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FILE NUMBER

TO: Mr Stello

FROM: Florida Pwr & Light Co  
Miami, Fla  
R E Uhrig

DATE OF DOCUMENT  
10-27-76

DATE RECEIVED 11-3-76

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DESCRIPTION

Ltr notarized 10-27-76...trans the follow:

ENCLOSURE

Amdt. to OL/Change to Tech Specs: Consisting of revisions with regard to steam generator surveillance requirements.....

(40 cys encl rec'd)

PLANT NAME:

Turkey Pt 3 & 4

**DO NOT REMOVE**

**ACKNOWLEDGED**

SAFETY

FOR ACTION/INFORMATION

ENVIRO 11-3-76 ehf

ASSIGNED AD:		ASSIGNED AD:
BRANCH CHIEF:	<i>Leav (5)</i>	BRANCH CHIEF:
PROJECT MANAGER:	<i>Elliot</i>	PROJECT MANAGER:
LIC. ASST.:	<i>Parrish</i>	LIC. ASST.:

INTERNAL DISTRIBUTION

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MIPC	MACCARRY	KIRKWOOD	ERNST
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HANAUER	SIHWEIL	OPERATING REACTORS	SPANGLER
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			SITE TECH.
PROJECT MANAGEMENT	REACTOR SAFETY	OPERATING TECH.	GAMMILL
BOYD	ROSS	EISENHUT	STAPP
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HOUSTON	ROSZTOCZY	BAER	
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	RUTBERG		KREGER

EXTERNAL DISTRIBUTION

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<input checked="" type="checkbox"/> LPDR: <i>Miam, Fla</i>	NAT LAB:	BROOKHAVEN NAT LAB	<p>9 11471</p>
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<input checked="" type="checkbox"/> ACRS/6CYS HOLDING/SENT	<i>AS CAT B</i>	<i>11-3-76</i>	

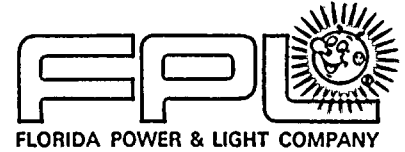
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MEMORANDUM FOR THE RECORD : ...

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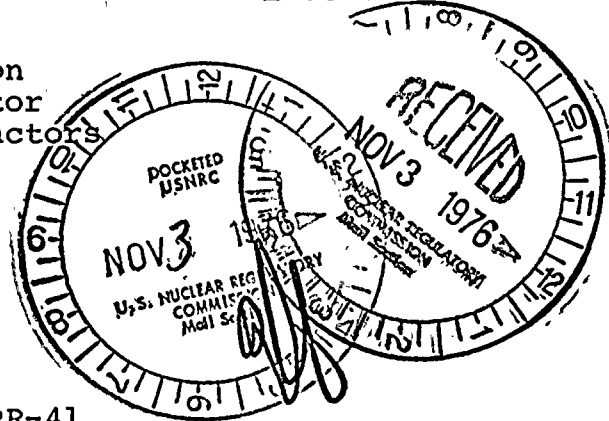
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REGULATORY DOCKET FILE COPY

October 27, 1976  
L-76-372

Director of Nuclear Reactor Regulation  
Attention: Mr. Victor Stello, Director  
Division of Operating Reactors  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555



Dear Mr. Stello:

Re: Turkey Point Units 3 and 4  
Docket Nos. 50-250 and 50-251  
Proposed Amendment to Facility  
Operating Licenses DPR-31 and DPR-41

In accordance with 10 CFR 50.30, Florida Power & Light Company submits herewith three (3) signed originals and forty (40) copies of a request to amend Appendix A of Facility Operating Licenses DPR-31 and DPR-41.

This proposal is being submitted in response to a September 8, 1976 letter from your staff which contained model technical specifications on steam generator tube leakage and steam generator tube surveillance requirements. The proposed changes are described below and shown on the accompanying Technical Specification pages bearing the date of this letter in the lower right hand corner.

Page 3.1-1

Specification 3.1.1.b is revised to incorporate limiting conditions for operation regarding primary-to-secondary leakage through steam generator tubes.

Page B3.1-1

The Basis for Specification 3.1.1 is revised to include a discussion of steam generator tube integrity.

The proposed amendment has been reviewed by the Turkey Point Plant Nuclear Safety Committee and the Florida Power & Light Company Nuclear Review Board. They have concluded that it does not involve a significant hazards consideration and should not require prenoticing pursuant to 10 CFR 2.105.

111/71

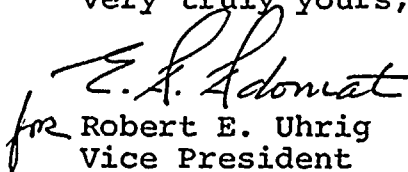


Director of Nuclear Reactor Regulation  
Attention: Mr. Victor Stello, Director  
Division of Operating Reactors

Page Two

The proposed amendment does not include new technical specifications on the surveillance of steam generator tubes, because we have not completed our review of that portion of the NRC model technical specifications. The model specifications represent a significant addition to the Turkey Point Technical Specifications, therefore, they need to be carefully considered to ensure their proper adaptation to the Turkey Point format. We intend to complete our review of the model technical specifications by December 20, 1976, at which time we will report the results of the review.

Very truly yours,

  
for Robert E. Uhrig  
Vice President

REU/MAS/cpc

Attachment

cc: Mr. Norman C. Moseley  
Jack R. Newman, Esquire



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### 3.0 LIMITING CONDITIONS FOR OPERATION

#### 3.1 REACTOR COOLANT SYSTEM

Applicability: Applies to the operating status of the Reactor Coolant System.

Objective: To specify those limiting conditions for operation of the Reactor Coolant System which must be met to assure safe reactor operation.

Specification: 1. OPERATIONAL COMPONENTS

a. Reactor Coolant Pumps

1. A minimum of ONE pump shall be in operation when the reactor is in power operation, except during low power physics tests.
2. A minimum of ONE pump, or ONE Residual Heat Removal Pump, shall be in operation during reactor coolant boron concentration reduction.
3. Reactor power shall not exceed 10% of rated power unless at least TWO reactor coolant pumps are in operation.
4. Reactor power shall not exceed 45% of rated power with only two pumps in operation unless the overtemperature  $\Delta T$  trip setpoint,  $K_1$ , for two loop operation, has been set at 0.88.

b. Steam Generators

1. A minimum of TWO steam generators shall be operable when the average coolant temperature is above 350° F.
2. During hot shutdown and power operation, except as allowed by Specification 3.1.1.b.3, the primary-to-secondary leak rate through the steam generator tubes shall not exceed 1 gallon per minute total for all 3 steam generators or 0.35 gallon per minute for each steam generator.
3. With any steam generator tube leak rate greater than the limits in Specification 3.1.1.b.2, the leak rate shall be reduced to within the limits within four hours or the unit shall be in cold shutdown within the next 36 hours.

c. Pressurizer Safety Valves

1. ONE valve shall be operable whenever the head is on the reactor vessel except during hydrostatic tests.
2. THREE valves shall be operable when the reactor coolant average temperature is above 350° F or the reactor is critical.



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## B3.1 BASES FOR LIMITING CONDITIONS FOR OPERATION, REACTOR COOLANT SYSTEM

### 1. Operational Components

The specification requires that a sufficient number of reactor coolant pumps be operating to provide coast down core cooling in the event that a loss of flow occurs. The flow provided will keep DNBR well above 1.30. When the boron concentration of the Reactor Coolant System is to be reduced the process must be uniform to prevent sudden reactivity changes in the reactor. Mixing of the reactor coolant will be sufficient to maintain a uniform boron concentration if at least one reactor coolant pump or one residual heat removal pump is running while the change is taking place. The residual heat removal pump will circulate the reactor coolant system volume in approximately one half hour.

Each of the pressurizer safety valves is designed to relieve 293,330 lbs. per hr. of saturated steam at the valve set point.<sup>(1)</sup> Below 350 F and 450 psig in the Reactor Coolant System, the Residual Heat Removal System can remove decay heat and thereby control system temperature and pressure. If no residual heat were removed by any of the means available the amount of steam which could be generated at safety valve lifting pressure would be less than the capacity of a single valve. Also, two safety valves have capacity greater than the maximum surge rate resulting from complete loss of load.<sup>(2)</sup>

The extent of stress corrosion cracking caused by localized corrosion can be limited by limiting steam generator tube leakage between the primary coolant system and the secondary coolant system. Cracks having a primary-to-secondary leakage less than the Technical Specification limit during operation will have an adequate margin of safety to withstand the loads imposed during normal operation and by postulated accidents. Operating plants have demonstrated that primary-to-secondary leakage can be detected by radiation monitoring of the steam generator blowdown. Leakage in excess of the Technical Specification limit may require plant shutdown and unscheduled steam generator tube inspections if the leakage cannot be reduced below the limit within a specified length of time. Leaking tubes will be located and plugged during the shutdown.

### 2. Heatup and Cooldown

All components in the Reactor Coolant System are designed to withstand the effects of cyclic loads due to reactor system temperature and pressure changes. These cyclic loads are introduced by normal unit load transients, reactor trips, and startup and shutdown operation. The number of thermal and loading cycles used for design purposes are shown in Table 4.1-8 of the FSAR. During unit startup and shutdown, the rates of temperature and pressure changes are limited. The maximum specified heatup and cooldown rates are consistent with the design number of cycles and satisfy stress limits for cyclic operation.

10/27/76



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2. THREE valves shall be operable when the reactor coolant average temperature is above 350° F or the reactor is critical.

STATE OF FLORIDA     )  
                                   )  
 COUNTY OF DADE        )           ss.

      E. A. Adomat      , being first duly sworn, deposes and says:

That he is Executive Vice President of Florida Power & Light Company, the                                    herein;

That he has executed the foregoing document; that the statements made in this said document are true and correct to the best of his knowledge, information, and belief, and that he is authorized to execute the document on behalf of said Licensee.

*E. A. Adomat*  
 \_\_\_\_\_  
 E. A. Adomat

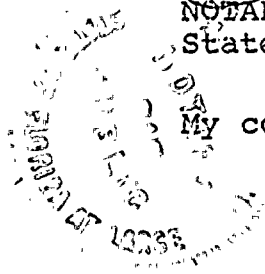
Subscribed and sworn to before me this

27<sup>th</sup> day of October, 1976

*Allen J. Carson*  
 \_\_\_\_\_  
 NOTARY PUBLIC, in and for the County of Dade,  
 State of Florida

NOTARY PUBLIC STATE OF FLORIDA AT LARGE  
 MY COMMISSION EXPIRES NOV. 30 1979  
 BONDED THRU GENERAL INS. UNDERWRITERS

My commission expires: \_\_\_\_\_



SECRET

