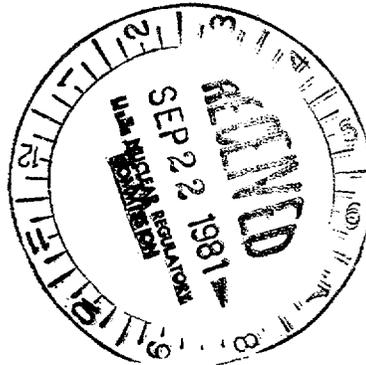


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SEP 10 1981

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. 66 to Facility Operating License No. DPR-41 for the Turkey Point Plant Unit No. 4. The amendment consists of changes to the Technical Specifications in response to your application transmitted by letter dated July 30, 1981.

The amendment authorizes continued operation of Unit 4 for ten equivalent full power months from January 13, 1981.

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. 66 to DPR-41
2. Safety Evaluation
3. Notice of Issuance

cc w/enclosures:  
 See next page

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*Handwritten signature and date: 9/10/81*

*Handwritten notes: no legal by memo 9/8/81*

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SURNAME	CParrish	MGrotenhuis	SVarga	TNovak	GOLDBERG	
DATE	9/4/81	9/4/81:ds	9/10/81	9/4/81	9/4/81	9/4/81

Robert E. Uhrig  
Florida Power and Light Company

cc: Mr. Robert Lowenstein, Esquire  
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Environmental and Urban Affairs Library  
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Miami, Florida 33199

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Miami, Florida 33131

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Turkey Point Plant  
Florida Power and Light Company  
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Miami, Florida 33101

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County Manager of Metropolitan  
Dade County  
Miami, Florida 33130

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U. S. Nuclear Regulatory Commission  
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Miami, Florida 33131



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. 66  
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 July 30, 1981, 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, paragraph 3.D.1 of the license is amended to read as follows:

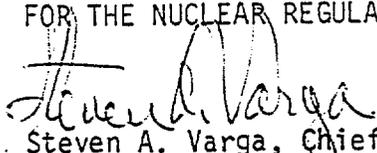
D. Steam Generator Inspection

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 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 7 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

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

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: September 10, 1981

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 66 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 7 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. 66 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 May 27, 1981, 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, 1980, additional steam generator tube wastage information dated February 27, 1981 and the pertinent operating history of both Unit 3 and Unit 4. Based upon the considerations that the preventive plugging criteria implemented during the November 1980 steam generator inspection were more conservative that required to support six months operation, that extensions previously granted for Unit 3 and 4 since mid-1978 have not resulted in denting related leaks, and that Unit 4 had essentially completed its authorized six month operating interval with essentially no leakage, the staff authorized a two month extension beyond six months operation. The supporting SER is incorporated into this SER by reference. The staff preferred not to make a finding regarding the full four month extension which was requested, until after the leak performance during the first two months of the requested extension could be established. By letter dated July 30, 1981, the licensee has again requested authorization to extend the operation of Unit 4 to ten equivalent full power months (EFPM) prior to performing the next steam generator inspection.

Discussion

The preventive plugging criteria implemented during the November 1980 steam generator inspection included the criteria which have been accepted by the NRC as being adequate to support six EFPM. Since January 1979, the licensee has elected to perform additional preventive type plugging beyond what is required to support six EFPM operation (see above referenced SER). 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.

Turkey Point Units 3 and 4 have not experienced denting related leaks since mid-1978. The period since this time has included one ten EFPM interval at Unit 4 and two eight EFPM intervals at Unit 3. Unit 4 has essentially completed its currently authorized eight EFPM operating interval and is presently operating with slight indication of 0.01 gpm leakage in steam generator B. This indication has been present since well before the conclusion of the initial six months 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.

### Evaluation

Our review of the results of the gauging inspections performed in November 1980 indicated that denting was continuing to develop in a manner consistent with previous experience at this and other similarly degraded units. The currently authorized eight EFPM operating interval has essentially been completed with no significant leakage, and no significant increase in the rate of denting is indicated. 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 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 shut down 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.

In addition to denting, the Unit 4 steam generators are also subject to wastage degradation. The acceptability of the requested ten month operating interval from a wastage stand point was evaluated in our previous SER (referenced earlier).

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

#### 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 10, 1981

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. 66 to Facility Operating License No. DPR-41 issued to Florida Power and Light Company (the licensee), which revised Technical Specifications for operation 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 authorizes continued operation of Unit 4 for ten equivalent full power months from January 13, 1981.

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

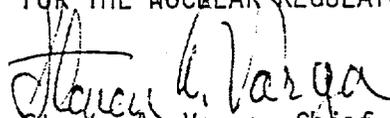
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10 CFR §51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

For further details with respect to this action, see (1) the application for amendment dated July 30, 1981, (2) Amendment No. 66 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 10th day of September, 1981.

FOR THE NUCLEAR REGULATORY COMMISSION

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