

Dockets Nos. 50-250  
and 50-251

OCT 4 1977

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

Gentlemen:

Distribution

- ✓ Docket
- ORB #3
- Local PRD
- NRC PDR
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- GLear
- CParrish
- RClark
- Attorney, OELD
- OI&E (5)
- BJones (8)
- BScharf (10)
- JMcGough
- DEisenhut
- ACRS (16)
- OPA (Clare Miles)
- DRoss

TBAbernathy  
JRBuchanan

The Commission has issued the enclosed Amendment No. 28 to Facility Operating License No. DPR-31 and Amendment No. 25 to Facility Operating License No. DPR-41 for the Turkey Point Nuclear Generating Units Nos. 3 and 4. The amendments consist of changes to the Technical Specifications in response to your application dated September 21, 1977, as supplemented by letter dated September 29, 1977.

This amendment changes Technical Specification 4.4.6 covering Tendon Surveillance for Turkey Point Units Nos. 3 and 4.

Copies of the Safety Evaluation and the FEDERAL REGISTER Notice are also enclosed.

Sincerely,

Original signed by

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

Enclosures:

1. Amendment No. 28 to License DPR-31
2. Amendment No. 25 to License DPR-41
3. Safety Evaluation
4. FEDERAL REGISTER Notice

cc w/enclosures:  
See next page

*ORIGINAL SUBJECT  
TO COMMENT 3 ON  
"WORKING COPY"*

OFFICE →	ORB #3	ORB #3	OELD <i>SJ</i>	ORB #3		
SURNAME →	CParrish	RClark <i>OR</i> <i>mjf</i>	<i>S. GOLDBERG</i>	GLear <i>G</i>		
DATE →	10/ /77	10/4/77	10/4/77	10/4/77		



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

October 4, 1977

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

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The Commission has issued the enclosed Amendment No. 28 to Facility Operating License No. DPR-31 and Amendment No. 25 to Facility Operating License No. DPR-41 for the Turkey Point Nuclear Generating Units Nos. 3 and 4. The amendments consist of changes to the Technical Specifications in response to your application dated September 21, 1977, as supplemented by letter dated September 29, 1977.

This amendment changes Technical Specification 4.4.6 covering Tendon Surveillance for Turkey Point Units Nos. 3 and 4.

Copies of the Safety Evaluation and the FEDERAL REGISTER Notice are also enclosed.

Sincerely,

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

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

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1. Amendment No. 28 to License DPR-31
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See next page

Florida Power & Light Company

- 2 -

cc:

Mr. Jack R. Newman, Esquire  
Lowenstein, Newman, Reis & Axelrad  
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Washington, D. C. 20036

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

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

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

Chief, Energy Systems Analysis 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 VI Office  
ATTN: EIS COORDINATOR  
345 Courtland Street, N. E.  
Atlanta, Georgia 30308

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



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. 28  
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 21, 1977, as supplemented by letter dated September 29, 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 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.

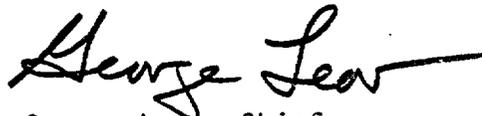
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B. of Facility Operating License No. DPR-31 is hereby amended to read as follows:

(B) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 28, 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



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

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: October 4, 1977

ATTACHMENT TO LICENSE AMENDMENT NO. 28

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

4.4-4

Replace

4.4-4

#### 4.4.6 TENDON SURVEILLANCE

##### Lift-off

Lift-off readings will be taken for the following nine (9) tendons available for inspection:

##### Unit 3

Horizontal 62H18, 42H70, 64H51  
Vertical 23V1, 45V7, 61V1  
Dome 1D53, 2D28, 3D28

##### Unit 4

62H38, 42H80, 64H70  
12V29, 34V29, 56V29  
1D28, 2D3, 3D28

##### Wire Inspection

One horizontal, one vertical and one dome tendon will be relaxed and one wire will be removed from each as a sample. (At subsequent inspections different tendons will be used for the sample). Wires will be visually inspected for corrosion and pitting. Tensile tests will be performed on three (3) samples cut from each wire (one from each end and one from the middle) of a length equal to the maximum length acceptable for the test apparatus to be used.

After samples are taken, tendons will be re-tensioned and final lift-off readings will be taken.

##### Test Frequency

Lift-off readings and wire inspection will take place at the end of the first, third and every fifth year thereafter from the date of the structural integrity test. Tendon surveillance may be conducted during reactor operation.



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. 25  
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 21, 1977, as supplemented by letter dated September 29, 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 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.

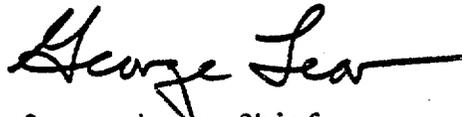
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B. of Facility Operating License No. DPR-41 is hereby amended to read as follows:

(B) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 25, 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



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

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: October 4, 1977

ATTACHMENT TO LICENSE AMENDMENT NO. 25

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

4.4-4

Replace

4.4-4

#### 4.6 TENDON SURVEILLANCE

##### Lift-off

Lift-off readings will be taken for the following nine (9) tendons available for inspection:

<u>Unit 3</u>	<u>Unit 4</u>
Horizontal 62H18, 42H70, 64H51	62H38, 42H80, 64H70
Vertical 23V1, 45V7, 61V1	12V29, 34V29, 56V29
Dome 1D53, 2D28, 3D28	1D28, 2D3, 3D28

##### Wire Inspection

One horizontal, one vertical and one dome tendon will be relaxed and one wire will be removed from each as a sample. (At subsequent inspections different tendons will be used for the sample). Wires will be visually inspected for corrosion and pitting. Tensile tests will be performed on three (3) samples cut from each wire (one from each end and one from the middle) of a length equal to the maximum length acceptable for the test apparatus to be used.

After samples are taken, tendons will be re-tensioned and final lift-off readings will be taken.

##### Test Frequency

Lift-off readings and wire inspection will take place at the end of the first, third and every fifth year thereafter from the date of the structural integrity test. Tendon surveillance may be conducted during reactor operation.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 28 TO LICENSE NO. DPR-31, AND

AMENDMENT NO. 25 TO LICENSE NO. DPR-41

FLORIDA POWER AND LIGHT COMPANY

TURKEY POINT NUCLEAR GENERATING UNITS NOS. 3 AND 4

DOCKETS NOS. 50-250 AND 50-251

Introduction

By letter dated September 21, 1977, supplemented by letter dated September 29, 1977, Florida Power and Light Company (FPL) submitted a proposed change to Technical Specification 4.4.6 covering Tendon Surveillance for Turkey Point Units Nos. 3 and 4. Technical Specification 4.4.6 requires that a surveillance be performed on three horizontal, three vertical and three dome tendons from the containment structures for both Units Nos. 3 and 4. at certain specified time intervals. The Technical Specification lists the specific nine tendons to be inspected in each unit. The proposed change is to make a substitution in two of the tendons listed for Unit No. 3 and in three of the tendons listed for Unit No. 4.

Discussion

10 CFR Part 50, Appendix A, General Design Criterion 53, entitled "Provisions for Containment Testing and Inspection" requires, in part, that reactor containments be designed to permit (1) periodic inspection of all important areas and (2) an appropriate surveillance program. The inservice inspection program for containment tendon surveillance at Turkey Point Unit Nos. 3 and 4 is specified in Section 4.4.6 of Appendix A to Facility Operating Licenses DPR-31 and DPR-41.

The containment design of Turkey Point Units Nos. 3 and 4 provides for a prestressed concrete structure with ungrouted tendons. Surveillance tendons are chosen such that a sample is obtained from each major tendon type (dome, vertical and hoop). The specific choices within each type were selected to provide tendons which are subject to various environmental exposures.

Surveillance of one of the previously designated tendons for Unit No. 3 (dome tendon 1D27) requires that personnel work in the area of the main steam and atmospheric dump valve discharges. This would expose the workmen to an unnecessary personal hazard if a safety valve or relief valve were to open.

The licensee evaluated alternative tendons that could be inspected without hazard to the personnel involved that (1) would experience essentially the same environmental conditions, (2) will satisfy the requirements of Regulatory Guide 1.35, "Inservice Inspection of Ungrouted Tendons in Prestressed Concrete Containment Structures", and (3) will adequately determine the effects of corrosion on the containment structure tendons.

To avoid the potential hazards associated with inspection of dome tendon 1D27 in Unit No. 3, the licensee proposes to substitute dome tendon 1D53. These two tendons are from the same dome group, have their ends anchored at approximately the same elevation within the same 60 degree angles and experience essentially the same environmental conditions.

In Unit No. 3, the licensee also proposes to make a substitution in one of the horizontal tendons 64H50 for better correlation with previous inspections. The proposal is to inspect tendon 64H51 instead of 64H50. Both of these tendons are located between azimuths 226° and 346°. Tendon 64H50 is at elevation 96'-10" and tendon 64H51 is at elevation 98'-6". Since both tendons are located between the same azimuths at approximately the same elevation, they experience essentially the same environmental conditions.

In Unit No. 4, the licensee proposes to substitute horizontal tendon 42H80 for 42H57 to protect the personnel performing the evaluation. Both tendons are located between azimuths 314° and 74° but are at different elevations.

In Unit No. 4, the licensee proposes to also substitute horizontal tendon 62H38 for 13H38. Tendon 62H38 is located between azimuths 74° and 194° at elevation 76'-3 5/8". Tendon 13H38 is located between azimuths 14° and 134° at elevation 76'-10". The licensee stated that the proposed change would be beneficial in that the new group of horizontal tendons will comprise one complete hoop and will thus provide more representative information during future surveillance.

In Unit No. 4, the licensee proposed to substitute dome tendon 2D3 for 2D14. Both of the tendons are from the same dome group, have their ends anchored at approximately the same elevations within the same 60-degree angles and therefore experience essentially the same environmental conditions.

#### Evaluation

The Technical Specifications for Turkey Point Units Nos. 3 and 4 now list specific tendons to be inspected at designated time intervals. The licensee proposes to substitute alternative tendons for 5 of the 18 tendons to be inspected during the current surveillance period and has justified the substitution on the basis of personnel safety and similarity of tendon exposure conditions.

The current staff position on inspection of prestressed concrete containment with ungrouted tendons is that at least some alternate tendons should be tested during each inspection rather than continually test the same tendons. Under "Containment Structural Integrity, Surveillance Requirements", the Standard Technical Specifications state:

"For each inspection, the tendons shall be selected on a random but representative basis so that the sample group will change somewhat for each inspection; however, to develop a history of tendon performance and to correlate the observed data, one tendon from each group (dome, vertical, and hoop) may be kept unchanged after the initial selection."

Thus, the licensee's proposed changes are in accord with the recommended position of the staff on tendon inspection. We have evaluated the licensee's proposed surveillance program and have concluded that the alternate tendons to be tested will provide a reliable indication of the containment tendon's structural integrity equivalent to that provided by the present Technical Specifications.

#### Environmental Considerations

We have determined that the 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: October 4, 1977

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

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendments Nos. 28 and 25 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 Nos. 3 and 4, located in Dade County, Florida. The amendments are effective as of the date of issuance.

The amendment consists of changes to Technical Specification 4.4.6 covering Tendon Surveillance for Turkey Point Units Nos. 3 and 4.

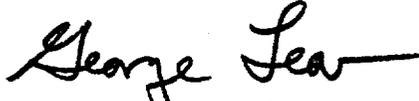
The application for the amendments complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR 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 September 21, 1977, as supplemented by letter dated September 29, 1977, (2) Amendments Nos. 28 and 25 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 4th day of October 1977.

FOR THE NUCLEAR REGULATORY COMMISSION



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