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

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December 28, 1982

Posted
Amdt. 84
to DPR-41

Docket Nos. 50-250
and 50-251

Dr. Robert E. Uhrig, Vice President
Advanced Systems and Technology
Florida Power and Light Company
Post Office Box 529100
Miami, Florida 33152

Dear Dr. Uhrig:

The Commission has issued the enclosed Amendment No. 90 to Facility Operating License No. DPR-31 and Amendment No. 84 to Facility Operating License No. DPR-41 for the Turkey Point Plant Unit Nos. 3 and 4, respectively. The amendments consist of changes to the Technical Specifications in response to your application transmitted by letter dated November 5, 1982.

These amendments modify the required flow rate of the auxiliary feedwater system from 600 gpm to 373 gpm for the new model 44F steam generators.

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

Sincerely,

Daniel G. McDonald

Daniel G. McDonald, Jr., Project Manager
Operating Reactors Branch No. 1
Division of Licensing

Enclosures:
1. Amendment No. 90 to DPR-31
2. Amendment No. 84 to DPR-41
3. Safety Evaluation
4. Notice of Issuance

cc w/enclosures:
See next page

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

FLORIDA POWER AND LIGHT COMPANY

DOCKET NO. 50-250

TURKEY POINT PLANT UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 90
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 November 5, 1982, 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 3.B of Facility Operating 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. 90, 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

Steven A. Varga, Chief
Operating Reactors Branch #1
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: December 28, 1982

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

FLORIDA POWER AND LIGHT COMPANY

DOCKET NO. 50-251

TURKEY POINT PLANT UNIT NO. 4

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 84
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 November 5, 1982, 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 3.B of Facility Operating 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. 84 , 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

Steven A. Varga, Chief
Operating Reactors Branch #1
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: December 28, 1982

ATTACHMENT TO LICENSE AMENDMENTS

AMENDMENT NO. 90 TO FACILITY OPERATING LICENSE NO. DPR-31

AMENDMENT NO. 84 TO FACILITY OPERATING LICENSE NO. DPR-41

DOCKET NOS. 50-250 AND 50-251

Revise Appendix A as follows:

Remove Pages	Insert Pages
4.10-1	4.10-1
B3.8-1	B3.8-1

4.10 AUXILIARY FEEDWATER SYSTEM

Applicability: Applies to periodic testing requirements of the auxiliary feedwater system.

Objective: To verify the operability of the auxiliary feedwater system and its ability to respond properly when required.▲

Specifications:

1. Each turbine-driven auxiliary feedwater pump shall be started at intervals not greater than one month, run for 15 minutes and a flow rate of 373* gpm established to the steam generators. The monthly frequency is not intended to require the test while at cold shutdown. The testing requirement is met by performing this test during startup subsequent to cold shtudown.

2. The auxiliary feedwater discharge valves shall be tested by operator action during pump tests.

3. Steam supply and turbine pressure valves shall be tested during pump tests.

4. These tests shall be considered satisfactory if control panel indication and visual observation of the equipment demonstrate that all components have operated properly.

5. At least once per 18 months:

   a. Verify that each automatic valve in the flow path actuates to its correct position upon receipt of each auxiliary feedwater actuation test signal.

   b. Verify that each auxiliary feedwater pump receives a start signal as designed automatically upon receipt of each axuliary feedwater actuation test signal.

N.A. during cold or refueling shutdowns (only for the Unit at cold or refueling shutdown). The specified tests, however shall be performed within one surveillance interval prior to starting the turbine.

▲ NOTE: If any local manual realignment of valves is required when operating the Auxiliary Feedwater pumps, a dedicated individual, who is in communication with the control room, shall be stationed at the auxiliary feedwater pump area. Upon instructions from the control room, this operator would realign the valves in the AFW system train to its normal operational alignment.

*600 gpm flow rate remains applicable to Turkey Point Unit 4 until steam generator replacement.

B3.8 BASES FOR LIMITING CONDITIONS FOR OPERATION, STEAM AND POWER CONVERSION SYSTEMS

In the unlikely event of complete loss of electrical power to the nuclear units, decay heat removal will be assured by the availability of the steam-driven auxiliary feedwater pumps and steam discharge to the atmosphere via the steam generator safety valves and power relief valves.(1) The operability of the auxiliary feedwater system ensures that the Reactor Coolant System can be cooled down to less than 350°F from normal operating conditions in the event of a total loss of offsite power. Each steam driven auxiliary feedwater pump is capable of delivering a total feedwater flow of 373* gpm to the entrance of the steam generators. This capacity is sufficient to ensure that adequate feedwater flow is available to remove decay heat and reduce the Reactor Coolant System temperature to less than 350°F when the Residual Heat Removal System may be placed into operation. The minimum amount of water in the condensate storage tanks is established from FSAR Figure 9.11-1, and meets safe shutdown requirements. (2)

The limit on secondary coolant iodine-131 specific activity is based on a postulated release of secondary coolant equivalent to the contents of three steam generators to the atmosphere due to a net load rejection. The limiting dose for this case would result from radioactive iodine in the secondary coolant. I-131 is the dominant isotope because of its low MPC in air and because the other shorter lived iodine isotopes cannot build up to significant concentrations in the secondary coolant under the limits of primary system leak rate and activity. One tenth of the iodine in the secondary coolant is assumed to reach the site boundary making allowance for plate-out and retention in water droplets. The inhalation thyroid dose at the site boundary is then;

Dose (Rem) = $C \cdot V \cdot B \cdot DCF \cdot X/Q \cdot 0.1$

Where: C = secondary coolant I-131 specific activity

= 1.34 curies/m^3 (uCi/cc) or 0.67 Ci/m^3, each unit

V = equivalent secondary coolant volume released = 214 m^3

B = breathing rate = 3.47×10^{-4} m^3 sec.

X/Q = atmospheric dispersion parameter $=1.54 \times 10^{-4}$ sec/m^3

0.1 = equivalent fraction of activity released

DCF = dose conversion factor, Rem/ci

The resultant thyroid dose is less than 1.5 Rem.

References

(1) FSAR - Section 10.3
(2) FSAR - Section 14.2.5

*600 gpm flow rate remains applicable to Turkey Point Unit 4 until steam generator replacement.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 90 TO FACILITY OPERATING LICENSE NO. DPR-31

AND AMENDMENT NO. 84 TO FACILITY OPERATING LICENSE NO. DPR-41

FLORIDA POWER AND LIGHT COMPANY

TURKEY POINT PLANT UNIT NOS. 3 AND 4

DOCKET NOS. 50-250 AND 50-251

I. INTRODUCTION

By letter dated November 5, 1982, Florida Power and Light Company proposed revised Technical Specifications for Turkey Point Units 3 and 4. The proposed Technical Specification revision is a result of a reduction in the minimum auxiliary feedwater (AFW) flow requirements since the installation of the new Westinghouse model 44F steam generators at Turkey Point Unit 3. The new model 44F generators will also be installed at Turkey Point Unit 4. Based on analyses performed by Westinghouse, the minimum required AFW flow to the new steam generators at Turkey Point Units is 373 gpm. The previous minimum flow requirement with the older model steam generators was 600 gpm.

II. EVALUATION

As a result of the Westinghouse analyses, the licensee has proposed to modify the Turkey Point Units 3 and 4 surveillance requirements that are used to verify the operability of the AFW system (Specification 4.10.1) and the bases for the limiting conditions for operation (Specification B 3.8) regarding AFW flow requirements. In support of the proposed revision to the specifications, the licensee provided the results of the Westinghouse analyses and a safety evaluation of the proposed change. The proposed change revises the monthly pump tests such that a flow rate of 373 gpm for 15 minutes will be established to the steam generators from each AFW pump. The present specification requires a 15 minute test at a flow rate of 600 gpm. Note that at Turkey Point Unit 4, the 600 gpm flow rate specification will be in effect until the new model 44F steam generators are installed.

III. SUMMARY

Based on our review of the results of the Westinghouse analyses and the safety evaluation provided by the licensee, and based on our knowledge of the more efficient heat transfer capability of the new model 44F steam generators compared to the older models, we conclude that the reduction in the minimum required AEW flow rate is acceptable. We, therefore, also conclude that the proposed revisions to the Turkey Point, Units 3 and 4, Technical Specifications (Sections 4.10.1 and B 3.8) are acceptable.

IV. 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 have further 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.

V. 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 an accident previously evaluated, do not create the possibility of an accident of a type different from any evaluated previously, and do not involve a significant reduction in a margin of safety, 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 the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Date: December 28, 1982

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NOS. 50-250 AND 50-251

FLORIDA POWER AND LIGHT COMPANY

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSES

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 90 to Facility Operating License No. DPR-31, and Amendment No. 84 to Facility Operating License No. DPR-41 issued to Florida Power and Light Company (the licensee), which revised Technical Specifications for operation of Turkey Point Plant, Unit Nos. 3 and 4 (the facilities) located in Dade County, Florida. The amendments are effective as of the date of issuance.

The amendments modify the required flow rate of the auxiliary feedwater system from 600 gpm to 373 gpm for the new model 44F steam generators.

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 amendments. Prior public notice of these amendments was 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 impact statement or negative declaration and 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 November 5, 1982, (2) Amendment Nos. 90 and 84 to License 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 and 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 Licensing.

Dated at Bethesda, Maryland, this 28th day of December, 1982.

FOR THE NUCLEAR REGULATORY COMMISSION

Steven A. Varga

Steven A. Varga, Chief
Operating Reactors Branch No. 1
Division of Licensing