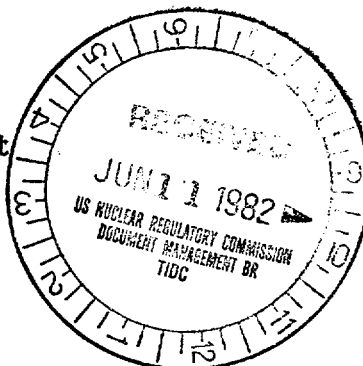


JUN 04 1982

Docket No. 50-251

DISTRIBUTION
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 DBrinkman
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 ASLAB
 TBarnhart-4
 CParrish
 MGrotenhuis
 LFrank

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. 80 to Facility Operating License No. DPR-41 for the Turkey Point Plant Unit No. 4. The amendment revises the license in response to your application transmitted by letter dated April 21, 1982.

The amendment extends the operating interval to ten equivalent full power months from December 10, 1981 at which time the steam generator shall be inspected. Additional conditions for extending the operating interval have been discussed with and agreed to by your staff.

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

Sincerely,

ORIGINAL SIGNED

Marshall Grotenhuis, Project Manager
 Operating Reactors Branch #1
 Division of Licensing

Enclosures:

1. Amendment No. 80 to DPR-41
2. Safety Evaluation
3. Notice of Issuance

cc w/enclosures:
 See next page

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 P PDR

Previous concurrences see next page

OFFICE	ORB#1:DL	ORB#1:DL	ORB#1:DL	AD/OR:DL	OELD		
SURNAME	CParrish	DNeighbors	SVArga	TNovak			
DATE	06/1/82	06/1/82:ds	06/1/82	06/1/82	06/1/82		

DISTRIBUTION
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 NRC PDR
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 TBarnhart-4
 CParrish
 MGrotenhuis
 LFrank
 Gray File

Docket No. 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. to Facility Operating License No. DPR-41 for the Turkey Point Plant Unit No. 4. The amendment revises the license in response to your application transmitted by letter dated April 21, 1982.

The amendment extends the operating interval to ten equivalent full power months from December 10, 1981 at which time the steam generator shall be inspected.

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

Sincerely,

Marshall Grotenhuis, Project Manager
 Operating Reactors Branch #1
 Division of Licensing

Enclosures:

1. Amendment No. to DPR-41
2. Safety Evaluation
3. Notice of Issuance

cc w/enclosures:
 See next page

OFFICE	ORB#1:DL	ORB#1:DL	ORB#1:DL	AD/OR:DL	OELD	
SURNAME	CParrish	MGrotenhuis	SVarga	TNowak	M. YOUNG	
DATE	06/1/82	06/1/82:ds	06/1/82	06/1/82	06/13/82	

Handwritten notes:
 w/o SER
 M. SER
 FRN's audit only concerned on noted change to the initial SER. To agreement with additional conditions

Robert E. Uhrig
Florida Power and Light Company

cc: 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

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

Mr. M. R. Stierheim
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
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Homestead, Florida 33030

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EPA Region IV
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Tallahassee, Florida 32304

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

James P. O'Reilly
Regional Administrator - Region II
U. S. Nuclear Regulatory Commission
101 Marietta Street - Suite 3100
Atlanta, Georgia 30303



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. 80
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 April 21, 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.

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DESIGNATED ORIGINAL

Certified By

[Handwritten Signature]

2. Accordingly, paragraph 3.D.1 of the license is amended to read as follows:

Steam Generator Inspection

1. After operation of six* equivalent full power months from the last inspection of all three steam generators, Turkey Point Unit 4 shall be brought to cold shutdown condition and all three steam generators shall be inspected unless: (1) an inspection of the steam generators is performed within this period, or (2) an extension is granted by the NRC to authorize period of operation. Any request for 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 the reactor coolant at a temperature greater than 350°F.

*extended to ten equivalent full power months of operation for cycle 8 subject to the following conditions:

- (1) The NRC staff shall be promptly notified in the event of any detectable trends in the indicated primary to secondary leakage, and
- (2) If the reactor is shutdown because of steam generator leakage the subsequent findings and any corrective action shall be discussed with the NRC staff prior to the resumption of power operation.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Joseph D. Neighlois
for Steven A. Varga, Chief
Operating Reactors Branch #1
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: June 4, 1982

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 80 TO FACILITY OPERATING LICENSE NO. DPR-41

DOCKET NO. 50-251

Replace the following page of Facility Operating License No. DPR-41
as indicated.

Remove Page

4

Insert Page

4

B. Technical Specifications

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

C. This license is subject to the following conditions for the protection of the environment:

(1) The applicant shall pursue evaluations of alternatives to the proposed cooling channel system during construction, interim operation, and evaluation of the channel system. These evaluations shall include at least the following:

(a) Study of availability of groundwater or other alternative sources of surface water to use in the cooling system.

(b) Study of applicability of mechanical cooling devices, including powered spray modules and cooling towers.

(c) Study of marine environmental impacts of once-through cooling alternatives (described in Section X of the AEC Final Environmental Statement on Turkey Point Units 3 and 4, July 1972).

(2) The applicant shall take appropriate corrective action on any adverse effects determined as a result of monitoring and study programs. To the fullest extent practicable, the applicant shall utilize results of study programs in improving and modifying the operation of the facility and its cooling system so as to achieve a minimal adverse environmental impact.

D. Steam Generator Inspection

1. After operation of six*equivalent full power months from the last inspection of all three steam generators, Turkey Point Unit 4 shall be brought to the cold shutdown condition and all three steam generators shall be inspected unless: (1) an inspection of the steam generators is performed within this period, or (2) an extension is granted by the NRC to authorize period of operation. Any request for 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 the reactor coolant at a temperature greater than 350 F.

*extended to ten equivalent full power months for cycle 8 subject to the following conditions: (1) the NRC staff shall be promptly notified in the event of any detectable trends in the indicated primary to secondary leakage, and (2) if the reactor is shutdown because of steam generator leakage the subsequent findings and any corrective action shall be discussed with the NRC staff prior to the resumption of power operation.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 80 TO FACILITY OPERATING LICENSE NO. DPR-41

FLORIDA POWER AND LIGHT COMPANY

TURKEY POINT PLANT, UNIT NO. 4

DOCKET NO. 50-251

Introduction

By letter dated April 21, 1982, Florida Power and Light Company (the licensee) requested an extension of four months to the operating interval of six months for the Turkey Point Plant Unit No. 4, Facility Operating License No. DPR-41. The application was supported by the extensive inspection program and the conservative plugging program presented in the inspection results dated December 18, 1981. The program, conducted during the November outage, included denting inspections in the hot and cold legs of all the steam generators, flow slot measurements, small radius U-bend inspections, Regulatory Guide 1.83 inspections in hot and cold legs of all three steam generators and preventive plugging to permit ten months operation. The staff had previously authorized two month extensions beyond six months operation during 1981 based on considerations that preventive plugging criteria implemented during the November 1980 steam generator inspection were more conservative than required to support six months operation. The unit returned to power on December 10, 1981 and the end of the six month operational period will be June 1982.


Discussion

The preventive plugging criteria implemented during the 1981 steam generator inspection included the criteria which have been accepted by the NRC as being adequate to support six EFPM operation. Since January 1979, the licensee has elected to perform additional preventive type plugging beyond what is required to support six EFPM operation. This additional plugging has been performed with the objective of supporting a ten EFPM operating interval for conservatism, as well as a contingency purpose.

The staff has previously expressed its reservations with regard to extending the methodology for preventive plugging to support a full ten EFPM operating interval. The staff has been concerned that the methodology for anticipating which tubes will become susceptible to stress corrosion cracking and leaks during the next interval becomes increasingly uncertain as the length of interval is increased. Therefore, the staff has continued to initially limit the authorized operating interval following each inspection to six EFPM, with extended operation beyond six EFPM being approved only on a case by case basis based upon continued leak free performance during the initial six EFPM and the fact that the previously implemented plugging was more conservative than that required to support six EFPM operation.

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Certified By: 

Turkey Point Unit 4 has not experienced denting related leaks since mid 1978. The period since this time has included two ten EFPM intervals. Unit 4 has essentially completed its currently authorized six EFPM operating interval and is presently operating with slight indication of 0.01 gpm leakage in steam generator C. This indication has been present during most of the current period of operation, has been relatively constant, and is significantly below the allowable 0.3 gpm limit in the Plant License. The licensee has stated that the behavior of this leakage to date is consistent with past experiences with "weeping" plugs.

In addition to denting, the Unit 4 steam generators have been subject to wastage degradation. The result of the November 1981 inspections for wastage attack revealed that tube wastage was occurring at a very minimal rate; a maximum thinning rate of 0.15% per EFPM was reported. This rate results in an insignificant amount of tube wall loss for the proposed ten EFPM operating interval.

Evaluation

Our review of the results of the gauging inspections which included plugging for 10 months operations performed in November 1981 indicated that denting was continuing at a slower rate, consistent with previous experience at this and other similarly degraded units. Tube thinning rate for the period of January 1981 through October 1981 had decreased from 1.77% EFPM for the June 1980 - November 1980 operating period to 0.15% EFPM indicating possible improvements in water chemistry control.

The currently authorized six EFPM operating interval has essentially been completed with no significant increase in the rate of leakage. In the event that significant tube leakage does occur, the 0.3 gpm leakage rate limit in the Plant Operating License provides assurance that the plant will be shutdown in a timely manner. This limitation on allowable leakage rate provides reasonable assurance that the steam generator tubes will not develop excessive leakage during normal or postulated accident conditions.

The staff will continue to closely monitor the leak performance of the Unit 4 steam generators. Depending on the magnitude of any observed changes in detectable leakage, the staff will consider taking action to require a reinspection of the steam generators prior to the completion of ten months operation as an additional precautionary measure. To this end, we are requiring that (1) the staff be notified immediately in the event of any detectable trends in the indicated primary to secondary leakage, and (2) if the reactor is shutdown because of steam generator leakage, subsequent findings and any corrective actions shall be discussed with the NRC staff prior to the resumption of power.

Subject to the additional requirements described above, we conclude that operation of Turkey Point Unit 4 may be extended from six to ten effective full power months with reasonable assurance that public health and safety will not be adversely affected. The licensee agrees with these requirements.

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: June 4, 1982

Principal Contributor
L Frank

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NO. 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. 80 to Facility Operating License No. DPR-41 issued to Florida Power and Light Company (the licensee), which revised the license of the Turkey Point Plant, Unit No. 4 (the facility) located in the Dade County, Florida. The amendment is effective as of the date of issuance.

The amendment extends the operating interval to ten equivalent full power months from December 10, 1981 at which time the steam generators shall be inspected.

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.

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.

- 2 -

For further details with respect to this action, see (1) the application for amendment dated April 21, 1982, (2) Amendment No. 80 to License No. 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 4th day of June, 1982.

FOR THE NUCLEAR REGULATORY COMMISSION

Joseph D. Neighbors
Joseph D. Neighbors, Acting Chief
Operating Reactors Branch #1
Division of Licensing