

5/17/76

Dockets Nos. 50-250
and 50-251

Florida Power and Light Company
ATTN: Dr. Robert E. Uhrig
Vice President
P. O. Box 013100
Miami, Florida 33101

Gentlemen:

DISTRIBUTION:

Docket	TBAbernathy
NRC PDR	JRBuchanan
Local PDR	VStello
ORB Rdg	Gray File
KRGoller	Xtra Copies
TJCarter	
CParrish	
KDEliott	
OELD	
OI&E (2)	
BJones (8)	
BScharf (10)	
JMcGough	
JSaltzman	
CHebron	
AESTeen	
ACRS (16)	
CMiles	

In response to your request dated September 19, 1974 the Commission has issued the enclosed Amendments Nos. 16 and 15 to Facility Operating Licenses Nos. DPR-31 and DPR-41 for the Turkey Point Nuclear Generating Units 3 and 4.

The amendments consist of changes in the Technical Specifications regarding the requirements for certain surveillance test frequencies.

Copies of the related Safety Evaluation and the Federal Register Notice also are enclosed.

Sincerely,

George Lear, Chief
Operating Reactors Branch #3
Division of Operating Reactors

Enclosures:

1. Amendment No. 16 to License DPR-31
2. Amendment No. 15 to License DPR-41
3. Safety Evaluation
4. Federal Register Notice

cc w/encls:
See next page

SEE PREVIOUS YELLOW FOR CONCURRENCE

OFFICE >	ORB#3	ORB#3	OEDD	ORB#3		
SURNAME >	CParrish	DEliott:acr		GLear		
DATE >	5/17/76	3/17/76		3/17/76		

DISTRIBUTION:

Docket JRBuchanan
 NRC PDR VStello
 Local PDR Gray File
 ORB Rdg Xtra Copies
 KR Goller
 TJ Carter
 CParrish
 DElliott
 OELD
 OT&E (7)
 BJones (8)
 BScharf (10)
 JMC Gough
 JSaltzman
 CHEbron
 AESteen
 ACRS (16)
 CMiles
 TBAbernathy

Dockets Nos. 50-250
 and 50-251

Florida Power and Light Company
 ATTN: Dr. Robert E. Uhrig
 Vice President
 P. O. Box 013100
 Miami, Florida 33101

Gentlemen:

In response to your request dated September 19, 1974 the Commission has issued the enclosed Amendments Nos. 16 and 15 to Facility Operating Licenses Nos. DPR-31 and DPR-41 for the Turkey Point Nuclear Generating Units 3 and 4.

The amendments consists of changes in the Technical Specifications regarding the requirements for certain surveillance test frequencies. The required test frequencies were changed so that meaningless surveillance tests which have no safety related significance would be deleted.

Copies of the related Safety Evaluation and the Federal Register Notice also are enclosed.

Sincerely,

George Lear, Chief
 Operating Reactors Branch #3
 Division of Operating Reactors

Enclosures:

1. Amendment No. 16 to License DPR-31
2. Amendment No. 15 to License DPR-41
3. Safety Evaluation
4. Federal Register Notice

cc w/encs:
 See next page

OFFICE >	ORB#3	ORB#3	OELD	ORB#3		
SURNAME >	CParrish	DElliott:acr		GLear		
DATE >	3/ /76	3/ /76	3/ /76	3/ /76		

cc:

Mr. Jack R. Newman, Esquire
Lowenstein, Newman, Reis & Axelrad
1025 Connecticut Avenue, N. W.
Suite 1214
Washington, D. C. 20036

Environmental & Urban Affairs Library
Florida International University
Miami, Florida 33199

Mr. Ed Maroney
Bureau of Intergovernmental Relations
725 South Bronough Street
Tallahassee, Florida 32304

Mr. Norman A. Coll, Esquire
Steel, Hector and Davis
S. E. First National Bank Building
Miami, Florida 33131



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

FLORIDA POWER AND LIGHT COMPANY

DOCKET NO. 50-250

TURKEY POINT NUCLEAR GENERATING UNIT 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 16
License No. DPR-31

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Florida Power and Light Company (the licensee) dated September 19, 1974, 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; and
 - 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.
 - E. An environmental statement or negative declaration need not be prepared in connection with the issuance of this amendment.
2. Accordingly, the license is amended by a change to the Technical Specifications as indicated in the attachment to this license amendment.
3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in cursive script that reads "George Lear".

George Lear, Chief
Operating Reactors Branch #3
Division of Operating Reactors

Attachment:
Changes to the Technical Specifications

Date of Issuance:

ATTACHMENT TO LICENSE AMENDMENT NO. 16

TO THE TECHNICAL SPECIFICATIONS

FACILITY OPERATING LICENSE NO. DPR-31

DOCKET NO. 50-250

Replace Table 4.1-2 with the attached revised pages.

TABLE 4.1-2

MINIMUM FREQUENCIES FOR EQUIPMENT AND SAMPLING TESTS

	<u>Check</u>	<u>Frequency</u>	<u>Max. Time Between Tests (Days)</u>
1. Reactor Coolant Samples	Radiochem. ($T_{1/2} > 30$ Min)	Monthly	45
	Cl & O ₂	5/Week	3
	Tritium Activity	Weekly	10
	Gross β, γ Activity ($\mu\text{Ci/cc}$)	5/Week	3
	Boron Concentration	2/Week	5
	\bar{E} Determination	Semi-annually	30 Wks
2. Refueling Water Storage Tank Water Sample	Boron Concentration	Weekly	10
3. Boric Acid Tank	Boron Concentration	2/Week	5
4. Boron Injection Tank	Boron Concentration	Monthly	45
5. Control Rods	Rod drop times of all full length rods	For all rods at least once per 18 months and following each removal of the reactor vessel head. For specifically affected individual rods following maintenance on or modification of the control rod drive system which could affect the drop time of those specific rods.	NA
	Partial movement of full length rods	Biweekly while critical	20
6. Pressurizer Safety Valves	Set point	Each refueling shutdown	NA
7. Main Steam Safety Valves	Set point	Each refueling shutdown	NA
8. Containment Isolation Trip	Functioning	Each refueling shutdown	NA
9. Refueling System Interlocks	Functioning	Prior to each refueling shutdown	NA
10. Accumulator	Boron Concentration	At least once per 31 days and within 6 hours after each solution volume increase of $\geq 1\%$ of tank volume. Not required when accumulator is drained.	NA

TABLE 4.1-2 continued

MINIMUM FREQUENCIES FOR EQUIPMENT AND SAMPLING TESTS

11.	Reactor Coolant System Leakage	Evaluate	Daily	NA
12.	Diesel Fuel Supply	Fuel inventory	Weekly	10
13.	Spent Fuel Pit	Boron Concentration	Prior to refueling	NA
14.	Secondary Coolant	I-131 Concentration	Weekly * (Not required when reactor is in cold shutdown condition)	10
15.	Vent Gas & Particulates	I-131 & Particulate Activity	Weekly *	10
16.	Fire Protection Pump & Power Supply	Operable	Monthly	45
17.	Turbine Stop and Control Valves, Reheater Stop and Intercept Valves	Closure	Monthly (Not required during shutdown)	45
18.	LP Turbine Rotor Inspection (w/o rotor disassembly)	V, MT, PT	Every 5 Years	6 Year

* When activity exceeds 10% of spec, frequency shall be changed to Daily.



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

FLORIDA POWER AND LIGHT COMPANY

DOCKET NO. 50-251

TURKEY POINT NUCLEAR GENERATING UNIT 4

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 15
License No. DPR-41

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Florida Power and Light Company (the licensee) dated September 19, 1974, 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; and
 - 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.
 - E. An environmental statement or negative declaration need not be prepared in connection with the issuance of this amendment.
2. Accordingly, the license is amended by a change to the Technical Specifications as indicated in the attachment to this license amendment.
3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in cursive script that reads "George Lear".

George Lear, Chief
Operating Reactors Branch #3
Division of Operating Reactors

Attachment:
Changes to the Technical Specifications

Date of Issuance:

ATTACHMENT TO LICENSE AMENDMENT NO. 15

TO THE TECHNICAL SPECIFICATIONS

FACILITY OPERATING LICENSE NO. DPR-41

DOCKET NO. 50-251

Replace Table 4.1-2 with the attached revised pages.

TABLE 4.1-2

MINIMUM FREQUENCIES FOR EQUIPMENT AND SAMPLING TESTS

	<u>Check</u>	<u>Frequency</u>	<u>Max. Time Between Tests (Days)</u>
1. Reactor Coolant Samples	Radiochem. ($T_{1/2} > 30$ Min)	Monthly	45
	Cl & O ₂	5/Week	3
	Tritium Activity	Weekly	10
	Gross β, γ Activity ($\mu\text{Ci/cc}$)	5/Week	3
	Boron Concentration	2/Week	5
2. Refueling Water Storage Tank Water Sample	\bar{E} Determination	Semi-annually	30 Wks
	Boron Concentration	Weekly	10
3. Boric Acid Tank	Boron Concentration	2/Week	5
4. Boron Injection Tank	Boron Concentration	Monthly	45
5. Control Rods	Rod drop times of all full length rods	For all rods at least once per 18 months and following each removal of the reactor vessel head. For specifically affected individual rods following maintenance on or modification of the control rod drive system which could affect the drop time of those specific rods.	NA
		Partial movement of full length rods	Biweekly while critical
6. Pressurizer Safety Valves	Set point	Each refueling shutdown	NA
7. Main Steam Safety Valves	Set point	Each refueling shutdown	NA
8. Containment Isolation Trip	Functioning	Each refueling shutdown	NA
9. Refueling System Interlocks	Functioning	Prior to each refueling shutdown	NA
10. Accumulator	Boron Concentration	At least once per 31 days and within 6 hours after each solution volume increase of $> 1\%$ of tank volume. Not required when accumulator is drained.	NA

TABLE 4.1-2 continued

MINIMUM FREQUENCIES FOR EQUIPMENT AND SAMPLING TESTS

11.	Reactor Coolant System Leakage	Evaluate	Daily	NA
12.	Diesel Fuel Supply	Fuel inventory	Weekly	10
13.	Spent Fuel Pit	Boron Concentration	Prior to refueling	NA
14.	Secondary Coolant	I-131 Concentration	Weekly * (Not required when reactor is in cold shutdown condition)	10
15.	Vent Gas & Particulates	I-131 & Particulate Activity	Weekly *	10
16.	Fire Protection Pump & Power Supply	Operable	Monthly	45
17.	Turbine Stop and Control Valves, Reheater Stop and Intercept Valves	Closure	Monthly (Not required during shutdown)	45
18.	LP Turbine Rotor Inspection (w/o rotor disassembly)	V, MT, PT	Every 5 Years	6 Year

* When activity exceeds 10% of spec, frequency shall be changed to Daily.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 16 TO LICENSE NO. DPR-31, AND

AMENDMENT NO. 15 TO LICENSE NO. DPR-41

FLORIDA POWER AND LIGHT COMPANY

TURKEY POINT NUCLEAR GENERATING UNITS 3 AND 4

DOCKETS NOS. 50-250 AND 50-251

Introduction

By letter dated September 19, 1974, Florida Power and Light Company (FPL) proposed changes to the Technical Specifications of Facility Operating License DPR-31 and DPR-41 for Turkey Point Nuclear Generating Units 3 and 4. The proposed changes would modify required surveillance test frequencies for: (1) control rod drop times, (2) accumulator solution boron concentration, (3) secondary coolant I-131 concentration, (4) turbine stop and control valves, and (5) reheater stop and intercept valves. The requested changes clarify the wording of the specified test frequencies but do not modify the original intent of the specifications.

Discussion

i. Control Rod Drop Time

Control rod drop times are periodically measured to assure that the actual rod drop time is consistent with the rod drop time assumed for the accident analyses. The present Technical Specifications require that the control rod drop time be measured following each refueling and following maintenance. FPL requested that the test frequency requirement be modified to state that the tests are required following each refueling and following maintenance on control rods only.

While reviewing the requested change, the staff suggested, and the licensee concurred, that the control rod surveillance test frequency requirement should be modified to: (1) require testing of each control rod at least once per 18 months and following each removal of the reactor vessel head, and (2) require testing of specifically affected individual control rods following maintenance on or modification of the control rod drive system which could affect the drop time of that specific rod.

2. Accumulator Solution Boron Concentration

Borated water is stored in the accumulators to assure that a sufficient volume of borated water will be available for injection into the reactor core in the event the reactor pressure falls below the accumulator pressure. This initial surge of water into the core provides the initial cooling mechanism during large reactor cooling system pipe ruptures. Periodic surveillance is required of the accumulator boron concentration to assure that it corresponds to concentrations assumed in the accident analyses. FPL proposed that the monthly surveillance test requirement on accumulator solution boron concentration not be required during those periods when the accumulator is drained.

3. Secondary Coolant I-131 Concentration

Limitations on secondary system specific activity are specified in the Technical Specifications to assure that, in the event of a steam line rupture, the resultant off-site radiation dose will be limited to a small fraction of 10 CFR Part 100 limits. Periodic surveillance of the I-131 concentration in the secondary coolant is required to assure that its concentration is less than the concentration assumed in the accident analyses. FPL proposed in their submittal that the monthly measurements on secondary coolant I-131 concentration not be required during those periods when the steam generator is drained. During the review the staff recommended that the wording of the request be changed to state that the surveillance test is not required when the reactor is in the cold shutdown condition. Our suggested modification is consistent with current NRC testing requirements and with assumptions used in the accident analyses. FPL agreed with our suggested modifications to their submittal.

4. Turbine Stop and Control Valves, Reheater Stop and Intercept Valves

The turbine stop and control valves, and the reheater stop and intercept valves are incorporated into the steam and power conversion system to: (1) prevent main turbine overspeed and (2) shutoff the turbine steam source in the event of abnormal operating conditions. The turbine stop and control valves control steam flow into the high pressure portion of the main turbine and their closure shuts off the main turbine steam source. The reheater stop and intercept valves close rapidly on load rejection to shutoff reheater steam flow to the low pressure portions of the main turbine.

FPL proposed that surveillance tests on these valves not be required during the period when the reactor is in a shutdown condition.

Evaluation

1. Control Rod Drop Time

The modified Technical Specifications regarding surveillance of control rod drop times requires that the drop times be measured (1) at least once per 18 months and following each removal of the reactor vessel head for all rods, and (2) for specifically affected individual rods following maintenance or modification of the control rod drive system which could affect the drop time of those specific rods. The change does not affect the original intent of the specification which was to require measurement of the control rod drop times following maintenance operations which could affect the drop times. The staff evaluated the change and determined that it satisfies present NRC requirements and does not reduce the effectiveness of the control rod drop time surveillance tests. Therefore, the change is acceptable.

2. Accumulator Solution Boron Concentration

The modified Technical Specifications regarding accumulator boron concentration clarifies the wording of the specification so that boron concentration need not be determined during those periods when the accumulator is drained. The change does not modify the original intent of the surveillance specification which was to require periodic assurance that the accumulator solution is adequately borated during those periods when the accumulator is required to be filled with liquid. We have concluded that the proposed change does not reduce the effectiveness of the accumulator solution boron concentration surveillance test and is, therefore, acceptable.

3. Secondary Coolant I-131 Concentration

The modified Technical Specifications regarding the surveillance testing of secondary coolant I-131 concentration does not require testing during cold shutdown conditions. Since: (1) a secondary coolant steam release accident is impossible during cold shutdown condition and (2) testing is required for all plant operating conditions other than cold shutdown, the modified surveillance test requirements assure that the I-131 concentration is known for all potential accident conditions. We have concluded that the Technical Specification change does not reduce the effectiveness of the surveillance test on secondary coolant I-131 concentration or change the original intent of the specification. Therefore, the change is acceptable.

4. Turbine Stop and Control Valves, Reheater Stop and Intercept Valves

The modified Technical Specifications relating to: (1) turbine stop and control valves, and (2) reheater stop and intercept valves would eliminate the requirement that these valves be tested during periods of reactor shutdown. The purpose of the test is to demonstrate that the valves will function as required under operating conditions. Since: (1) the operability of these valves is not required during shutdown and (2) testing while the reactor is shutdown gives no indication of their capability to function properly during reactor operation, testing of these valves while the reactor is shutdown has no safety significance. Therefore, modifying the Technical Specifications so that testing is not required during reactor shutdown does not change the original intent of the specification and is acceptable.

Summary

Our evaluation supports the conclusion that the Technical Specification changes do not decrease the effectiveness of the presently specified surveillance tests regarding: (1) control rod drop times, (2) accumulator solution boron concentration, (3) secondary coolant I-131 concentration, (4) turbine stop and control valves, and (5) reheater stop and intercept valves. We further conclude that the changes do not increase the probability or consequences of accidents previously considered and do not significantly decrease a safety margin. Moreover, we have concluded that the changes have been appropriately incorporated into the Technical Specifications and are acceptable.

Environmental Consideration

We have determined that the amendment and incorporated Technical Specification changes do 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 statement, negative declaration, or 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 change 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 change 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.

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKETS NOS. 50-250 AND 50-251

FLORIDA POWER AND LIGHT COMPANY

NOTICE OF ISSUANCE OF AMENDMENTS TO FACILITY
OPERATING LICENSES

Notice is hereby given that the U. S. Nuclear Regulatory Commission (the Commission) has issued Amendments Nos. 16 and 15 to Facility Operating Licenses Nos. DPR-31 and DPR-41, respectively, issued to Florida Power and Light Company which revised Technical Specifications for operation of the Turkey Point Nuclear Generating Units 3 and 4, located in Dade County, Florida. The amendments are effective as of the date of issuance.

The amendment modifies the Technical Specification regarding the requirements for certain surveillance test frequencies. The modifications clarify the wording of the specified test frequencies but do not change the original intent of the specifications.

The application for the amendments 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 these amendments is not required since the amendments do not involve a significant hazards consideration.

The Commission has determined that the issuance of these amendments will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental statement, negative declaration or environmental impact appraisal need not be prepared in connection with

issuance of these amendments.

For further details with respect to this action, see (1) the application for amendments dated September 19, 1974, (2) Amendments Nos. 16 and 15 to Licenses Nos. DPR-31 and DPR-41 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 Environmental & Urban Affairs Library, Florida International University, Miami, Florida 33199.

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 17 day of May 1976.

FOR THE NUCLEAR REGULATORY COMMISSION



George Lear, Chief
Operating Reactors Branch #3
Division of Operating Reactors