, determined in accordance with the Federal Power Commission's Uniform System of Accounts.

"Purchase" means payment, within a reasonable time, of participant's share of the Company's costs incurred through date of acceptance of the offer, and, thereafter, regular payments of the participant's share of all costs incurred during development, construction and operation of the facility.

(b) Participant will notify the Company of its acceptance to participate in St. Lucie Plant Unit No. 2 within a reasonable time after receipt of the offer.

(c) The Company may retain complete control and act for the other participants with respect to the design, engineering, construction, operation and maintenance of St. Lucie Plant Unit No. 2, and may make all decisions relevant thereto, insofar as they deal with the relationship between the Company and the other participants, including, but not limited to, decisions regarding adherence to the Commission's health, safety and environmental regulations, changes in construction schedule, modification or cancellation of the project, and operation at such time and at such capacity levels as it deems proper, all without the consent of any participant.

II. The Company shall facilitate the delivery of each participant's share of the output of the facility to that participant, on terms which are reasonable and will fully compensate it for the use of its facilities,

1/Two or more of the referred-to cooperatives may determine to aggregate their entitlements from the St. Lucie Plant Unit No. 2 through a single representative. In such event, the Company shall allocate the delivery of said entitlements as designated by the representative to one or more existing or mutually agreeable Florida Power & Light Company delivery points on the combined system provided that such delivery is technically feasible.

to the extent that subject arrangements reasonably can be accommodated from a functional and technical standpoint.

- III. The Company shall not refuse to operate in parallel to the extent that it is technically feasible to do so with the participants and shall provide emergency and maintenance power to participants as required when such power is or can be made available without jeopardizing power supply to the Company's customers or its other power supply commitments. A separate rate schedule(s) shall be established for such emergency and maintenance power exchanges.
- IV. At a time when the Company plans for the next nuclear generating unit to be constructed after St. Lucie Plant Unit No. 2 has reached the stage of serious planning, but before firm decisions have been made as to the size and desired completion date of the proposed nuclear unit, the Company will notify all non-affiliated utility systems with peak loads smaller than the Company's which serve either at wholesale or at retail adjacent to areas served by the Company that the Company plans to construct such nuclear facility.
- V. It is recognized that the foregoing conditions are to be implemented in a manner consistent with the provisions of the Federal Power Act and all rates, charges or practices in connection therewith are to be subject to the approval of regulatory agencies having jurisdiction over them.

Appendix E
Human Engineering Discrepancies
License No. NPF-16

- A.1.3 Key storage will be provided as well as the necessary key access control procedures for those keys used in the Control Room and Remote Shutdown Panel. The Remote Shutdown Panel SIS block keys will be maintained at RAB control access point.
- A.1.6 A re-evaluation of the glare problem will be performed after the diffusing grid has been installed. Those items then still found to have glare problems will have suitable backfits implemented.
- A.1.9 The Remote Control Transfer Panels will have a security seal for security purposes. Operations of any control transfer switch is annunciated in the control room.
- A.2.1 The SL-2 communications system is currently under design. The system will be reviewed in accordance with the communications section of NUREG-0700.
- A.3.3 Multiple input annunciator windows will undergo assessment as to reflash capability. Any that do not "reflash" and require the function will be provided with the "reflash" and "readable" function.
- A.3.9 Blank annunciator tiles will be extinguished.
- A.5.6 Glare and potential face plate scratching will be addressed through display shielding to reduce incident light to the display surface and protect face plates.
- A.5.12 A lighting color convention will be established.
- A.5.18 This item will be addressed as part of the ongoing labeling and demarcation program.
- A.5.23 The boron concentration recorder will use lined unscaled paper. Recorder Panel 201 will have proper scales. Recorder Panel 202 will have proper scales.
- A.6.1 All labels will be reviewed as part of the labeling study. Those missing labels will be installed and those incorrect labels will be corrected.

APPENDIX F

CONTROL BOARD 206 EQUIPMENT REWORK

A. Displays to be relocated (Total 12)

1. Safety Injection Tanks

a.	LIA-3311	Label 103	Loop 2A2
b.	LIA-3312	Label 102	Loop 2A2
c.	PIA-3311	Label 101	Loop 2A2
d.	PIA-3319	Label 100	Loop 2A2
e.	LIA-3321	Label 97	Loop 2A1
f.	LIA-3322	Label 96	Loop 2A1
g.	PIA-3321	Label 95	Loop 2A1
h.	PIA-3329	Label 94	Loop 2A1

2. LPSI

a.	F1-3312	Label 67	Loop 2A2
b.	F1-3312	Label 57	Loop 2A1

3. HPSI

a.	F1-3311	Label 66	Loop 2A2
b.	F1-3321	Label 56	Loop 2A1

B. Hand controllers to be relocated (Total 2)

1. Safety Injection Tanks

a.	HIC-3618	Label 98	Loop 2A2
b.	HIC-3628	Label 93	Loop 2A1

C. Hand switches to be relocated (Total 10)

1. Safety Injection Tanks

a.	HS-242-1	Label 192	Loop 2A2
b.	HS-3612	Label 225	Loop 2A2
c.	HS-3733	Label 258	Loop 2A2
d.	HS-3614	Label 291	Loop 2A2
e.	HS-242-2	Label 189	Loop 2A2
f.	HS-3622	Label 222	Loop 2A2
g.	HS-3735	Label 255	Loop 2A2
h.	HS-3624	Label 288	Loop 2A2

2. LPSI

a.	HS-3615	Label 293	2A2	Loop 2A2
b.	HS-3625	Label 292	2A2	Loop 2A1

- D. Indicating lights to be relocated (Total 16)
 - 1. Safety injection tanks - 12 lamps for associated hand switches in C.1 above.
 - 2. LPSI - 4 lamps for associated hand switches in C.2 above.
- E. New wires to be pulled (Total 55)
- F. Wires to be reused i.e. repulled and cut at new location (Total 55)
- G. Wire marker changes (Total 349)

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-389

ST. LUCIE PLANT, UNIT 2

FLORIDA POWER & LIGHT COMPANY, ET AL

NOTICE OF ISSUANCE OF FACILITY OPERATING LICENSE

Notice is hereby given that the U. S. Nuclear Regulatory Commission (the Commission), has issued Facility Operating License No. NPF-16, (License) to Florida Power & Light Company, Orlando Utilities Commission of the City of Orlando and Florida Municipal Power Agency (licensees). This License authorizes operation of the St. Lucie Plant, Unit 2 (facility) at reactor core power levels not in excess of 2560 megawatts thermal in accordance with the provisions of the License, the Technical Specifications and the Environmental Protection Plan. However, the License contains a condition currently limiting operation to five percent of full power (128 megawatts thermal). Authorization to operate at greater than five percent power will require specific Commission approval.

St. Lucie Plant, Unit 2 is a pressurized water reactor located at the licensees' site on Hutchinson Island in St. Lucie County, Florida approximately 34 miles north-northeast of the city of West Palm Beach. The License is effective as of the date of issuance and shall expire at midnight on April 6, 2023.

The application for the license complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations. The Commission has made appropriate findings as required by the

Act and the Commission's regulations in 10 CFR Chapter I, which are set forth

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In the License. Prior public notice of the overall action involving the proposed issuance of an operating license was published in the FEDERAL REGISTER on March 9, 1981 (46 F. R. 15831).

The Commission has determined that the issuance of this license will not result in any environmental impacts other than those evaluated in the Final Environmental Statement since the activity authorized by the license is encompassed by the overall action evaluated in the Final Environmental Statement.

For further details with respect to this action, see (1) Facility Operating License No. NPF-16, with Technical Specifications (NUREG-0949) and Environmental Protection Plan; (2) the report of the Advisory Committee on Reactor Safeguards dated November 17, 1981; (3) the Commission's Safety Evaluation Report dated October 1981; Supplement No. 1 dated December 1981; Supplement No. 2 dated September 1982; Supplement No. 3 dated April 1983; (4) the Final Safety Analysis Report and amendments thereto; (5) the Environmental Report and supplements thereto; (6) the Draft Environmental Statement dated October 1981; (7) the Final Environmental Statement dated April 1982; and (8) the assessment of the effect of license duration on matters discussed in the Final Environmental Statement for St. Lucie Plant, Unit 2.

These documents are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C., and the Indian River Community College Library, 3209 Virginia Avenue, Ft. Pierce, Florida

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33450. A copy of Facility Operating License No. NPF-16 may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Licensing. Copies of the Safety Evaluation Report and its Supplements 1 through 3 (NUREG-0843) and the Final Environmental Statement (NUREG-0842) may be purchased at current rates from the National Technical Information Service, Department of Commerce, 5285 Port Royal Road, Springfield, Virginia 22161, and through the NRC GPO sales program by writing the U. S. Nuclear Regulatory Commission, Attention: Sales Manager, Washington, D. C. 20555. GPO desposit account holders can call 301-492-9530.

Dated at Bethesda, Maryland, the 6th day of April, 1983.

FOR THE NUCLEAR REGULATORY COMMISSION

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George W. Knighton, Chief
Licensing Branch No. 3
Division of Licensing

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DATE	3/21/83	3/22/83	3/ /83	3/30/83			



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

Docket No. 50-335


AMENDMENT TO INDEMNITY AGREEMENT NO. B-76
AMENDMENT NO 8

Effective October 14, 1982, Indemnity Agreement No. B-76, between Florida Power & Light Company and the Atomic Energy Commission, dated February 11, 1975, as amended, is hereby further amended as follows:

Wherever the name "Florida Power & Light Company" appears in the indemnity agreement, the following named licensee is added:

"Orlando Utilities Commission of the City of Orlando, Florida."

FOR THE UNITED STATES NUCLEAR REGULATORY COMMISSION


Jerome Saltzman, Assistant Director
State and Licensee Relations
Office of State Programs

Accepted _____, 1983 Accepted _____, 1983

By _____
FLORIDA POWER & LIGHT COMPANY

By _____
ORLANDO UTILITIES COMMISSION OF
THE CITY OF ORLANDO, FLORIDA



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

Docket No. 50-335

AMENDMENT TO INDEMNITY AGREEMENT NO. B-76
AMENDMENT NO. 9

Effective February 3, 1983, Indemnity Agreement No. B-76, between Florida Power & Light Company, Orlando Utilities Commission of the City of Orlando, Florida, and the Atomic Energy Commission, dated February 11, 1975, as amended, is hereby further amended as follows:

Wherever the names "Florida Power & Light Company, and "Orlando Utilities Commission of the City of Orlando, Florida" appear in the indemnity agreement, the following named licensee is added:

"Florida Municipal Power Agency"

FOR THE UNITED STATES NUCLEAR REGULATORY COMMISSION

Warrel O. Mark for

Jerome Saltzman, Assistant Director
State and Licensee Relations
Office of State Programs

Accepted _____, 1983 Accepted _____, 1983

By _____
FLORIDA POWER & LIGHT COMPANY

By _____
ORLANDO UTILITIES COMMISSION OF
THE CITY OF ORLANDO, FLORIDA

Accepted _____, 1983

By _____
FLORIDA MUNICIPAL POWER AGENCY



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

Docket No. 50-335
50-389

AMENDMENT TO INDEMNITY AGREEMENT NO. B-76
AMENDMENT NO. 10

Effective APR 6 1983, Indemnity Agreement No. B-76, between Florida Power & Light Company, Orlando Utilities Commission of the City of Orlando, Florida, and Florida Municipal Power Agency, and the Atomic Energy Commission, dated February 11, 1975, as amended, is hereby further amended as follows:

Item 3 of the Attachment to the indemnity agreement is deleted in its entirety and the following substituted therefor:

Item 3 - License number or numbers

- SNM-1514 (From 12:01 a.m., February 11, 1975 to 12 midnight, February 29, 1976, inclusive)
- SNM-1902 (From 12:01 a.m., October 14, 1982 to 12 midnight, APR 5 1983 inclusive)
- DPR-67 (From 12:01 a.m., March 1, 1976)
- NPF-16 (From 12:01 a.m. APR 6 1983)

FOR THE UNITED STATES NUCLEAR REGULATORY COMMISSION

Jerome Saltzman
Jerome Saltzman, Assistant Director
State and Licensee Relations
Office of State Programs

Accepted _____, 1983

Accepted _____, 1983

By _____
FLORIDA POWER & LIGHT COMPANY

By _____
ORLANDO UTILITIES COMMISSION OF
THE CITY OF ORLANDO, FLORIDA

Accepted _____, 1983

By _____, 1983
FLORIDA MUNICIPAL POWER AGENCY

ASSESSMENT OF THE EFFECT OF LICENSE DURATION ON MATTERS DISCUSSED
IN THE FINAL ENVIRONMENTAL STATEMENT FOR THE ST. LUCIE PLANT, UNIT 2

INTRODUCTION

The Final Environmental Statement (FES) for the operation of the St. Lucie Plant, Unit 2 was published in April 1982. At that time it was staff practice to issue operating licenses for a period of 40 years from the date of the construction permit. This was approximately 30 years of operating life.

However, since the applicant has requested in their application that the operating license (OL) for their St. Lucie Plant, Unit 2 then under consideration by the staff, have a duration of 40 years from the date of OL issuance, an assessment contained herein is made for those issues affected by the 40 year duration.

DISCUSSION

The staff has reviewed the St. Lucie 2 FES to determine which aspects considered in the FES are affected by the duration of the operating license. In general, the FES assesses various impacts associated with operation of the facility in terms of annual impacts and balances these against the anticipated annual energy production benefits. Thus, the overall assessment and conclusions would not be dependent on specific operating life. There are, however, a few areas in which a specific operating life was assumed. These are as follows:

1. Radiological assessments are based on a 15-year plant midlife.
2. Probabilistic assessment of severe accidents. The evaluation and findings in the FES are applicable to 40 years of operation, therefore, no further appraisal is necessary in this area.
3. Community characteristics. The evaluation and findings in the FES are applicable to 40 years of operation; therefore, no further appraisal is necessary in this area.
4. Uranium fuel cycle impacts are based on one initial core load and 29 annual refuelings.

EVALUATION

The staff's appraisal of the significance of the use of 40 years of operation rather than 30 as it affects the two areas above (i.e. 1 and 4) is presented in the following discussions:

1. Radiological Assessments - The NRC staff calculated dose commitments to the human population residing around nuclear power reactors to assess the impact on people from radioactive material released from these reactors. The annual dose commitment is calculated to be the dose that would be received over a 50-year period following the intake of radioactivity for one year under the conditions that would exist 15 years after the plant began operation.

The 15 year period is chosen as representing the midpoint of plant operation and is incorporated into the dose models by allowing for buildup of long life radionuclides in the soil. It affects the estimated doses only for radionuclides ingested by humans that have half-lives greater than a few years. For a plant licensed for 40 years, increasing the buildup period from 15 to 20 years would increase the dose from long life radionuclides via the ingestion pathways by 10% at most. It would have much less effect on dose from shorter life radionuclides. Table E-6.6 of the FES indicates that the estimated doses via the ingestion pathways are well below the regulatory design objectives. For example, the ingestion dose to the thyroid from Unit 2 is 0.61 mrem/yr compared to an Appendix I design objective of 15 mrem/yr. Thus, an increase of even as much as 10% in these pathways would remain well below the Appendix I guidelines and would not be significant.

- 2. Uranium Fuel Cycle Impacts - The impacts of the uranium fuel cycle are based on 30 years of operation of a model LWR. The fuel requirements for the model LWR were assumed to be one initial core load and 29 annual refuelings (approximately 1/3 core). The annual fuel requirement for the model LWR averaged out over a 40-year operating life (1 initial core and 39 refuelings of approximately 1.3 core) would be reduced slightly as compared to the annual fuel requirement averaged for a 30-year operating life.

The net result would be approximately 1.5% reduction in the annual fuel requirement for the model LWR. This small reduction in fuel requirements would not lead to significant changes in the impacts of the uranium fuel cycle. The staff judges that there would not be any changes to St. Lucie 2 FES Table 5.11 (S-3) that would be necessary in order to consider 40 years of operation. If anything, the values in Table 5.11 become more conservative when a 40-year period of operation is considered.

CONCLUSION

The staff has reviewed the St. Lucie 2 FES and determined that only a few of the areas related to its NEPA analysis discussed in the statement were tied directly to a 30-year operating period. We have concluded, based on the reasons discussed in the sections above, that the impacts associated with a 40-year license duration are not significantly different from those associated with a 30-year license duration and are not significantly different from those assessed in the St. Lucie 2 FES.

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