

4. ~~Environmental Qualification of Mechanical and Electrical Equipment (Section 3.11, SSER 4)~~

~~Prior to startup following the first refueling outage but not later than March, 1985 the licensee shall environmentally qualify all electrical equipment as required by 10 CFR 50.49.~~

AMEND #2

Deleted per Amendment No. _____

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

~~Prior to startup following the first refueling outage, the licensee 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.~~

Deleted per Amendment No. _____

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 licensee shall submit a revised inservice inspection program for Class 1, 2 and 3 components for NRC approval.~~

Deleted per Amendment No. _____

7. ~~Natural Circulation Cooldown and Boron Mixing Test (Section 5.4.3, SSER 4)~~

~~Prior to completing the startup test program, the licensee 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.~~

AMEND #2

Deleted per Amendment No. _____

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

~~Prior to exceeding 5% of rated thermal power, the licensee 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 licensee 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.~~

Deleted per Amendment No. _____

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

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

Deleted per Amendment No. _____

*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)~~

Deleted per Amendment
No. _____

~~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)~~

Deleted per Amendment
No. _____

~~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)~~

Amend.

~~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)~~

Deleted per Amendment
No. _____

~~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)~~

Deleted per Amendment
No. _____

~~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)~~

Deleted per Amendment
No. _____

~~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)

*Deleted per Amendment
No. —*

~~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)

*Deleted per Amendment
No. —*

a. Emergency Response Capability (I.C.9, I.D.1, I. D.2, 7.5.4, 13.3.2.8, SSER 4)

- 1) The licensee shall implement the requirements of Generic Letter No. 82-33 on the following schedule:
 - a) Prior to startup following the first refueling outage, the Safety Parameter Display System (SPDS) shall be operable, including training of operators.
 - b) By September 30, 1983 the licensee shall submit for NRC review and approval a detailed control room design review summary report.

AMEND.
#2

- c) By November 30, 1983 the licensee shall submit for NRC review and approval a Regulatory Guide 1.97 Evaluation Report describing how Regulatory Guide 1.97 has been met and justifications for any deviations.
- d) By November 1, 1983 the licensee shall submit for NRC review and approval plant specific Emergency Operating Procedures descriptions. By July 1, 1984, the licensee shall implement the upgraded Emergency Operating Procedures including SPDS and control room upgrades.
- e) By October 1983, the permanent Emergency Operating Facility shall be operational.

- 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.

AMEND.
2

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.

Deleted per Amendment
No. _____

~~18. Reactor Trip Breakers Post-Trip Review Procedures (Section 7.2.3.1, SSER 4)~~

~~Within 60 days of issuance of this amendment, the licensee shall provide the upgraded post-trip review procedures for NRC staff review.~~

Amend
2

(19) Prior to storing extended burnup fuel in the modified spent fuel pool (greater than 38,000 Mw-days/Metric ton) the licensee must submit and obtain approval of a new analysis that addresses the potential of large gap releases for the extended burnup fuel.

Amend
7

- 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 Deleted per Amendment No. _____~~
- 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) Deleted per Amendment No. _____~~
- 7. ~~Appendix F (Control Board 206 Equipment Rework) Deleted per Amendment No. _____~~

Date of Issuance: APR 6 1983

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.

Deleted per Amendment No. _____

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.

Deleted per Amendment No. _____

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.
- 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.

Deleted per Amendment No. —

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

Deleted per Amendment No. _____

- 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)

Deleted per Amendment No. _____

STATE OF FLORIDA)
) ss.
COUNTY OF DADE)

C. O. Woody, being first duly sworn, deposes and says:

That he is Vice President Nuclear Operations of Florida Power & Light Company, the licensee herein;

That he has executed the foregoing document; that the statements made in this document are true and correct to the best of his knowledge, information, and belief, and that he is authorized to execute the document on behalf of said Licensee.

C. O. Woody
C. O. Woody

Subscribed and sworn to before me this

25 day of JANUARY, 1985.

James J. McElroy
NOTARY PUBLIC, in and for the County of
Dade, State of Florida.
NOTARY PUBLIC STATE OF FLORIDA
MY COMMISSION EXP. FEB 14, 1988
BONDED THRU GENERAL INS. UND.
My commission expires: 2/14/88

2

