

Docket File

CP/1

MARCH 12 1980

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

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Dear Dr. Uhrig:

The Commission has issued the enclosed Amendment No. <sup>53</sup> to Facility Operating License No. DPR-31 and Amendment No. <sup>45</sup> to Facility Operating License No. DPR-41 for the Turkey Point Nuclear Generating Unit Nos. 3 and 4, respectively. The amendments consist of changes to the Technical Specifications in response to your application transmitted by letter dated August 9, 1979.

These amendments increase the minimum low-low generator water level reactor trip point from 5% to 15% of the narrow range instrument scale.

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

Sincerely,

Original Signed By

AS 3/12/80

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

Enclosures:

1. Amendment No. <sup>53</sup> to DPR-31
2. Amendment No. <sup>45</sup> to DPR-41
3. Safety Evaluation
4. Notice of Issuance

cc: w/enclosures  
See next page

12535  
12536

F2  
NOTICE ONLY

OFFICE	DOR:ORB	DOR:ORB1	DOR:AD:ORP	OELD	DOR:ORB1
SURNAME	MGrotenhuis	CPSParrish	WP Gammill	GOLOBERG	ASchwencer
DATE	02/11/80	03/3/80	03/3/80	3/7/80	3/13/80



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

March 12, 1980

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. 53 to Facility Operating License No. DPR-31 and Amendment No. 45 to Facility Operating License No. DPR-41 for the Turkey Point Nuclear Generating Unit Nos. 3 and 4, respectively. The amendments consist of changes to the Technical Specifications in response to your application transmitted by letter dated August 9, 1979.

These amendments increase the minimum low-low generator water level reactor trip point from 5% to 15% of the narrow range instrument scale.

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

Sincerely,

A handwritten signature in cursive script, appearing to read "A. Schwencer", is written over the typed name.

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

Enclosures:

1. Amendment No. 53 to DPR-31
2. Amendment No. 45 to DPR-41
3. Safety Evaluation
4. Notice of Issuance

cc: w/enclosures  
See next page

Robert E. Uhrig  
Florida Power and Light Company

- 2 -

March 12, 1980

cc: Mr. Robert Lowenstein, Esquire  
Lowenstein, Newman, Reis and Axelrad  
1025 Connecticut Avenue, N.W.  
Suite 1214  
Washington, D. C. 20036

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

Mr. Norman A. Coll, Esquire  
Steel, Hector and Davis  
1400 Southeast First National  
Bank Building  
Miami, Florida 33131

Mr. Henry Yaeger, Plant Manager  
Turkey Point Plant  
Florida Power and Light Company  
P. O. Box 013100  
Miami, Florida 33101

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

Bureau of Intergovernmental Relations  
660 Apalachee Parkway  
Tallahassee, Florida 32304

Resident Inspector  
Turkey Point Nuclear Generating Station  
U. S. Nuclear Regulatory Commission  
Post Office Box 971277  
Quail Heights Station  
Miami, Florida 33197

Director, Technical Assessment Division  
Office of Radiation Programs (AW-459)  
U. S. Environmental Protection Agency  
Crystal Mall #2  
Arlington, Virginia 20460

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

Mr. Jack Shreve  
Office of the Public Counsel  
Room 4, Holland Building  
Tallahassee, Florida 32304

Administrator  
Department of Environmental  
Regulation  
Power Plant Siting Section  
State of Florida  
2600 Blair Stone Road  
Tallahassee, Florida 32301



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. 53  
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 August 9, 1979, 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. 53, 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: March 12, 1980



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. 45  
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 August 9, 1979, 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 provision of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by the 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. 45, 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: March 12, 1980

ATTACHMENT TO LICENSE AMENDMENTS

AMENDMENT NO. 53 TO FACILITY OPERATING LICENSE NO. DPR-31

AMENDMENT NO. 45 TO FACILITY OPERATING LICENSE NO. DPR-41

DOCKET NOS. 50-250 AND 50-251

Revise Appendix A as follows:

Remove Page

2.3-3

Insert Page

2.3-3



Over-  
power  $\Delta T \leq \Delta T_0$

$$\left[ 1.11 * -K_1 \frac{dT}{dt} - K_2 (T - T') - f(\Delta q) \right]$$

$\Delta T_0$  = Indicated  $\Delta T$  at rated power, F

T = Average temperature, F

T' = Indicated average temperature at nominal conditions and rated power, F

K<sub>1</sub> = 0 for decreasing average temperature,  
0.2 sec./F for increasing average temperature

K<sub>2</sub> = 0.00068<sup>†</sup> for T equal to or more than T';  
0 for T less than T'

$\frac{dT}{dt}$  = Rate of change of temperature, F/sec

f( $\Delta q$ ) = As defined above

#### Pressurizer

Low Pressurizer pressure - equal to or greater than 1835 psig.

High Pressurizer pressure - equal to or less than 2385 psig.

High Pressurizer water level - equal to or less than 92% of full scale.

#### Reactor Coolant Flow

Low reactor coolant flow - equal to or greater than 90% of normal indicated flow

Low reactor coolant pump motor frequency - equal to or greater than 56.1 Hz

Under voltage on reactor coolant pump motor bus - equal to or greater than 60% of normal voltage

#### Steam Generators

Low-low steam generator water level - equal to or greater than 15% of narrow range instrument scale

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\*This factor is 1.11 for steam generator tube plugging  $\leq 15$  percent

This factor is 1.10 for steam generator tube plugging  $> 15$  percent and  $\leq 19\%$

This factor is 1.08 for steam generator tube plugging  $> 19\%$  and  $\leq 25\%$ .

†This factor is 0.00106 for steam generator tube plugging  $> 19\%$  and  $\leq 25\%$ .



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMENDMENT NO. 53 TO FACILITY OPERATING LICENSE NO. DPR-31  
AND AMENDMENT NO. 45 TO FACILITY OPERATING LICENSE NO. DPR-41  
FLORIDA POWER AND LIGHT COMPANY  
TURKEY POINT NUCLEAR GENERATING, UNIT NOS. 3 AND 4  
DOCKET NOS. 50-250 AND 50-251

INTRODUCTION

By letter dated August 9, 1979, the licensee (Florida Power and Light Company) proposed changes to the Technical Specifications for the Turkey Point Nuclear Plant, Units 3 and 4. These changes will increase the "low-low steam generator water level" minimum reactor trip setpoint from 5% to 15% of the narrow range instrument scale.

DISCUSSION

High energy line breaks inside containment can result in heatup of the steam generator level measurement reference leg. Increased reference leg water column temperature will result in a decrease of the water column density with a consequent apparent increase in the indicated steam generator water level (i.e., apparent level exceeding actual level). This potential level bias could result in delayed protection signals (reactor trip and auxiliary feedwater initiation) which are based on low-low steam generator water level. In the case of a feedline rupture, this adverse environment could be present and could delay or prevent the primary signal arising from declining steam generator water level (low-low steam generator level). High pressurizer pressure, overtemperature delta T, high containment pressure and safety injection are backup signals to steam generator water level with an adverse containment environment. For other high energy line breaks which could introduce a similar positive bias to the steam generator water level measurement, steam generator level does not provide the primary trip function and the potential bias would not interfere with needed protective system actuation.

## EVALUATION

Westinghouse (NSSS vendor for the Turkey Point Nuclear Plant, Units 3 and 4) has advised that the potential temperature-induced bias described above can be compensated for by raising the steam generator low-low water level setpoint. Westinghouse has recommended a change in the allowable water level setpoint sufficient to accommodate the bias (up to 10% of the instrument's range) which could result from containment temperatures up to 280°F. Containment analyses have shown that following a secondary high energy line break, a containment high pressure signal would be generated before the containment temperature reaches 280°F.

To alleviate the error which could result from the temperature effect described above, the licensee has proposed to increase the minimum allowable low-low steam generator water level trip setting from 5% (35.5") to 15% (46.3") of the narrow range (108.09") instrument scale. The low and high level taps are 30.13" and 138.22" respectively. Increasing the setpoint by 10% of the instruments range will ensure that the trip setpoint maintains conservatism and compensates for the potential 10% error.

## 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.

## CONCLUSION

Based on our review of the licensee's submittal, we find the proposed changes to the Technical Specifications for the Turkey Point Nuclear Plant, Units 3 and 4, acceptable.

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 the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Date: March 12, 1980

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NOS. 50-250 AND 50-251FLORIDA POWER AND LIGHT COMPANYNOTICE OF ISSUANCE OF AMENDMENT TO FACILITY  
OPERATING LICENSE

The U.S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 53 to Facility Operating License No. DPR-31, and Amendment No. 45 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 Nuclear Generating, Unit Nos. 3 and 4 (the facilities) located in Date County, Florida. The amendments are effective as of the date of issuance.

These amendments increase the minimum low-low generator water level reactor trip point from 5% to 15% of the narrow range instrument scale.

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 August 9, 1979, (2) Amendment Nos. 53 and 45 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 Operating Reactors.

Dated at Bethesda, Maryland, this 12th day of March, 1980.

FOR THE NUCLEAR REGULATORY COMMISSION



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