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OCTOBER 25 1978

Docket 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:

The Commission has issued the enclosed Amendment Nos. 40 and 32 to Facility Operating License Nos. DPR-31 and DPR-41 for the Turkey Point Nuclear Generating Unit Nos. 3 and 4. The amendments consist of changes to the Technical Specifications in response to your application dated December 15, 1977.

The amendment changes the Technical Specifications to reduce the pressurizer heatup rate.

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

Sincerely,

Original signed by

A. Schwencer, Chief
 Operating Reactors Branch No. 1
 Division of Operating Reactors

Enclosures:

1. Amendment Nos. 40 and 32
 to License Nos. DPR-31
 and DPR-41
2. Safety Evaluation
3. Notice of Issuance

*Consistent
 cep*

*SEE PREVIOUS YELLOW FOR CONCURRENCE

OFFICE	DOR:ORB#1/PM	DOR:ORB#1/LA	DOR:ORB#1	OELD	DOR:ORB#1/C
SURNAME	MGrotenhuis	CParrish	DNeighbors	SGoldberg	ASchwencer
DATE	10/12/78	10/16/78	10/12/78	10/20/78	10/25/78

Docket 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

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PER MODIFICATION OF ER NOTICE IN "MARK-UP" COPY.

OFFICE	DOR:ORB#1	DOR:ORB#1/LA	DOR:ORB#1	OELD	DOR:ORB/C
SURNAME	MGrotenhuis	CParrish	DNeighbors	S. G. GLOBERG	ASchwencer
DATE	10/17/78 pag	10/16/78	10/17/78	10/20/78	10/ /78

October 25, 1978

cc: Mr. Robert Lowenstein, Esquire
Lowenstein, Newman, Reis & Axelrad
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Suite 1214
Washington, D.C. 20036

Environmental & Urban Affairs Library
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Miami, Florida 33199

Mr. Norman A. Coll, Esquire
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Florida Power & Light Company
ATTN: Mr. Henry Yaeger
Plant Manager
Turkey Point Plant
P. O. Box 013100
Miami, Florida 33101

Honorable Dewey Knight
County Manager of Metropolitan
Dade County
Miami, Florida 33130

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Relations
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Tallahassee, Florida 32304

Chief, Energy Systems
Analyses Branch (AW-459)
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U.S. Environmental Protection Agency
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Washington, D.C. 20460

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



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

FLORIDA POWER AND LIGHT COMPANY

DOCKET NO. 50-250

TURKEY POINT NUCLEAR GENERATING UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 40
License No. DPR-31

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by the Florida Power and Light Company (the licensee) dated December 15, 1977, 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 regulations, 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 3.B of Facility License No. DPR-31 is hereby amended to read as follows:

(B) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 40, 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



A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: October 25, 1978



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

FLORIDA POWER AND LIGHT COMPANY

DOCKET NO. 50-251

TURKEY POINT NUCLEAR GENERATING UNIT NO. 4

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 32
License No. DPR-41

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by the Florida Power and Light Company (the licensee) dated December 15, 1977, 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 regulations, 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.

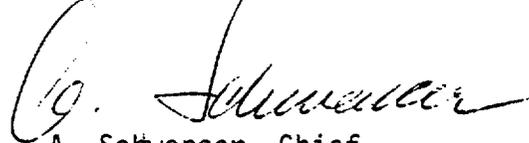
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 3.B of Facility License No. DPR-41 is hereby amended to read as follows:

(B) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 32, 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



A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: October 25, 1978

ATTACHMENT TO LICENSE AMENDMENT NO. 40
TO THE TECHNICAL SPECIFICATIONS
FACILITY OPERATING LICENSE NO. DPR-31
DOCKET NO. 50-250

Replace the following page of the Appendix "A" Technical Specifications with the enclosed page. The revised page is identified by amendment number and contains vertical lines indicating the area of change.

Remove
3.1-2

Replace
3.1-2

ATTACHMENT TO LICENSE AMENDMENT NO. 32

TO THE TECHNICAL SPECIFICATIONS

FACILITY OPERATING LICENSE NO. DPR-41

DOCKET NO. 50-251

Replace the following page of the Appendix "A" Technical Specifications with the enclosed page. The revised page is identified by amendment number and contains vertical lines indicating the area of change.

Remove
3.1-2

Replace
3.1-2

2. PRESSURE-TEMPERATURE LIMITS

The Reactor Coolant System (except for the pressurizer) pressure and temperature shall be limited during heatup, cooldown, criticality (except for low power physics tests), and inservice leak and hydrostatic testing in accordance with the limit lines shown on Figures 3.1-1a through 3.1-1b. Allowable pressure-temperature combinations are BELOW AND TO THE RIGHT of the lines on the Figures. Heatup and cooldown rate limits are:

- a. A maximum heatup rate of 100 °F in any one hour.
- b. A maximum cooldown rate of 100 °F in any one hour.
- c. A maximum temperature change of ≥ 5 °F in any one hour during hydrostatic testing operation above system design pressure.

The pressurizer pressure and temperature shall be limited in accordance with the following:

- d. The pressurizer shall be limited to a maximum heatup rate of 100 °F in any one hour, and a maximum cooldown rate of 200 °F in any one hour.
- e. The pressurizer shall be limited to a maximum Reactor Coolant System spray water temperature differential of 320 °F.

With any of the above limits exceeded, restore the temperature and/or pressure within the limits within 30 minutes; determine that the RCS or pressurizer remains acceptable for continued operations or, if at power, be in at least Hot Shutdown within the next 6 hours and Cold Shutdown within the following 30 hours.

The reactor shall not be made critical unless the moderator temperature coefficient is zero or negative. When the coefficient is greater than zero, the reactor shall be subcritical by an amount equal to or greater than the potential reactivity insertion due to depressurization. These moderator temperature coefficient conditions do not apply to low power physics tests.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NOS. 40 AND 32 TO LICENSE NOS. DPR-31 AND DPR-41

FLORIDA POWER AND LIGHT COMPANY

TURKEY POINT NUCLEAR GENERATING UNITS NOS. 3 AND 4

DOCKET NOS. 50-250 AND 50-251

Introduction

By letter dated December 15, 1977, Florida Power and Light Company (the licensee) requested amendment of the Technical Specifications appended to Facility Operating License Nos. DPR-31 and DPR-41 for the Turkey Point Plant Unit Nos. 3 and 4. The amendment reduces the maximum pressurizer heatup rate from 200°F per hour to 100°F per hour.

Background

In August 1977, Mitsubishi Heavy Industries, Ltd. of Japan noted an inconsistency in the pressurizer heatup rate stated in their Technical Specifications. Specification 3.4.9 required a heatup rate of 200°F/hr; Specification 5.7.1, however, required a heatup rate of 100°F/hr. This discrepancy was reported to the Westinghouse Electric Corporation (Westinghouse), who then reviewed their analysis of the pressurizer heatup rate and determined that the correct heatup rate is 100°F/hr, and that the correct cooldown rate is 200°F/hr; the Technical Specifications for Turkey Point stated that pressurizer heatup and cooldown rates were 200°F/hr. Westinghouse then notified the Nuclear Regulatory Commission (the Commission) and the licensee of this problem. The licensee reported the error as Reportable Occurrences 50-250/77-7 and 50-251/77-7. The requested amendment would correct the error in the pressurizer heatup rate limit.

Evaluation

In designing the pressurizer, Westinghouse performed a thermal stress analysis which analyzed the fatigue resulting from a heatup rate of 100°F/hr and a cooldown rate of 200°F/hr. This analysis meets the standards of the ASME Code, Section III, which requires that the analysis be based on a usage factor. The usage factor represent the fraction of the fatigue life (the total amount amount of stress that a particular component is designed to handle), with a usage factor of zero implying that no stress has been exerted on the component, and a usage factor of one implying that the stress exerted on the complying that the stress exerted on the component is equal to the amount of stress

that the component is designed to handle. For any piece of equipment, certain components receive more stress than others. For the pressurizer, this component is the surge nozzle, which has a usage factor of 0.9 for the design numbers listed above. This usage factor is such that if the heatup and cooldown rates used in the analysis were exceeded more than a few times, the actual usage factor for the surge nozzle would exceed 1.0, which is not allowable under the ASME Code. Thus, we conclude that reducing the heatup rate limit from 200°F/hr to 100°F/hr is necessary to maintain thermal stresses in the pressurizer to allowable levels. For the same reasons, we further conclude that the cooldown rate limit presently listed in the Technical Specifications is adequate.

Because the current Technical Specification provision authorized higher rates of pressurizer heatup than the correct limit, the question arose as to whether the correct limit of 100°F per hour has been exceeded in the past. Discussions with Westinghouse indicate that this is unlikely. This is because system capabilities and Technical Specification limits on the rate of reactor coolant system heatup and pressurization effectively preclude pressurizer heatup rates in excess of 50°F to 75°F per hour. Furthermore, the licensee reviewed the pressurizer and heater designs for Turkey Point after being informed of this potential problem and found that they are sized for a 55°F per hour heatup rate and therefore concluded that the heatup rate never exceeded 100°F per hour. Accordingly, we conclude that the only action required by the licensee is modification of the Technical Specifications to reduce the limiting pressurizer heatup rate of 200°F per hour to 100°F per hour.

It is our understanding that Westinghouse is performing a review of the stress analyses for components of the reactor coolant pressure boundary to assure that no similar inadvertent error appears in any other portion of the applicable Technical Specifications. This action will be confirmed by Westinghouse.

Environmental Consideration

We have determined that the amendments 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 concluded that the amendments involve 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 these amendments.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendments do not involve a significant increase in the probability or consequences of accidents previously considered and do not involve a significant decrease in a safety margin, the amendments do 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 issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Date: October 25, 1978