Docket No. 50-389

DISTRIBUTION See attached sheet

Mr. W. F. Conway Senior Vice President-Nuclear Nuclear Energy Department Florida Power and Light Company Post Office Box 14000 Juno Beach, Florida 33408-0420

Dear Mr. Conway:

SUBJECT: ST. LUCIE UNIT 2 - ISSUANCE OF AMENDMENT RE: DELETION OF LICENSE CONDITIONS (TAC NO. 56860)

The Commission has issued the enclosed Amendment No. 34 to Facility Operating License No. NPF-16 for the St. Lucie Plant, Unit No. 2. This amendment consists of changes to the Technical Specifications in partial response to your letter dated November 20, 1984 and application dated January 25, 1985.

This amendment deletes license conditions 2.C.4, 2.C.5, 2.C.6, 2.C.7, 2.C.8, 2.C.9, 2.C.12, 2.C.13, 2.C.14, 2.C.15, 2.C.16, 2.C.17, and 2.C.18. The amendment also deletes Attachment 1, Appendix E and Appendix F of the license.

The review of your request to delete Licensee Conditions (LC) 2.C.10 and 2.C.11 is continuing. Since this amendment completes most of the work associated with your request, we are closing out TAC number 56860 and are opening TAC number 69236 to address LC 2.C.10 and 2.C.11.

A copy of the Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

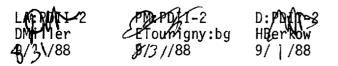
Original signed by

E. G. Tourigny, Project Manager Project Directorate II-2 Division of Reactor Projects-I/II Office of Nuclear Reactor Regulation

Enclosures: 1. Amendment No. 34 to NPF-16 2. Safety Evaluation

cc w/enclosures: See next page

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

September 13, 1988

Docket No. 50-389

Mr. W. F. Conway Senior Vice President-Nuclear Nuclear Energy Department Florida Power and Light Company Post Office Box 14000 Juno Beach, Florida 33408-0420

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This amendment deletes license conditions 2.C.4, 2.C.5, 2.C.6, 2.C.7, 2.C.8, 2.C.9, 2.C.12, 2.C.13, 2.C.14, 2.C.15, 2.C.16, 2.C.17, and 2.C.18. The amendment also deletes Attachment 1, Appendix E and Appendix F of the license.

The review of your request to delete Licensee Conditions (LC) 2.C.10 and 2.C.11 is continuing. Since this amendment completes most of the work associated with your request, we are closing out TAC number 56860 and are opening TAC number 69236 to address LC 2.C.10 and 2.C.11.

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E. G. Tourigny, Project Manager Project Directorate II-2 Division of Reactor Projects-I/II Office of Nuclear Reactor Regulation

Enclosures:

- 1. Amendment No. 34 to NPF-16
- 2. Safety Evaluation

cc w/enclosures: See next page Mr. W. F. Conway Florida Power & Light Company

cc: Mr. Jack Shreve Office of the Public Counsel Room 4, Holland Building Tallahassee, Florida 32304

Resident Inspector c/o U.S. NRC 7585 S. Hwy A1A Jensen Beach, Florida 34957

State Planning & Development Clearinghouse Office of Planning & Budget Executive Office of the Governor The Capitol Building Tallahassee, Florida 32301

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

Mr. Weldon B. Lewis, County Administrator St. Lucie County 2300 Virginia Avenue, Room 104 Fort Pierce, Florida 33450

Mr. Charles B. Brinkman, Manager Washington - Nuclear Operations Combustion Engineering, Inc. 7910 Woodmont Avenue Bethesda, Maryland 20814 St. Lucie Plant

Jacob Daniel Nash Office of Radiation Control Department of Health and Rehabilitative Services 1317 Winewood Blvd. Tallahassee, Florida 32399-0700

Regional Administrator, Region II U.S. Nuclear Regulatory Commission 101 Marietta Street N.W., Suite 2900 Atlanta, Georgia 30323 AMENDMENT NO. 34 TO FACILITY OPERATING LICENSE NO. NPF-16 - ST. LUCIE, UNIT 2

Docket File NRC & Local PDRs PDII-2 Reading S. Varga, 14/Ĕ/4 G. Lainas, 14/H/3 H. Berkow D. Miller E. Tourigny OGC-WF D. Hagan, 3302 MNBB E. Jordan, 3302 MNBB B. Grimes, 9/A/2 T. Barnhart(4), P1-137 Wanda Jones, P-130A E. Butcher, 11/F/23 B. Desai, R-II ACRS (10) ACRS (10) GPA/PA ARM/LFMB PD Plant-specific file [Gray File] B. Wilson, R-II cc: Plant Service list

OFOI



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

FLORIDA POWER & LIGHT COMPANY

ORLANDO UTILITIES COMMISSION OF

THE CITY OF ORLANDO, FLORIDA

<u>AND</u>

FLORIDA MUNICIPAL POWER AGENCY

DOCKET NO. 50-389

ST. LUCIE PLANT UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 34 License No. NPF-16

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Florida Power & Light Company, et al. (the licensee), dated January 25, 1985, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment 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;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

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- Accordingly, Facility Operating License No. NPF-16 is amended by deleting (1) paragraphs 2.C.4, 2.C.5, 2.C.6, 2.C.7, 2.C.8, 2.C.9, 2.C.12, 2.C.13, 2.C.14, 2.C.15, 2.C.16, 2.C.17, 2.C.18, (2) Attachment 1, (3) Appendix E, and (4) Appendix F.
- 3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Herbert N. Berkow, Director Project Directorate II-2 Division of Reactor Projects-I/II Office of Nuclear Reactor Regulation

Date of Issuance: September 13, 1988



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 34

TO FACILITY OPERATING LICENSE NO. NPF-16

FLORIDA POWER & LIGHT COMPANY, ET AL.

ST. LUCIE PLANT, UNIT NO. 2

DOCKET NO. 50-389

1.0 INTRODUCTION

By letter dated November 20, 1984 and application dated January 25, 1985, the Florida Power and Light Company (the licensee, FP&L) requested that certain license conditions be deleted from the St. Lucie Plant, Unit No. 2 Operating License No. NPF-16. The following is the staff evaluation of the licensee's request except for License Conditions 2.C.10 and 2.C.11. The staff's review of these two remaining license conditions is continuing and will be the subject of a separate Safety Evaluation to be issued at a later date.

2.0 EVALUATION

2.1 License Condition 2.C.4 Environmental Qualification of Mechanical and Electrical Equipment (Section 3.11, Supplemental Safety Evaluation Report [SSER] 4)

License Condition 2.C.4 was modified in Amendment No. 2 to the St. Lucie Unit 2 Facility Operating License NPF-16 and it requires the licensee, prior to startup following the first refueling outage but not later than March 1985, to environmentally qualify all electrical equipment as required by 10 CFR 50.49.

FPL submitted their Environmental Qualification (EQ) program for St. Lucie Unit 2 to the staff in a letter dated March 18, 1983. The staff provided results of the review of FPL's EQ program in Section 3.11.5 of SSER 3, dated April 1983. In letters dated May 26 and 31, 1983, FPL responded to outstanding items concerning compliance with 10 CFR 50.49. In SSER 4, Section 3.11, dated June 1983, the staff concluded that all outstanding items of Supplement 3 had been resolved and the licensee had demonstrated compliance with 10 CFR 50.49. Based on the evaluations identified in Supplement 4, Amendment No. 2 to Facility Operating License NPF-16 required all electrical equipment within the scope of 10 CFR 50.49 to be environmentally qualified prior to startup following the first refueling outage. The licensee stated in a letter dated November 20, 1984, and again in a letter dated April 2, 1985, that all 10 CFR 50.49 equipment was qualified.

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The staff verified FPL's compliance with the license condition described in Supplement 4 to the SER which required the licensee to environmentally qualify all electrical equipment within the scope of 10 CFR 50.49. The details of the staff's inspection are documented in NRC Region II inspection report No. 50-389/84-37, dated November 29, 1984. In Section 11.a of the subject inspection report, the staff verified that the licensee's EQ program addressed the SSER 4, Section 3.11, requirements and that License Condition 2.C.4 was "closed."

In addition, a followup inspection was conducted to review the licensee's implementation of 10 CFR 50.49 and is documented in NRC Region II Inspection Report No. 50-389/86-07, dated August 7, 1986. The results of this inspection determined that the licensee had implemented an EQ program which addressed the requirements of 10 CFR 50.49.

Based on the findings as documented in the above two inspection reports, the NRC staff finds that the requirements, as stipulated in License Condition 2.C.4, have been fully satisfied and the staff concludes that Facility Operating License NPF-16 should be amended to delete License Condition 2.C.4.

2.2. License Condition 2.C.5 Axial Growth (Section 4.2.3.1(g), SSER 3)

License Condition 2.C.5 of the St. Lucie Unit 2 Facility Operating License NPF-16 requires the licensee, prior to startup following the first refueling outage, to provide an analysis and/or make hardware modifications to assure that the shoulder gap clearance between fuel rods and fuel assembly and fittings is adequate.

St. Lucie Unit 2 completed Cycle 1 operation on October 13, 1984. FPL submitted their Shoulder Gap Evaluation Report to the staff on November 8, 1984. This report summarized the analytical methods and measurements performed to demonstrate that adequate shoulder gap clearance exists for all the fuel assemblies loaded into the Cycle 2 core.

The staff, in Inspection Report No. 50-389/84-37, confirmed that the licensee had completed the shoulder gap clearance measurements as required by License Condition 2.C.5.

Therefore, based upon the results of the licensee's November 8, 1984, analysis of shoulder gap clearance measurements and their verification, the staff finds that the requirements as stipulated in the license condition have been fully satisfied and concludes that the operating license should be amended to delete License Condition 2.C.5.

2.3 <u>License Condition 2.C.6</u> Inservice Inspection Program for Class 1, 2, and 3 Components (Section 5.2.4, 6.6, SER)

License Condition 2.C.6 of the St. Lucie Unit 2 Facility Operating License requires the licensee to, within six (6) months from the date of this license, submit a revised Inservice Inspection Program for Class 1, 2, and 3 components for NRC approval.

- 3 -

The licensee's proposed Inservice Inspection Program (Revision 0) for the first 10-year inspection interval was submitted to the staff on October 6, 1983. As a result of a preliminary review of the plan, the staff requested additional information in a letter from J. R. Miller (NRC) to J. W. Williams (FPL), dated September 14, 1984. The licensee provided the additional information in letters dated October 25, 1984, and November 19, 1984. By letter dated July 5, 1985, FPL submitted Revision 1 of the Inservice Inspection Program which addressed FPL's response to NRC questions identified in the September 14 letter.

The licensee's Inservice Inspection Program (Rev. 0) was submitted to the staff within six months of the date of Facility Operating License NPF-16. Therefore, the staff finds the requirements as stipulated in the license condition have been fully satisfied and concludes that the operating license should be amended to delete License Condition 2.C.6.

2.4 <u>License Condition 2.C.7</u> Natural Circulation Cooldown and Boron Mixing Test (Section 5.4.3, SSER 4)

License Condition 2.C.7 requires the licensee, prior to completing the startup test program, either to: (a) provide a report of the San Onofre Unit 2 Natural Circulation Cooldown and Boron Mixing 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 at St. Lucie 2.

Originally, License Condition 2.C.7 required that this data be provided to the staff prior to St. Lucie Unit 2 exceeding 50% of rated thermal power; however, in a letter dated June 9, 1983, the licensee stated that due to delays of the San Onofre 2 test, it appears unlikely that the test at St. Lucie 2 will be completed before St. Lucie 2 reaches 50% power. The licensee expected the San Onofre 2 test data to be applicable to St. Lucie 2; therefore, a St. Lucie 2 test was not expected to be performed. Due to this delay, the licensee requested a change to the requirement of the license condition from "prior to exceeding 50% of rated thermal power" to "prior to completing the startup test program." After NRC review, the license condition was modified as stated in Amendment No. 2 to St. Lucie Unit 2 Facility Operating License NPF-16.

A full natural circulation cooldown test was performed at San Onofre Unit 2 on July 27, 1983. FPL letter dated August 3, 1983, provided the licensee's report of the test justifying that the test data obtained at San Onofre 2 is applicable to St. Lucie 2. FPL provided additional information concerning the San Onofre 2 test in a briefing to the staff on August 12, 1983. Upon review of the information provided by the licensee justifying the applicability of the San Onofre 2 test, the staff reported in a letter to FPL Vice President \mathbf{R} . E. Uhrig, dated August 23, 1983, that License Condition 2.C.7 had been completed satisfactorily.

Based on the above, the staff finds that the requirements stipulated in License Condition 2.C.7 have been fully satisfied and the staff concludes that Facility Operating License NPF-16 should be amended to delete License Condition 2.C.7.

2.5 <u>License Condition 2.C.8</u>: Continuous Containment Purge System (Section 6.2.4, SSER 3)

License Condition 2.C.8 requires that prior to exceeding 5% of rated thermal power, the licensee will make the necessary modifications to assure the operability of the Continuous Containment Purge System in the event of a loss of coolant accident. Additionally, prior to startup following the first refueling outage, the licensee shall install testing capability of the eight-inch purge valves which would allow for testing to the Standard Technical Specifications requirements of every 92 days.

As stated in Section 6.2.4 of SSER 3, dated April 1983, the review of the as-built configuration of the eight-inch continuous containment purge (mini-purge) system revealed that certain modifications were required in order to assure the system would function as required in the event of a LOCA. In a letter dated March 24, 1983, FPL informed the staff that because of certain design constraints, the valves would not be tested during power operation. In addition, FPL committed to make the necessary design change during the first refueling outage. By letters dated May 10, 1983, and May 25, 1983, the licensee presented their analysis of the system with regard to providing testing capabilities for the eight-inch purge valves.

As stated in SSER 4, dated June 1983, NRC reviewed the licensee's method of analysis, assumptions and results, and found them to be conservative and acceptable. In addition, the staff, on October 14, 1984, (Inspection Report No. 50-389/84-37) conducted an inspection of the licensee's implementation of these modifications and verified that the eight-inch containment purge valves were provided with the appropriate testing capabilities.

Based on the above, the staff finds that the requirements as stipulated in the license condition have been fully satisfied and concludes that the Facility Operating License NPF-16 should be amended to delete License Condition 2.C.8.

2.6 License Condition 2.C.9: Barrier for High Energy Equipment (8.4.1, SSER 3)

License Condition 2.C.9 requires that 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 as justification for its acceptability.

As mentioned in Section 8.9.1 of SSER 3, dated April 1983, the staff's observation of the St. Lucie Unit 2 cable spreading area revealed that the high energy electrical equipment (transformers) was not separated by walls or barriers. The licensee was informed that this was inconsistent with the recommendations of Regulatory Guide 1.75. By a letter dated October 29, 1982, the licensee committed to install a suitable barrier around the transformer prior to startup following first refueling.

The staff on October 14, 1984, conducted an inspection (Inspection Report No. 50-389/84-37) of the licensee's compliance with License Condition 2.C.9 and verified that the licensee had installed a barrier around the appropriate transformer in the cable spreading area. Therefore, the staff finds that the requirements as stipulated in the license condition have been fully satisfied and concludes that the Facility Operating License NPF-16 should be amended to delete License Condition 2.C.9.

2.7 License Condition 2.C.12. Heavy Loads (Section 9.1.4, SSER 3)

License Condition 2.C.12 requires that prior to startup following the first refueling outage, the licensee 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 licensee shall have made commitments acceptable to the NRC regarding the guidelines of Section 5.1.2 through 5.1.6 of NUREG-0612.

This License Condition was placed in Facility Operating License NPF-16 as stated in Section 9.1.4 of SSER 3, dated April 1983. As mentioned in letter dated April 12, 1985, the NRC found the licensee's actions with regard to guidelines of NUREG-0612, Sections 5.1.1 and 5.3 to be acceptable. Later, the staff reviewed Administrative Procedure AP 0010438, Revision 8, Control of Heavy Load Lift and Transporting of Heavy Loads and found it acceptable with regard to the guidelines of Section-5.1.2 through 5.1.6 of NUREG-0612. Additionally, this AP references the following plant procedures:

| 1-M-0015 | - | Reactor Vessel Maintenance - Sequence of Operations |
|----------|---|---|
| M-0020 | - | Lifting of the Spent Fuel Gate |
| M-0021 | - | Lifting of the Pressurizer Missile Shield |
| M-0022 | - | Handling of the Spent Fuel Casks |
| M-0023 | - | Handling of the ISI Tool |
| 2-M-0036 | - | Reactor Vessel Maintenance - Sequence of Operations |

These procedures were also reviewed and found acceptable.

Based on the above findings, which are documented in Inspection Report No. 50-389/88-03, the NRC staff finds that the requirements, as stipulated in License Condition 2.C.12, have been satisfied.

2.8 <u>License Condition 2.C.13</u>: Fire Protection (Sections 9.5.1.11(a) and (b), SSER 3)

License Condition 2.C.13 requires the licensee to implement the fire protection program on a schedule specified in sections 9.5.1.11(a) and (b) of Supplement No. 3 to the Safety Evaluation Report.

Appendix R, Sections III.L.2 and 3 to 10 CFR 50 describe the performance goal requirements for the alternate shutdown capability and requires that procedures be in effect to implement this capability. Contrary to the above, Appendix R, Section III.L to 10 CFR 50 was not fully implemented by the schedule required by SSER 3. The licensee, however, did have the procedures fully implemented on September 26, 1984. The staff documented this schedular discrepancy in Inspection Report No. 50-389/85-06 dated April 22, 1985. The staff finds that the requirements as stipulated in the license condition have been fully satisfied and concludes that the Facility Operating License NPF-16 should be amended to delete License Condition 2.C.13.

2.9 <u>License Condition 2.C.14</u>: Emergency Diesel Generator Modifications (Section 9.5.4.1, SER)

License Condition 2.C.14 requires that prior to startup following the first refueling outage, the licensee shall: (a) install and have fully operational the automatic prelube pump and (b) relocate instruments and controls located on the diesel engine skid-to-floor-mounted panel.

As mentioned in Section 9.5.4.1 of the SER dated October 1981, the licensee was required to install an automatic prelube pump and relocate instruments and controls located on the diesel engine skid-to-floor mounts in the diesel generator rooms.

The staff performed a site visit on October 14, 1984, and verified the licensee's compliance with License Condition 2.C.14 (Inspection Report No. 50-389/84-37). The staff found the automatic prelube pumps installed and the instruments and controls, which were mounted on the generator skids, relocated to floor mounted instrument racks in the diesel generator mounted.

Based on the site visit, the staff finds that the requirements as stipulated in the license condition have been fully satisfied and concludes that the Facility Operating License NPF-16 should be amended to delete License Condition 2.C.14.

2.10 License Condition 2.C.15: Radioactive Waste Management (Sections 11.2, 11.5, SER, SSER 3)

License Condition 2.C.15 requires that within 14 months after core load, the licensee shall implement 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 implement the design modification to automatically isolate the Low Pressure Safety Injection pump discharge to the Refueling Water Storage Tank upon receipt of a refueling water tank high water level alarm.

In addition, prior to startup following the first refueling outage, the licensee shall install waste concentrator bottom tanks and install a second continuous oxygen analyzer.

In a letter dated October 8, 1982, the licensee noted an improvement in the schedule date for implementing the design modifications for the liquid radwaste pump interlocks to prevent the primary water storage tank overflow and addition of a control valve to prevent the Refueling Water Storage Tank overflow. In Section 11.2 of SSER 3 dated April 1983, the staff reviewed and accepted the licensee's proposal to install these items 14 months after core load.

In addition, by letters dated May 4, 1982, and October 8, 1982, the licensee provided the necessary information justifying their schedule for installing the waste concentrator bottom tanks and the second oxygen analyzer. The staff found the licensee's schedule to be acceptable.

The NRC staff inspected for compliance with the License Condition 2.C.15 on September 16, 1984 (Inspection Report No. 50-389/84-31), and October 14, 1984 (Inspection Report No. 50-389/84-37), and found that the waste concentrator bottom tank and the second oxygen analyzer tanks were installed. In addition, the staff verified that the modifications to provide automatic shutoffs for the waste management condensate and boric acid condensate pumps and the automatic isolation of the low pressure safety injection pump return to the refueling water storage tank upon high level were completed.

Based on our findings, the staff finds that the requirements as stipulated in License Condition 2.C.15 have been fully satisfied and concludes that the Facility Operating License NPF-16 should be amended to delete License Condition 2.C.15.

2.11 License Condition 2.C.16: Initial Test Program (Section 14, SER)

License Condition 2.C.16 requires that the licensee 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 FPL's letter L-83-207) without making any modifications to this program unless such modifications are in accordance with the provisions of 10 CFR 50.59.

In addition, the licensee shall not make any major modifications to this program unless such modifications have been identified and 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 FPL's letter L-83-207;
- 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 FPL'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.

- 8 -

The testing activities performed on safety-related systems at the St. Lucie Plant Unit No. 2 are divided into two major phases: properational testing, and startup testing. As mentioned in Section 14 of SER dated October 1981, the licensee made a number of changes to the initial test program because of NRC staff comments. Later, as described in SSER 3, dated April 1983, the licensee stated that certain portions of the test would be delayed. Based on the review criteria provided in NUREG-0800 (U.S. NRC Standard Review Plan Section 14.2, Initial Plant Test Program) and by comparison with the St. Lucie Unit No. 2 Technical Specifications, the staff found FPL's proposed delays acceptable. The staff also found acceptable the licensee's request to conduct the natural circulation testing and training during the precritical, hot functional testing phase of initial testing, in lieu of during the low-power phase. This is further discussed in SSER 4, dated June 1983.

In a letter dated November 30, 1983, the licensee sent the St. Lucie Unit 2 startup report as required by Technical Specification 6.9.13. The staff reviewed the startup report against the requirements of the Technical Specifications (Inspection Report No. 50-389/84-05), and other generated information and found it to be acceptable. Based on this, the staff finds that the requirements as stipulated in License Condition 2.C.16 have been fully satisfied and concludes that the facility operating License NPF-16 should be amended to remove License Condition 2.C.16.

2.12 License Condition 2.C.17a. and f. - NUREG-0737 Conditions (Section 22, SER, Section 13.3, SSER 3).

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

With regard to implementation of Generic Letter No. 82-33 requirements, License Condition 2.C.17.a.1.a requires the licensee, prior to startup following the first refueling outage, to have the Safety Parameter Display System (SPDS) operable, including training of operators.

As discussed in Section 13.3.2.8 of SSER 4, dated June 1983, the licensee stated that the SPDS would be completed at the end of the first refueling outage. The staff verified the licensee's compliance with the license condition on October 14, 1984, and confirmed that the SPDS system was operable. The staff also reviewed training records and confirmed that all licensed operators had received training on the SPDS system.

Based on the above findings, which are documented in Inspection Report No. 50-389/84-37, the NRC staff finds that the requirements as stipulated in License Condition 2.C.17.a.1.a, have been satisfied.

With regard to implementation of Generic Letter No. 82-33 requirements, License Condition 2.C.17.a.1.b requires the licensee, by September 30, 1983, to submit for NRC review and approval a detailed control room design review (DCRDR) summary report. In letter L-83-238, dated April 15, 1983, the licensee committed to submit to the NRC a Summary Report of the DCRDR September 15, 1983. The licensee submitted the DCRDR in letter L-83-504, dated September 30, 1983.

The staff finds that the requirements as stipulated in License Condition 2.C.17.a.1.b have been satisfied.

With regard to implementation of Generic Letter No. 82-33 requirements, Licensee Condition 2.C.17.a.1.c requires the licensee, by November 30, 1983, to submit for NRC review and approval a Regulatory Guide 1.97 Evaluation Report describing how Regulatory Guide 1.97 has been met and justification for any deviations.

In letter L-83-238, dated April 15, 1983, the licensee committed to submit to the NRC a report describing how Regulatory Guide 1.97, Revision 3 would be met and justification for any deviations. In letter L-83-573, dated November 30, 1983, the licensee submitted their Regulatory Guide 1.97 Evaluation Report for staff review.

The staff finds that the requirements as stipulated in License Condition 2.C.17.a.1.c have been satisfied.

With regard to implementation of Generic Letter No. 82-33 requirements, License Condition 2.C.17.a.1.d requires by November 1, 1983, the licensee to submit for NRC review and approval, plant specific Emergency Operating Procedures descriptions and by July 1, 1984, the licensee to implement the upgraded Emergency Operating Procedures including SPDS and control room upgrade.

In a letter L-83-536, dated October 26, 1983, the licensee submitted the Procedures Generation Package that was developed to convert the CE Emergency Procedure Guidelines into Emergency Operating Procedures for St. Lucie Unit 2.

The staff conducted an EOP inspection and verified that the Emergency Operating Procedures including SPDS and control room upgrade were in fact implemented and adequate.

Based on the above findings, which are documented in Inspection Report No. 50-389/88-08, the NRC staff finds that the requirements as stipulated in License Condition 2.C.17.a.1.d have been satisfied.

With regard to implementation of Generic Letter No. 82-33 requirements, License Conditions 2.C.17.a.1.e requires that the permanent Emergency Operating Facility to be operational by October 1983.

In letters L-83-238 and L-83-236 dated April 15, 1983, the licensee committed to have the Emergency Operating Facility (EOF) completed and operational by October 1, 1983. In letter L-83-578 dated December 7, 1983, the licensee stated that the EOF was completed and declared operational on September 1, 1983.

The staff finds that the requirements as stipulated in License Condition 2.C.17.a.1.e have been satisfied.

License Condition 2.C.17.a.2 requires the licensee to maintain interim emergency support facilities (Technical Support Center, Operations Support Center and the Emergency Operations Facility) until the upgraded facilities are completed.

The staff verified in Inspection Report No. 50-389/88-03 that the facilities have been in operation, and have been tested during the first Full Field Exercise and several other emergency exercises. The staff finds that the requirements as stipulated in License Condition 2.C.17.a.2 have been satisfied.

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

License Condition 2.C.17.f requires the licensee to have: 1) the final design core exit thermocouple (LET) 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 operating by initial criticality, 3) the heated junction thermocouples (HJTC) installed in the QSPDS cabinets and operable by June 1983, and 4) the final Inadequate Core Cooling System checkout and test report completed and submitted by January 15, 1984.

The staff verified, as documented in Inspection Report 50-389/88-03, that the above conditions 1, 2 and 3 exist and have been proven accurate and reliable through daily tours by the resident inspector. Additionally, in letter L-84-27, dated February 3, 1984, the licensee submitted the system checkout and test report for the Qualified Safety Parameter Display System.

The staff finds that the requirements as stipulated in License Condition . 2.C.17.f.1, 17.f.2, 17.f.3 and 17.f.4 have been satisfied.

2.13 License Condition 2.C.17.b Control Room Design Review (I.D.1, Appendix E, Also Part A7 Appendix C, SSER 1, SSER 3, SSER 4)

License Condition 2.C.17.b requires the licensee to complete, prior to exceeding five (5) percent of rated thermal power, correction of the human engineering discrepancies as noted in Appendix E of the license. Also the licensee is required, prior to startup following the first refueling outage, to rearrange the instruments described in Appendix F to the operating license.

Appendix E of Facility Operating License NPF-16 listed eleven human engineering discrepancy items that needed to be completed prior to exceeding five (5) percent of rated thermal power. The staff conducted two site visits and reviewed the licensee's progress in this area and then discussed each item with the Regional management and NRR-Human Factors Engineering Branch. The staff performed a site visit on April 11, 1983 (Inspection Report No. 50-389/83-47), and found all eleven license conditions satisfied. With regard to the condition that required the licensee to rearrange the instruments described in Appendix F, the staff performed a site visit on November 29, 1984 (Inspection Report No. 50-389/84-37). The staff verified that the instruments had been relocated and that the associated instrument systems had been calibrated and verified to be operational. This was accomplished by visually confirming control board locations and by review of the associated PC/Ms that verified calibration and test.

Based on the site visits, the staff finds that the requirements as stipulated in the license condition have been fully satisfied and concludes that Facility Operating License NPF-16 should be amended to delete License Condition 2.C.17.b.

2.14 License Condition 2.C.17.c Reactor Coolant System Vents (II.B.1, SSER 2)

License Condition 2.C.17.c requires the licensee to have the reactor coolant system vents installed and operational prior to exceeding five (5) percent of rated thermal power.

In letter L-83-348, dated June 6, 1983, the licensee informed the staff that the reactor coolant system vents were installed and are fully operational. The staff conducted an inspection on May 21, 1983, (Inspection Report No. 50-389/83-47) and verified that the reactor coolant system vents were installed, tested and fully operational.

Based on this site visit, the staff concludes that the requirements as stipulated in the license condition have been fully satisfied and concludes that the Facility Operating License NPF-16 should be amended to remove License Condition 2.C.17.c.

2.15 License Condition 2.C.17.d Post Accident Sampling System (II.B.3, SSER 3)

License Condition 2.C.17.d requires the licensee to submit for NRC approval, prior to startup following the first refueling outage, 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. Also, the licensee is required, prior to exceeding initial criticality, to have installed and operational the Post Accident Sampling System.

The staff conducted a site visit on February 6, 1984 (Inspection Report No. 50-389/84-07), to verify the licensee's compliance with License Condition 2.C.17.d. This visit included an examination of as-built design, operating procedures, training, instrumentation calibration, and the capability to obtain a containment atmosphere and reactor coolant sample. The staff concluded that the requirements of License Condition 2.C.17.d have been met and were acceptable. The staff also confirmed that on November 9, 1984, the licensee had submitted, for approval, a revised core damage assessment procedure.

Based on the licensee's actions, the staff concludes that the requirements as stipulated in the license condition have been fully satisfied and concludes that the Facility Operating License NPF-16 should be amended to deleted License Condition 2.C.17.d. 2.16 License Condition 2.C.17.e In-Containment High Range Radiation Monitors (II.F.1 (2c) SSER 3)

License Condition 2.C.17.e requires that the licensee, prior to exceeding five (5) percent of rated thermal power, have the in-containment high range radiation monitors installed and operational.

The staff conducted a site visit on March 16, 1983, (Inspection Report No. 50-389/83-25) to verify the licensee's compliance with License Condition 2.C.17.e. The staff verified that two high range $(10-10^8 \text{ R/mr})$ monitors were installed inside containment, calibrated and operational.

Therefore the staff concludes that the requirements as stipulated in the license condition have been fully satisfied and concludes that the Facility Operating License NPF-16 should be amended to delete License Condition 2.C.17.e.

2.17 <u>License Condition 2.C.18</u> Reactor Trip Breakers Post Trip Review Procedures (Section 7.2.3.1, SSER 4)

License Condition 2.C.18 requires the licensee to provide, within 60 days of issuance of Amendment No. 2 dated June 10, 1983, the upgraded post-trip review procedures for NRC staff review.

In letter L-83-444, dated August 11, 1983, the licensee submitted to the staff the Post Reactor Trip Review Procedure, which meets the intent of Generic Letter 83-28.

Therefore, the staff concludes that the requirements stipulated in the license condition have been satisfied and concludes that the Facility Operating License NPF-16 should be amended to remove License Condition 2.C.18.

2.18 Attachment 1, Appendix E and Appendix F

The staff reviewed (1) the requirements contained in the Attachment 1 Items To Be Completed Prior to Initial Criticality and Prior to Exceeding 5% Rated Power, (2) Appendix E (Human Engineering Discrepancies), and (3) Appendix F (Control Board 206 Equipment Rework) of the Unit 2 license. The staff concludes that all Attachment 1 items have been satisfied, the Human Engineering Discrepancies of Appendix E have been corrected, and the Control Board Rework described in Appendix F have been accomplished.

3.0 SUMMARY

In response to Florida Power and Light Company's letter dated November 20, 1984, and application dated January 25, 1985, requesting deletion of certain license conditions to St. Lucie Unit 2 Operating License No. NPF-16, the staff performed Safety Evaluations as presented above in Section 2.0. Based on these evaluations, the license conditions described above may be deleted.

4.0 ENVIRONMENTAL CONSIDERATION

This amendment relates to changes in recordkeeping, reporting or administrative procedures or requirements. The Commission has previously published a proposed finding that the amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR S1.22(c)(10). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

5.0 CONCLUSION

We have concluded, based on the considerations discussed above, that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

6.0 REFERENCES

- Inspection Report No. 50-389/88-03 for inspections conducted at St. Lucie on February 7 - March 5, 1988.
- Inspection Report No. 50-389/84-37 for inspections conducted at St. Lucie on October 14 - November 17, 1984.
- 3. Letter, Robert E. Uhrig, FPL, to D. G. Eisenhut, NRC, dated September 10, 1983, transmitting the Detailed Control Room Design Review (DCRDR).
- 4. Letter, J. W. Williams, Jr., FPL, to D. G. Eisenhut, NRC, dated November 30, 1983, transmitting the Regulatory Guide 1.97 Rev. 3 Evaluation Report.
- 5. Inspection Report No. 50-389/88-08 for Headquarters-based inspection conducted at St. Lucie.
- 6. Letter, J. W. Williams, Jr., FPL, to D. G. Eisenhut, NRC, dated December 7, 1983, declaring Emergency Operation Facility completed and operational.
- Letter, J. W. Williams, Jr., FPL, to D. G. Eisenhut, NRC, dated February 3, 1984 transmitting status of License Condition 2.C.17.f.4.
- Letter, R. E. Uhrig, FPL, to D. G. Eisenhut, NRC, dated October 6, 1983, transmitting Revision 0 of Inservice Inspection Program for Class 1, 2, and 3 components. (NRC DCS No. 8310130153)

- 9. Letter, R. E. Uhrig, FPL, to D. G. Eisenhut, NRC, dated August 3, 1983, transmitting the justification for using San Onofre 2's test data. (NRC DCS No. 08090458)
- 10. Letter, R. E. Uhrig, FPL, to D. G. Eisenhut, NRC, dated August 11, 1983, transmitting Plant Operating Procedure No. 0030119. data. (NRC DCS No. 8308160254)
- 11. Inspection Report Nos. 50-335/84-04 and 50-389/84-05 for inspection conducted at St. Lucie, Units 1 and 2 on February 1-3, 1984.
- 12. Inspection Report Nos. 50-335/85-06 and 50-389/85-06 for inspection conducted at St. Lucie, Units 1 and 2 on February 25-March 1, 1985.
- 13. Inspection Report Nos. 50-335/86-08 and 50-389/86-07 for inspection conducted at St. Lucie, Units 1 and 2 on March 31-April 4, 1986.
- 14. Inspection Report Nos. 50-335/84-31 and 50-389/84-37 for inspection conducted at St. Lucie, Units 1 and 2 on October 14-November 17, 1984.
- 15. Inspection Report Nos. 50-335/83-10 and 50-389/83-25 for inspection conducted at St. Lucie, Units 1 and 2 on March 16-18, 1983.
- 16. Inspection Report Nos. 50-335/83-23 and 50-389/83-47 for inspection conducted at St. Lucie, Units 1 and 2 on May 21-June 10, 1983.
- 17. Inspection Report Nos. 50-335/84-39 and 50-389/84-31 for inspection conducted at St. Lucie, Units 1 and 2 on September 16-October 13, 1984.
- 18. Inspection Report Nos. 50-335/84-05 and 50-389/84-07 for inspection conducted at St. Lucie, Units 1 and 2 on February 6-10, 1984.

Date: September 13, 1988

Principal Contributor:

B. Desai, Region II

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