

Docket file
50-250

SEPTEMBER 26 1979

Docket No. 50-250

REGULATORY DOCKET FILE COPY

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. 50 to Facility Operating License No. DPR-31 for the Turkey Point Nuclear Generating, Unit No. 3. The amendment consists of changes to the license in response to your application transmitted by letter dated August 7, 1979. Your application also included a request for an extension of the operating interval for Unit 4. We have not completed our review of that request.

The amendment permits continued operation of Turkey Point Plant Unit No. 3 for an additional seven effective full power weeks from March 29, 1979 or until the next refueling outage, whichever occurs first. Also, for our administrative convenience, we are issuing new pages 1 through 5 of Facility Operating License No. DPR-31.

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

Sincerely,

Original Signed by
A. Schwencer for

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

Enclosures:

- 1. Amendment No. 50 to DPR-31
- 2. Safety Evaluation
- 3. Notice of Issuance

cc: w/enclosures
See next page

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Distribution

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DATE >	09/11/79	09/ /79	09/12/79	09/21/79	09/25/79

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

September 26, 1979

Docket No. 50-250

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. 50 to Facility Operating License No. DPR-31 for the Turkey Point Nuclear Generating, Unit No. 3. The amendment consists of changes to the license in response to your application transmitted by letter dated August 7, 1979. Your application also included a request for an extension of the operating interval for Unit 4. We have not completed our review of that request.

The amendment permits continued operation of Turkey Point Plant Unit No. 3 for an additional seven effective full power weeks from March 29, 1979 or until the next refueling outage, whichever occurs first. Also, for our administrative convenience, we are issuing new pages 1 through 5 of Facility Operating License No. DPR-31.

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

Sincerely,

for *Charles M. Trammell*
A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors

Enclosures:

1. Amendment No. 50 to DPR-31
2. Safety Evaluation
3. Notice of Issuance

cc: w/enclosures
See next page

Robert E. Uhrig
Florida Power and Light Company

- 2 -

September 26, 1979

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

Mr. Jack Shreve
Office of the Public Counsel
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Tallahassee, Florida 32304

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

Mr. Norman A. Coll, Esquire
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1400 Southeast First National
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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

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



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. 50
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 7, 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.

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2. Accordingly, the license is amended by changes to paragraph 3.E.5. Paragraph 3.E.5 of Facility Operating License No. DPR-31 is hereby amended to read as follows:

E. Steam Generator Inspections

5. In order to perform an inspection of the steam generators, Unit No. 3 shall be brought to the cold shutdown condition within six equivalent months and seven weeks of operation from March 29, 1979 or at the next refueling shutdown, whichever occurs first, unless: (1) an inspection of the steam generators is performed within this period as a result of the requirements in 2, 3 and 4 above, or (2) an acceptable analysis of the susceptibility for stress corrosion cracking of tubing is submitted to explicitly justify continued operation of Unit No. 3 beyond the authorized period of operation. Any analysis justifying continued operation must be submitted at least 45 days prior to the expiration date of the authorized period of operation. For the purpose of this requirement, equivalent operation is defined as operation with a primary coolant temperature greater than 350°F. NRC approval shall be obtained before resuming power operation following this inspection.
3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

for *Charles M. Trannell*
A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors

Attachment:
Pages 1 through 5 of
Operating License DPR-31

Date of Issuance: September 26, 1979

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 50 TO FACILITY OPERATING LICENSE NO. DPR-31

DOCKET NO. 50-250

Replace the following pages of Facility Operating License No. DPR-31 with the attached pages as indicated. The changed area in the license is indicated by a marginal line.

Remove Pages

1
2
3
3a
4

Insert Pages

1
2
3
4
5



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

FLORIDA POWER AND LIGHT COMPANY

DOCKET NO. 50-250

FACILITY OPERATING LICENSE

License No. DPR-31

The Atomic Energy Commission (the Commission) having found that:

- a. Construction of the Turkey Point Nuclear Generating Unit No. 3 (the facility) has been substantially completed in conformity with Provisional Construction Permit No. CPPR-27, the application as amended, the provisions of the Atomic Energy Act of 1954, as amended (the Act), and the rules and regulations of the Commission;
- b. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
- c. There is reasonable assurance (i) that the facility can be operated at steady state power levels up to 2200 megawatts thermal in accordance with this license without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the regulations of the Commission;
- d. Florida Power and Light Company is technically and financially qualified to engage in the activities authorized by this operating license in accordance with the rules and regulations of the Commission;
- e. The applicable provisions of 10 CFR Part 140 have been satisfied; and
- f. The issuance of this license will not be inimical to the common defense and security or to the health and safety of the public.

Facility Operating License No. DPR-31 is hereby issued to Florida Power and Light Company (FPL), as follows:

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1. This license applies to the Turkey Point Nuclear Generating Unit No. 3 nuclear power reactor, a pressurized, light water moderated and cooled reactor, and associated steam generators and electrical generating equipment (the facility). The facility is located on the applicant's Turkey Point site in Dade County, about 25 miles south of Miami, Florida, and is described in the application for construction permit and facility license, as amended.
2. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses FPL:
 - A. Pursuant to Section 104b of the Atomic Energy Act of 1954, as amended (the Act), and 10 CFR Part 50, "Licensing of Production and Utilization Facilities," to possess, use, and operate the facility as a utilization facility at the designated location on the Turkey Point site;
 - B. Pursuant to the Act and 10 CFR Part 70, to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;
 - C. Pursuant to the Act and 10 CFR Parts 30, 40 and 70 to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
 - D. Pursuant to the Act and 10 CFR Part 30 to receive, possess, and use at any time 100 millicuries each of any byproduct material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactivity contaminated apparatus;
 - E. Pursuant to the Act and 10 CFR Parts 40 and 70 to receive, possess and use at any time 100 milligrams each of any source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactively contaminated apparatus;

F. Pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of Turkey Point Unit Nos. 3 and 4.

3. This license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations: 10 CFR Part 20, Section 30.34 of 10 CFR Part 30, Section 40.41 of 10 CFR Part 40, Sections 50.54 and 50.59 of 10 CFR Part 50, and Section 70.32 of 10 CFR Part 70; and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect, and is subject to the additional conditions specified below:

A. Maximum Power Level

The applicant is authorized to operate the facility at steady state power levels not in excess of 2200 megawatts (thermal).

B. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 49 are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

C. Reports

FPL shall issue certain reports to the NRC in accordance with the requirements of the Technical Specifications.

D. Records

FPL shall originate and maintain facility operating records in accordance with the requirements of the Technical Specifications.

E. Steam Generator Inspections

1. The concentration of radioiodine in the primary coolant shall be limited to 1.0 microcurie/gram during normal operation and to 30 microcuries/gram during power transients.

2. Primary to secondary leakage through the steam generator tubes shall be limited to 0.3 gpm per steam generator. With any steam generator tube leakage greater than this limit, the reactor shall be brought to the cold shutdown condition within 24 hours. The leaking tube(s) shall be evaluated and plugged prior to resuming power operation, if leaking is not attributable to the denting phenomena.
3. Reactor operation shall be terminated and Nuclear Regulatory Commission approval shall be obtained prior to resuming operation if primary to secondary leakage attributable to the tube denting phenomena is detected from two or more tubes in the plant in any 20-day period.
4. Unit No. 3 steam generators shall be inspected during the next refueling outage or sooner in the event the limitations of 2 and 3, above, are exceeded. Nuclear Regulatory Commission approval shall be obtained before resuming power operation following this inspection.
5. In order to perform an inspection of the steam generators, Unit No. 3 shall be brought to the cold shutdown condition within six equivalent months and seven weeks of operation from March 29, 1979 or at the next refueling shutdown, whichever occurs first, unless: (1) an inspection of the steam generators is performed within this period as a result of the requirements in 2, 3 and 4 above, or (2) an acceptable analysis of the susceptibility for stress corrosion cracking of tubing is submitted to explicitly justify continued operation of Unit No. 3 beyond the authorized period of operation. Any analysis justifying continued operation must be submitted at least 45 days prior to the expiration date of the authorized period of operation. For the purpose of this requirement, equivalent operation is defined as operation with a primary coolant temperature greater than 350°F. NRC approval shall be obtained before resuming power operation following this inspection.

F. Physical Security

The licensee shall maintain in effect and fully implement all provisions of the Commission-approved physical security plan, including amendments and changes made pursuant to the authority of 10 CFR 50.54(p). The approved security plan documents, withheld from public disclosure pursuant to 10 CFR 2.790(d), collectively titled "Turkey Point Plant Unit Nos. 3 and 4 Physical Security Plan", dated October 18, 1979, as supplemented February 20, 1979.

G. Fire Protection

The licensee may proceed with and is required to provide a schedule for and to complete the modifications identified in Paragraphs 3.1.1 through 3.1.19 of the NRC's Fire Protection Safety Evaluation, dated March 21, 1979 for the facility. These modifications are to be completed prior to December 1980. If any modifications cannot be completed on schedule the licensee shall submit a report explaining the circumstances together with a revised schedule.

In addition, the licensee shall submit the additional information identified in Sections 3.1 and 3.2 of the related Safety Evaluation in accordance with the schedule contained herein. In the event these dates for submittal cannot be met, the licensee shall submit a report, explaining the circumstances, together with a revised schedule.

The licensee is required to develop and implement the administrative controls which are consistent with the licensee's letters of August 28 and November 7, 1978 within three months from the date of this amendment.

4. FPL shall proceed with implementation of the recommendations set forth in paragraphs 7b and c of the "Summary and Conclusions" section of the "Final Environmental Statement Related to Operation of Turkey Point Plant, Florida Power and Light Company, Docket Nos. 50-250 and 50-251," issued July 1972 by the AEC Directorate of Licensing. No later than thirty (30) days from the date of issuance of this license, FPL shall submit to the AEC, for review and approval, its plan for the implementation of such recommendations.
5. This license is effective as of the date of issuance, and shall expire at midnight April 27, 2007.

FOR THE ATOMIC ENERGY COMMISSION

Original Signed by D. J. Skovholt
for

A. Giambusso, Deputy Director
for Reactor Projects
Directorate of Licensing

Attachment:
Appendix A - Technical Specifications

Date of Issuance; July 19, 1972



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 50 TO FACILITY OPERATING LICENSE NO. DPR-31

FLORIDA POWER AND LIGHT COMPANY

TURKEY POINT NUCLEAR GENERATING, UNIT NO. 3

DOCKET NO. 50-250

Introduction

By application dated August 7, 1979 (L-79-215), Florida Power and Light Company (the licensee) requested amendments to Facility Operating License Nos. DPR-31 and DPR-41 for the Turkey Point Plant, Unit Nos. 3 and 4. The application requested amendments to allow ten effective full power months (EFPM) of operation for each unit prior to performing another steam generator inspection. Operation for ten effective full power months had been requested in the application for amendments dated March 6, 1979 (L-79-51) and May 18, 1979 (L-79-122).

Background

By letter (L-79-51) dated March 6, 1979, the licensee submitted the results of the most recent steam generator inspection for Turkey Point Unit 3 and requested authorization to operate ten effective full power months, beginning March 29, 1979, prior to the next steam generator inspection. The technical basis for the preventative plugging program implemented subsequent to the inspection was consistent with that for programs performed previously at this and other similarly degraded units. These programs have been determined adequate by the Nuclear Regulatory Commission (NRC) to support six effective full power months of operation. The plugging criteria implemented during this inspection were more conservative than those implemented previously for six months operation to support the request for ten effective full power months of operation.

As indicated in our Safety Evaluation Report (SER) dated March 30, 1979, supporting Amendment 46, current authorization to operate Turkey Point Unit 3, we did not have an adequate technical basis to predict steam generator performance for periods longer than six EFPM at a time, and that our consideration of extended operation beyond six EFPM would depend on the operating experience at this and similarly degraded PWR units. Accordingly, License Amendment 46 authorized Turkey Point Unit 3 to operate for only six effective full power months.

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By letter (L-79-215) dated August 7, 1979, the licensee again requested an amendment to the operating license for Turkey Point Unit 3 to allow ten effective full power months of operation prior to the next steam generator inspection. The licensee has justified the request on the basis of the March 6, 1979 submittal, existing steam generator operating restrictions, and the continued leak free operation of Turkey Point Units 3 and 4 since March 29 and June 1, 1979, respectively.

The March 6, 1979 submittal regarding the results of the most recent steam generator inspection and the implemented plugging criteria at Turkey Point Unit 3 was discussed and evaluated in the SER attached to License Amendment 46 dated March 30, 1979. The March 30, 1979 SER is incorporated into this Safety Evaluation by reference.

Evaluation

Turkey Point Unit 3 has operated since the authorized restart on March 29, 1979 (approximately 5-1/2 EFPM) without detectable steam generator leakage. Similarly, Turkey Point Unit 4, where the denting phenomenon is more advanced, has operated approximately three months into the current cycle without detectable steam generator leakage. This experience plus the results of the most recent inspections at these units indicate that the denting phenomenon remains in a predictable mode. In addition, the preventative plugging criteria implemented by the licensee in January 1979 and evaluated in our above referenced SER were based upon the predicted growth (using finite element analysis) of the 17.5% tube hoop strain contour during a ten month operating interval. These criteria were proved to be more conservative than those employed in previous inspections at this and at similarly degraded units which were based upon the predicted growth of the 17.5% contour over a six month operating interval. The basis for these plugging criteria have been previously accepted by NRC and been shown to adequately support six months of steam generator operation.

As expressed in our above referenced SER, we continue to have reservations regarding the validity of extrapolating the predictive methodology beyond six months. We find that there remains an insufficient technical basis upon which to authorize a four month extension to the currently authorized

six month operating interval. Considering, however (1) that the implemented plugging criteria were significantly more conservative than the criteria already accepted by NRC as being adequate to support six months of operation, and (2) that the currently authorized six EFPM operating interval has essentially been completed with no detectable steam generator leakage, we conclude that operating interval may be extended until the upcoming November refueling outage but limited to seven weeks (effective full power) without significantly altering our previous conclusions that the steam generator tubes will maintain an acceptable degree of integrity. The above considerations, together with the existing licensing conditions restricting steam generator operation in the event that detectable leaks occur, provide reasonable assurance that the health and safety of the public will be protected.

Environmental Consideration

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.

Date: September 26, 1979

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NO. 50-250FLORIDA POWER AND LIGHT COMPANYNOTICE OF ISSUANCE OF AMENDMENT TO FACILITY
OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 50 to Facility Operating License No. DPR-31 issued to Florida Power and Light Company (the licensee), which revised Technical Specifications for operation of the Turkey Point Nuclear Generating, Unit No. 3 (the facility) located in the Dade County, Florida. The amendment is effective as of the date of issuance.

The amendment permits continued operation of Turkey Point Plant Unit No. 3 for six equivalent full power months and an additional seven equivalent full power weeks from March 29, 1979, or until the next refueling outage, whichever occurs first.

The application for the amendment 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 this amendment was not required since this amendment does not involve a significant hazards consideration.

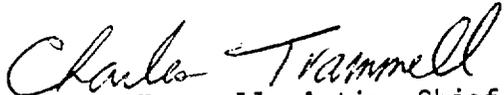
- 2 -

The Commission has determined that the issuance of this amendment 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 this amendment.

For further details with respect to this action, see (1) the application for amendment dated August 7, 1979, (2) Amendment No. 50 to License No. DPR-31, 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 26th day of September, 1979.

FOR THE NUCLEAR REGULATORY COMMISSION


Charles Trammell, Acting Chief
Operating Reactors Branch #1
Division of Operating Reactors