

September 15, 1987

Docket No. 50-335

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Mr. C. O. Woody
Group Vice President
Nuclear Energy
Florida Power & Light Company
P. O. Box 14000
Juno Beach, Florida 33408

Dear Mr. Woody:

SUBJECT: ISSUANCE OF AMENDMENT (TAC NO. 63194)

The Commission has issued the enclosed Amendment No. 35 to Facility Operating License No. DPR-67 for the St. Lucie Plant, Unit No. 1. This amendment consists of changes to the Technical Specifications in response to your application dated October 10, 1986, as supplemented January 9, 1987.

This amendment revised the Unit No. 1 Technical Specifications that deal with containment air locks, and makes them consistent with the Unit No. 2 Technical Specifications. The associated exemption to 10 CFR 50, Appendix J was sent to you by letter dated August 19, 1987.

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

Sincerely,

/s/

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

Enclosures:

1. Amendment No. 85 to DPR-67
2. Safety Evaluation

cc w/enclosures:

See next page

*PREVIOUS CONCURRENCE

LA:PD22*	PM:PD22*	SPLB*	OGC*	D:PD22
DMiller	EGTourigny:mv	JCraig		H Berkow
8/31/87	9/1/87	9/3/87	9/9/87	9/15/87

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E. G. Tourigny, Project Manager
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8/1/87

JWC
SPLB
JCraig
8/13/87

OGC
MYoung
8/19/87

D:PD22
HBerkow
8/1/87

Mr. C. O. Woody
Florida Power & Light Company

St. Lucie Plant

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

Harold F. Reis, Esq.
Newman & Holtzinger
1615 L Street, N.W.
Washington, DC 20036

Norman A. Coll, Esq.
McCarthy, Steel, Hector and Davis
14th Floor, First National Bank Building
Miami, Florida 33131

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

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
Executive Director for Operations
101 Marietta Street N.W., Suite 2900
Atlanta, Georgia 30323



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

FLORIDA POWER & LIGHT COMPANY

DOCKET NO. 50-335

ST. LUCIE PLANT UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 85
License No. DPR-67

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Florida Power & Light Company, (the licensee) dated October 10, 1986, as supplemented January 9, 1987, 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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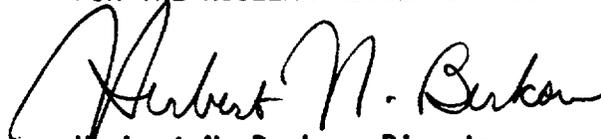
2. Accordingly, Facility Operating License No. DPR-67 is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and by amending paragraph 2.C.(2) to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 85, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

Attachment:
Changes to the Technical
Specifications

Date of Issuance: September 15, 1987

ATTACHMENT TO LICENSE AMENDMENT NO. 85
TO FACILITY OPERATING LICENSE NO. DPR-67
DOCKET NO. 50-335

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised pages are identified by amendment number and contain vertical lines indicating the area of change. The corresponding overleaf pages are also provided to maintain document completeness.

<u>Remove Pages</u>	<u>Insert Pages</u>
3/4 6-10	3/4 6-10
3/4 6-11	3/4 6-11
B 3/4 6-1	B 3/4 6-1

ST. LUCIE - UNIT 1

3/4 6-9

Amendment No. 64

TABLE 3.6-1 (Continued)

<u>Penetration</u>	<u>System</u>	<u>Valve Tag Number</u>	<u>Location to Containment</u>	<u>Service</u>	<u>Test Type*</u>
4	Feedwater Steel Containment Nozzles	Tap 1 Tap 2	Outside Outside	Expansion Bellows	Type B
25	Fuel Tube Steel Containment Nozzles	Tap 1	Inside	Expansion Bellows	Type B

* Type C and bypass tests are conducted in the same manner, the only difference is in the acceptance criteria that is applicable.
** In accordance with Specification 4.6.1.3.b.

CONTAINMENT SYSTEMS

CONTAINMENT AIR LOCKS

LIMITING CONDITION FOR OPERATION

3.6.1.3 Each containment air lock shall be OPERABLE with:

- a. Both doors closed except when the air lock is being used for normal transit entry and exit through the containment, then at least one air lock door shall be closed, and
- b. An overall air lock leakage rate of less than or equal to $0.05 L_a$ at P_a , 39.6 psig.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

- a. With one containment air lock door inoperable*:
 1. Maintain at least the OPERABLE air lock door closed and either restore the inoperable air lock door to OPERABLE status within 24 hours or lock the OPERABLE air lock door closed.
 2. Operation may then continue until performance of the next required overall air lock leakage test provided that the OPERABLE air lock door is verified to be closed at least once per 31 days.
 3. Otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
 4. The provisions of Specification 3.0.4 are not applicable.
- b. With the containment air lock inoperable, except as the result of an inoperable air lock door, maintain at least one air lock door closed; restore the inoperable air lock to OPERABLE status within 24 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.3 Each containment air lock shall be demonstrated OPERABLE:

- a. Within 72 hours following each closing, except when the air lock is being used for multiple entries, then at least once per 72 hours, by verifying the seal leakage is $< 0.01 L_a$ as determined by precision flow measurement when the volume between the door seals is pressurized to greater than or equal to:

*If the inner air lock door is inoperable, passage through the OPERABLE outer air lock door is permitted to effect repairs to the inoperable inner air lock door. No more than one airlock door shall be open at any time.

CONTAINMENT SYSTEMS

CONTAINMENT AIR LOCKS

SURVEILLANCE REQUIREMENTS (Continued)

1. For the personnel air lock, greater than or equal to P_a , 39.6 psig for at least 15 minutes if not tested with the automatic tester.
 2. For the emergency air lock, greater than or equal to 10.0 psig for at least 15 minutes.
- b. By conducting overall air lock leakage tests at not less than P_a , 39.6 psig, and verifying the overall air lock leakage rate is within its limit:
1. At least once per 6 months,[#] and
 2. Prior to establishing CONTAINMENT INTEGRITY when maintenance has been performed on the air lock that could affect the air lock sealing capability.*
- c. At least once per 6 months by verifying that only one door in each air lock can be opened at a time.

[#]The provisions of Specification 4.0.2 are not applicable.

*This constitutes an exemption to Appendix J of 10 CFR 50.

CONTAINMENT SYSTEMS

INTERNAL PRESSURE

LIMITING CONDITION FOR OPERATION

3.6.1.4 Primary containment internal pressure shall be maintained between -0.7 and 2.4 PSIG.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With the containment internal pressure outside of the limits above, restore the internal pressure to within the limits within 1 hour or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.4 The primary containment internal pressure shall be determined to be within the limits at least once per 12 hours.

3/4.6 CONTAINMENT SYSTEMS

BASES

3/4.6.1 CONTAINMENT VESSEL

3/4.6.1.1 CONTAINMENT VESSEL INTEGRITY

CONTAINMENT VESSEL INTEGRITY ensures that the release of radioactive materials from the containment atmosphere will be restricted to those leakage paths and associated leak rates assumed in the accident analyses. This restriction, in conjunction with the leakage rate limitation, will limit the site boundary radiation doses to within the limits of 10 CFR Part 100 during accident conditions.

3/4.6.1.2 CONTAINMENT LEAKAGE

The limitations on containment leakage rates ensure that the total containment leakage volume will not exceed the value assumed in the accident analyses at the peak accident pressure, P_a (39.6 psig). As an added conservatism, the measured overall integrated leakage rate is further limited to $\leq 0.75 L_a$ or $\leq 0.75 L_t$ (as applicable) during performance of the periodic tests to account for possible degradation of the containment leakage barriers between leakage tests.

The surveillance testing for measuring leakage rates are consistent with the requirements of Appendix "J" of 10 CFR Part 50.

3/4.6.1.3 CONTAINMENT AIR LOCKS

The limitations on closure and leak rate for the containment air locks are required to meet the restrictions on CONTAINMENT INTEGRITY and containment leak rate. Surveillance testing of the air lock seals provides assurance that the overall air lock leakage will not become excessive due to seal damage during the intervals between air lock leakage tests.

CONTAINMENT SYSTEMS

BASES

3/4.6.1.4 INTERNAL PRESSURE

The limitations on containment internal pressure ensure that 1) the containment structural is prevented from exceeding its design negative pressure differential with respect to the annulus atmosphere of 0.70 psi and 2) the containment peak pressure does not exceed the design pressure of 44 psig during steam line break accident conditions.

The maximum peak pressure obtained from a steam line break accident is 41.6 psig. The limit of 2.4 psig for initial positive containment pressure will limit the total pressure to 44.0 psig which is the design pressure and is consistent with the accident analyses.

3/4.6.1.5 AIR TEMPERATURE

The limitation on containment air temperature ensures that the containment vessel temperature does not exceed the design temperature of 264°F during LOCA conditions. The containment temperature limit is consistent with the accident analyses.

3/4.6.1.6 CONTAINMENT VESSEL STRUCTURAL INTEGRITY

This limitation ensures that the structural integrity of the containment steel vessel will be maintained comparable to the original design standards for the life of the facility. Structural integrity is required to ensure that the vessel will withstand the maximum pressure of 41.6 psig in the event of a steam line break accident. A visual inspection in conjunction with Type A leakage test is sufficient to demonstrate this capability.

3/4.6.2 DEPRESSURIZATION AND COOLING SYSTEMS

3/4.6.2.1 CONTAINMENT SPRAY SYSTEM

The OPERABILITY of the containment spray system ensures that containment depressurization and cooling capability will be available in the event of a LOCA. The pressure reduction and resultant lower containment leakage rate are consistent with the assumptions used in the accident analyses.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 85

TO FACILITY OPERATING LICENSE NO. DPR-67

FLORIDA POWER & LIGHT COMPANY

ST. LUCIE PLANT, UNIT NO. 1

DOCKET NO. 50-335

INTRODUCTION

By letter dated October 10, 1986, the Florida Power & Light Company (the licensee), proposed revisions to the St. Lucie Plant Unit No. 1 technical specifications (TS) that deal with containment air locks. The proposed revisions would make the Unit No. 1 TS consistent with the Unit No. 2 TS. In the staff's preliminary review of the proposed TS, it was noted that a footnote to a proposed TS contained the phrase, "This constitutes an exemption to Appendix J of 10 CFR 50." Appendix J contains the Commission's basic requirement for containment leakage testing for water-cooled power reactors. However, the licensee's letter did not contain a request for exemption. In the staff's preliminary review of the supporting safety evaluation/no significant hazards considerations determination, it was noted that no analysis was presented on each factor used to determine whether a significant hazard consideration was involved. By letter dated November 25, 1986, the staff advised the licensee that no further action on the application would be taken until the licensee provided an exemption request and a complete no significant hazards considerations determination analysis. The licensee provided the additional information by letter dated January 9, 1987.

This safety evaluation addresses the licensee's proposed TS revisions. The staff has evaluated the request for exemption as a separate matter. The exemption was forwarded to the licensee by letter dated August 19, 1987. The staff's review of the proposed TS relies primarily on the previously approved containment air lock TS for Unit No. 2, in addition to the staff guidance contained in the Combustion Engineering (C-E) Standard Technical Specifications.

EVALUATION

TS 3/4.6.1.3 contains the basic requirements for the Unit No. 1 containment air locks. The licensee is not proposing a change to the limiting conditions for operation (LCO's) or applicability modes. These are already consistent with the Unit No. 2 TS, except for the plant-specific value of Pa. Pa is defined in Appendix J as the calculated peak containment internal pressure related to the design basis accident. The licensee is proposing changes to the LCO action statements and surveillance requirements.

The licensee proposes changing the action statement for when an air lock is inoperable (presently Action Statement a.), except as a result of an inoperable door gasket. Currently, the air lock must be returned to operable status within 24 hours, or be in at least hot standby within the next 6 hours and in cold shutdown within the following 30 hours. The licensee proposes keeping the same action statement but adding the words, ". . . maintain at least one air lock door closed." This addition is acceptable because it ensures that containment integrity is maintained during the short period of time that the air lock is inoperable. In addition, the action will be reformatted as Action Statement b., instead of Action Statement a., which is acceptable. The proposed changes also make the action statement consistent with the Unit No. 2 TS.

The licensee proposes changing the action statement for when an air lock is inoperable because of an inoperable door gasket. Currently, the operable door must be closed and sealed, and the faulty door must be repaired within seven days. If the door is not repaired within seven days, the unit must be shut down.

The licensee proposes adding a footnote that applies when one containment air lock door is inoperable. The footnote states that if the inner air lock door is inoperable, passage through the outer air lock door is permitted to effect repairs to the inoperable inner air lock door, and no more than one air lock door shall be open at any time. This is acceptable because in order to repair the inner air lock door, the licensee must traverse the outer air lock door and during the repair and/or transit period, one door would always be closed. Literally following the present specification of maintaining the remaining door of the affected air lock closed and sealed would preclude repairing the faulty door if the faulty door was the inner one.

In connection with the action statement itself, the licensee proposes the same action statement currently contained in the Unit 2 TS. This entails keeping the operable air lock door closed for up to 24 hours and restoring the inoperable door to operable status. If this cannot be accomplished, the operable air lock door must be lock closed, and operation of the unit may continue until the next required overall air lock leakage test. Provisions are incorporated to check that the operable air lock door is lock closed every 31 days. If the above statements cannot be met, then the unit must be shut down. The proposed action statement is acceptable because containment integrity will be maintained while in the action statement. This action statement will be reformatted as action statement a, which is also acceptable.

The licensee proposes changing two of the three surveillance requirements (TS 4.6.1.3.a and TS 4.6.1.3.b). TS 4.6.1.3.c, which requires a check at least once per 6 months to verify that only one door in each air lock can be opened at a time, will remain. TS 4.6.1.3.c is the same for Unit 1 and Unit 2.

In regard to the proposed change to TS 4.6.1.3.a, the same TS as Unit 2 is proposed, except for plant-specific test pressure values. Proposed TS 4.6.1.3.a is required under Appendix J, paragraph III.D.2(b)(iii). On this basis, the proposed surveillance requirement is acceptable.

In connection with proposed TS 4.6.1.2.b, part b.1 of the proposed TS is required by Appendix J, paragraph III.D.2(b)(i); part b.2 of the proposed TS is required by Appendix J, paragraph III.D.2(b)(ii). These TS are the same as the Unit 2 TS except for plant-specific test pressures. On this basis, the proposed surveillance requirement is acceptable. The footnote associated with TS 4.6.1.3.b.2 was previously evaluated in the August 19, 1987 exemption approval.

ENVIRONMENTAL CONSIDERATION

This amendment involves a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 or changes an inspection or a surveillance requirement. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. 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 51.22(c)(9). 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.

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.

Date: September 15, 1987

Principal Contributor:

E. Tourigny