DISTRIBUTION:
Docket File
NRC PDR
L PDR
ORB#4 Rdg
VStello
KRGoXXXXXXXXXXXXXX
BGrimes/TJCarter
XXXgaXX RIngram
PErickson
Attorney, OELD
OI&E (5)
BScharf (15)
JMcGough
BHarless
DEisenhut
ACRS (16)
OPA, Clare Miles
DRoss
Gray File
4 Extra Cys
TBAbernathy
JRBuchanan
WMiller, LFMB
BJones

April 14, 1978

Docket No.: 50-335

Florida Power & Light Company
ATTN: Dr. Robert E. Uhrig
Vice President, Advanced
Systems & Technology
P. O. Box 529100
Miami, Florida 33152

Gentlemen:

The Commission has issued the enclosed Amendment No. 24 to Facility Operating License No. DPR-67 for St. Lucie Plant, Unit No. 1. This amendment consists of changes to the Technical Specifications in response to your request dated April 14, 1978.

This amendment revises the technical specifications to allow the use of certain areas of the spent fuel pool for repair work on fuel assembly guide tubes.

Copies of the Safety Evaluation and the Notice of Issuance are also enclosed.

Sincerely,

Robert W. Reid, Chief
Operating Reactors Branch #4
Division of Operating Reactors

Enclosures:
1. Amendment No. 24 to DPR-67
2. Safety Evaluation
3. Notice

cc w/enclosures: See next page

McGough 4/14/78

dcmt. 1

60

OFFICE	ORB#4:DOR	ORB#4:DOR	OELD	C-ORB#4:DOR		
SURNAME	RIngram	PErickson:rm		RReid		
DATE	4/14/78	4/14/78	4/14/78	4/ /78		

NRC FORM 318 (9-76) NRCM 0240

☆ U.S. GOVERNMENT PRINTING OFFICE: 1976 — 626-624

Florida Power & Light Company

cc w/enclosures:
Robert Lowenstein, Esquire
Lowenstein, Newman, Reis & Axelrad
1025 Connecticut Avenue, N. W.
Washington, D. C. 20036

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

Indian River Junior College Library
3209 Virginia Avenue
Ft. Pierce, Florida 33450

Mr. Hamilton Oven, Jr., Administrator
Florida Department of Environmental Reg.
Power Plant Siting Section
Montgomery Building
2562 Executive Center Circle
Tallahassee, Florida 32301

Mr. Weldon B. Lewis
County Administrator
St. Lucie County
Post Office Box 700
Ft. Pierce, Florida 33450

Chief, Energy Systems Analyses
Branch (AW-459)
Office of Radiation Programs
U. S. Environmental Protection Agency
Room 645, East Tower
401 M Street, S. W.
Washington, D. C. 20460

U. S. Environmental Protection Agency
Region IV Office
ATTN: EIS COORDINATOR
345 Courtland Street, N. E.
Atlanta, Georgia 30308

cc w/enclosures & incoming dtd:
4/4 /78
Bureau of Intergovernmental
Relations
660 Apalachee Parkway
Tallahassee, Florida 32304

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. 24
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 April 4, 1978, 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.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-67 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 24, 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

Robert W. Reid, Chief
Operating Reactors Branch #4
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 14, 1978

ATTACHMENT TO LICENSE AMENDMENT NO. 24

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.

Pages
VIII
XII
3/4 9-16 (added)
B 3/4 9-3
5-6

INDEX

LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

SECTION		PAGE
3/4.7.2	STEAM GENERATOR PRESSURE/TEMPERATURE LIMITATION	3/4 7-13
3/4.7.3	COMPONENT COOLING WATER SYSTEM	3/4 7-14
3/4.7.4	INTAKE COOLING WATER SYSTEM	3/4 7-16
3/4.7.5	ULTIMATE HEAT SINK	3/4 7-18
3/4.7.6	FLOOD PROTECTION	3/4 7-19
3/4.7.7	CONTROL ROOM EMERGENCY VENTILATION SYSTEM	3/4 7-20
3/4.7.8	ECCS AREA VENTILATION SYSTEM	3/4 7-24
3/4.7.9	SEALED SOURCE CONTAMINATION	3/4 7-27
3/4.7.10	HYDRAULIC SNUBBERS	3/4 7-29
3/4.8	ELECTRICAL POWER SYSTEMS	
3/4.8.1	A.C. SOURCES	3/4 8-1
	Operating	3/4 8-1
	Shutdown	3/4 8-7
3/4.8.2	ONSITE POWER DISTRIBUTION SYSTEMS	3/4 8-8
	A.C. Distribution - Operating	3/4 8-8
	A.C. Distribution - Shutdown	3/4 8-9
	D.C. Distribution - Operating	3/4 8-10
	D.C. Distribution - Shutdown	3/4 8-13
3/4.9	REFUELING OPERATIONS	
3/4.9.1	BORON CONCENTRATION	3/4 9-1
3/4.9.2	INSTRUMENTATION	3/4 9-2
3/4.9.3	DECAY TIME	3/4 9-3
3/4.9.4	CONTAINMENT PENETRATIONS	3/4 9-4
3/4.9.5	COMMUNICATIONS	3/4 9-5
3/4.9.6	MANIPULATOR CRANE OPERABILITY	3/4 9-6
3/4.9.7	CRANE TRAVEL - SPENT FUEL STORAGE POOL BUILDING	3/4 9-7
3/4.9.8	COOLANT CIRCULATION	3/4 9-8
3/4.9.9	CONTAINMENT ISOLATION SYSTEM	3/4 9-9

INDEX

LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

SECTION		PAGE
3/4.9.10	WATER LEVEL - REACTOR VESSEL	3/4 9-10
3/4.9.11	STORAGE POOL WATER LEVEL	3/4 9-11
3/4.9.12	FUEL POOL VENTILATION SYSTEM - FUEL STORAGE	3/4 9-12
3/4.9.13	SPENT FUEL CASK CRANE	3/4 9-15
3/4.9.14	DECAY TIME - STORAGE POOL	3/4 9-16
3/4.10	SPECIAL TEST EXCEPTIONS	
3/4.10.1	SHUTDOWN MARGIN	3/4 10-1
3/4.10.2	GROUP HEIGHT, INSERTION AND POWER DISTRIBUTION LIMITS	3/4 10-2
3/4.10.3	THIS SPECIFICATION DELETED	3/4 10-3
3/4.10.4	PHYSICS TESTS	3/4 10-4
3/4.10.5	CENTER CEA MISALIGNMENT	3/4 10-5

INDEX

BASES

SECTION		PAGE
3/4.7	PLANT SYSTEMS	
3/4.7.1	TURBINE CYCLE	B 3/4 7-1
3/4.7.2	STEAM GENERATOR PRESSURE/TEMPERATURE LIMITATION	B 3/4 7-3
3/4.7.3	COMPONENT COOLING WATER SYSTEM	B 3/4 7-4
3/4.7.4	INTAKE COOLING WATER SYSTEM	B 3/4 7-4
3/4.7.5	ULTIMATE HEAT SINK	B 3/4 7-4
3/4.7.6	FLOOD PROTECTION	B 3/4 7-4
3/4.7.7	CONTROL ROOM EMERGENCY VENTILATION SYSTEM	B 3/4 7-4
3/4.7.8	ECCS AREA VENTILATION SYSTEM	B 3/4 7-5
3/4.7.9	SEALED SOURCE CONTAMINATION	B 3/4 7-5
3/4.7.10	HYDRAULIC SNUBBERS	B 3/4 7-5
3/4.8	ELECTRICAL POWER SYSTEMS	B 3/4 8-1
3/4.9	REFUELING OPERATIONS	
3/4.9.1	BORON CONCENTRATION	B 3/4 9-1
3/4.9.2	INSTRUMENTATION	B 3/4 9-1
3/4.9.3	DECAY TIME	B 3/4 9-1
3/4.9.4	CONTAINMENT PENETRATIONS	B 3/4 9-1
3/4.9.5	COMMUNICATIONS	B 3/4 9-1
3/4.9.6	MANIPULATOR CRANE OPERABILITY	B 3/4 9-2
3/4.9.7	CRANE TRAVEL - SPENT FUEL STORAGE BUILDING	B 3/4 9-2
3/4.9.8	COOLANT CIRCULATION	B 3/4 9-2

INDEX

BASES

SECTION		PAGE
3/4.9.9	CONTAINMENT ISOLATION SYSTEM	B 3/4 9-2
3/4.9.10 and 3/4.9.11	WATER LEVEL - REACTOR VESSEL AND STORAGE POOL WATER LEVEL	B 3/4 9-2
3/4.9.12	FUEL POOL VENTILATION SYSTEM - FUEL STORAGE	B 3/4 9-3
3/4.9.13	SPENT FUEL CASK CRANE	B 3/4 9-3
3/4.9.14	DECAY TIME - STORAGE POOL	B 3/4 9-3
3/4.10	SPECIAL TEST EXCEPTIONS	
3/4.10.1	SHUTDOWN MARGIN	B 3/4 10-1
3/4.10.2	GROUP HEIGHT, INSERTION AND POWER DISTRIBUTION LIMITS	B 3/4 10-1
3/4.10.3	THIS SPECIFICATION DELETED	B 3/4 10-1
3/4.10.4	PHYSICS TESTS	B 3/4 10-1
3/4.10.5	CENTER CEA MISALIGNMENT	B 3/4 10-1

REFUELING OPERATIONS

SPENT FUEL CASK CRANE

LIMITING CONDITION FOR OPERATION

3.9.13 The maximum load which may be handled by the spent fuel cask crane shall not exceed 25 tons.

APPLICABILITY: Whenever irradiated fuel assemblies are in the storage pool.

ACTION:

With the requirements of the above specification not satisfied, place load in a safe condition. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.13 The loaded weight of a spent fuel assembly cask shall be verified to not exceed 25 tons prior to attaching it to the spent fuel cask crane.

REFUELING OPERATIONS

3/4.9.14 DECAY TIME - STORAGE POOL

LIMITING CONDITION FOR OPERATION

3.9.14 The 217 fuel assemblies in the three 7X7 modules and the one 7X10 module nearest the fuel cask compartment shall have decayed for at least 1553 hours.

APPLICABILITY: Prior to movement of the spent fuel cask into the fuel cask compartment.

ACTION:

With irradiated fuel assemblies having a decay time of less than 1553 hours in the three 7X7 modules and the one 7X10 module nearest the fuel cask compartment, suspend all activities involving movement of the spent fuel cask into the fuel cask compartment. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.14 The 217 fuel assemblies in the three 7X7 modules and the one 7X10 module nearest the fuel cask compartment shall have been determined to have decayed for at least 1553 hours by verification of the date and time of discharge from the reactor prior to movement of the spent fuel cask into the fuel cask compartment.

3/4.9.12 FUEL POOL VENTILATION SYSTEM-FUEL STORAGE

The limitations on the fuel handling building ventilation system ensures that all radioactive material released from an irradiated fuel assembly will be filtered through the HEPA filters and charcoal adsorber prior to discharge to the atmosphere. The OPERABILITY of this system and the resulting iodine removal capacity are consistent with the assumptions of the accident analyses.

3/4.9.13 SPENT FUEL CASK CRANE

The maximum load which may be handled by the spent fuel cask crane is limited to a loaded single element cask which is equivalent to approximately 25 tons. This restriction is provided to ensure the structural integrity of the spent fuel pool in the event of a dropped cask accident. Structural damage caused by dropping a load in excess of a loaded single element cask could cause leakage from the spent fuel pool in excess of the maximum makeup capability.

3/4.9.14 DECAY TIME - STORAGE POOL

The minimum requirement for decay of the irradiated fuel assemblies in the three 7X7 modules and the one 7X10 module nearest the fuel cask compartment prior to movement of the spent fuel cask into the fuel cask compartment ensures that sufficient time has elapsed to allow radioactive decay of the fission products. This decay time is consistent with the assumptions used in the cask drop accident analysis.

CONTROL ELEMENT ASSEMBLIES

5.3.2 The reactor core shall contain 73 full length and 8 part length control element assemblies. The control element assemblies shall be designed and maintained in accordance with the original design provisions contained in Section 4.2.3.2 of the FSAR with allowance for normal degradation pursuant to the applicable Surveillance Requirements.

5.4 REACTOR COOLANT SYSTEM

DESIGN PRESSURE AND TEMPERATURE

5.4.1 The reactor coolant system is designed and shall be maintained:

a. In accordance with the code requirements specified in Section 5.2 of the FSAR with allowance for normal degradation pursuant to the applicable Surveillance Requirements,

b. For a pressure of 2485 psig, and

c. For a temperature of 650°F, except for the pressurizer which is 700°F.

VOLUME

5.4.2 The total water and steam volume of the reactor coolant system is 11,100 $\pm$ 180 cubic feet at a nominal T_{avg} of 567°F.

5.5 EMERGENCY CORE COOLING SYSTEMS

5.5.1 The emergency core cooling systems are designed and shall be maintained in accordance with the original design provisions contained in Section 6.3 of the FSAR with allowance for normal degradation pursuant to the applicable Surveillance Requirements.

5.6 FUEL STORAGE

CRITICALITY

5.6.1 The new fuel storage racks are designed and shall be maintained with a center-to-center distance of not less than 21 inches between fuel assemblies placed in the storage racks. The spent fuel storage racks are designed and shall be maintained with a center-to-center distance of not

CRITICALITY (Continued)

less than 12.53 inches between fuel assemblies placed in the storage racks. These spacings ensure a K_{eff} equivalent to $\leq$ 0.95 with the storage pool filled with unborated water. The K_{eff} of $\leq$ 0.95 includes the conservative assumptions as described in Section 9.1 of the FSAR. In addition, fuel in the storage pool shall have a U-235 loading of $\leq$ 41.45 grams of U-235 per axial centimeter of fuel assembly.

DRAINAGE

5.6.2 The fuel pool is designed and shall be maintained to prevent inadvertent draining of the pool below elevation 56 feet.

CAPACITY

5.6.3 The spent fuel pool is designed and shall be maintained with a storage capacity limited to no more than 728 fuel assemblies.

5.7 SEISMIC CLASSIFICATION

5.7.1 Those structures, systems and components identified as seismic Class I in Section 3.2.1 of the FSAR shall be designed and maintained to the original design provisions contained in Section 3.7 of the FSAR with allowance for normal degradation pursuant to the applicable Surveillance Requirements.

5.8 METEOROLOGICAL TOWER LOCATION

5.8.1 The meteorological tower location shall be as shown on Figure 5.1-1.

5.9 COMPONENT CYCLE OR TRANSIENT LIMITS

5.9.1 The components identified in Table 5.9-1 are designed and shall be maintained within the cyclic or transient limits of Table 5.9-1.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 24 TO FACILITY OPERATING LICENSE NO. DPR-67

FLORIDA POWER & LIGHT COMPANY

ST. LUCIE PLANT UNIT NO. 1

DOCKET NO. 50-335

Introduction and Discussion

By application dated April 4, 1978, Florida Power and Light Company (FPL) requested an amendment to the Technical Specifications for the St. Lucie Plant Unit No. 1 spent fuel pool. The amendment would permit use of the area in the pool near the fuel cask compartment for repair work on fuel assembly guide tubes. The present Technical Specifications prohibit the use of the fuel rack modules near the fuel cask compartment for spent fuel unless that fuel has decayed at least 1553 hours. This decay requirement was imposed to assure that any accidental fuel cask drop on spent fuel would not result in an unacceptable high release of radioactivity.

Evaluation

The Technical Specifications proposed by FPL will assure that cask handling in the spent fuel pool area cannot result in any damage to spent fuel with less than 1553 hours of decay. This is done by prohibiting the movement of any spent fuel cask into the fuel cask compartment if fuel with less than 1553 hours of decay is in fuel rack modules near that compartment. This amendment, therefore, does not increase the risk of fresh spent fuel being damaged by any cask handling operations or the potential for release of radioactivity. We have reorganized the location of the proposed Technical Specifications to be more consistent with our Standard Technical Specification format.

Environmental Consideration

We have determined that this amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and pursuant to 10 CFR §51.5(d)(4) that an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: April 14, 1978

7590-01

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-335

FLORIDA POWER AND LIGHT COMPANY

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 24 to Facility Operating License No. DPR-67 issued to Florida Power & Light Company (the licensee), which revised Technical Specifications for operation of St. Lucie Plant, Unit No. 1 (the facility), located in St. Lucie County, Florida. The amendment is effective as of its date of issuance.

This amendment revises the Technical Specifications to allow use of certain areas of the spent fuel pool for repair work on fuel assembly guide tubes.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement or

negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

For further details with respect to this action, see (1) the application for amendment dated April 4, 1978, (2) Amendment No. 24 to License No. DPR-67, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D. C. and at the Indian River Junior College Library, 3209 Virginia Avenue, Ft. Pierce, Florida. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Operating Reactors.

Dated at Bethesda, Maryland, this 14th day of April 1978.

FOR THE NUCLEAR REGULATORY COMMISSION

Robert W. Reid, Chief
Operating Reactors Branch #4
Division of Operating Reactors