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TO: Mr. V. Stello

FROM: Florida Power & Light Co.
Miami, Fla. 33101
R.E. Uhrig

DATE OF DOCUMENT 3-26-76

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DESCRIPTION Ltr notarized 4-1-76 request for amdt of App. A of Lic. DPR-31 & DPR-41 in re to surveillance testing & trans the following:

ENCLOSURE Revised & addl pages to Proposed Tech Specs for Turkey Pt. Units 3 & 4....

(40 cys encl rec'd)

ACKNOWLEDGED

DO NOT REMOVE

PLANT NAME: Turkey Pt. Units 3 & 4

SAFETY — FOR ACTION/INFORMATION — ENVIRO — DHL 4-7-76

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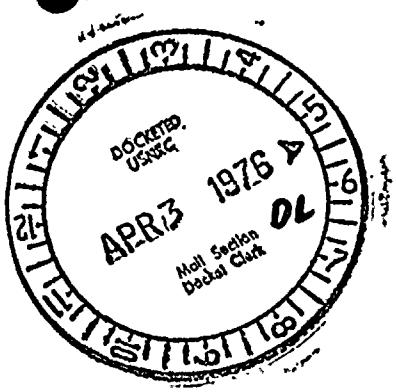

FPL
FLORIDA POWER & LIGHT COMPANY

March 26, 1976
L-76-133

Regulatory Docket File

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 and Light Company submits herewith three (3) signed originals and forty (40) conformed copies of a request to amend Appendix A of Facility Operating Licenses DPR-31 and DPR-41.

This submittal proposes Technical Specification changes to permit waiver of certain surveillance testing requirements during cold shutdown or refueling shutdown conditions and supplements our previous proposals of September 19-20, 1974. The proposed changes are as described below and as shown on the accompanying Technical Specification pages bearing the date of this letter in the lower right hand corner.

Page 4.1-1

Technical Specification 4.0 is expanded to include a general discussion of surveillance tests which are not applicable during cold shutdown or refueling shutdown conditions.

Table 4.1-1, Sheets 2 and 3

A footnote, applicable to items 17A and 17B, is added to modify the surveillance requirements for these items during cold or refueling shutdowns.

Table 4.1-2, Sheets 1 and 2

Footnotes, applicable to items 2, 4, 10, 14 and 17, are added to modify the surveillance requirements for these items during cold or refueling shutdowns.

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Page 4.5-2

Technical Specification 4.5.2.a.2 is revised such that the acceptance criteria is satisfied if the safety injection pumps reach the required head for "normal" as well as for "recirculation" flow. During cold or refueling shutdown conditions, the RHR pumps are normally operated to remove decay heat, in which case it would be necessary to check head vs. normal flow rather than recirculation flow.

Footnotes, applicable to Technical Specifications 4.5.2.b.1, 4.5.2.b.2, and 4.5.2.b.4 are added to modify the surveillance requirements for cycling the boron injection tank isolation valves and the containment recirculation sump suction valves and the RWST outlet valves during cold or refueling shutdowns.

Page 4.6-2

A footnote, applicable to Technical Specification 4.6.2, is added to modify the surveillance requirements for starting the containment spray pumps and the emergency containment cooling fans during cold or refueling shutdowns.

Page 4.7-1

A footnote, applicable to Technical Specification 4.7.1.1, is added to modify the surveillance requirement for conducting emergency containment filtering system tests during cold or refueling shutdowns.

Page 4.10-1

A footnote, applicable to Technical Specification 4.10, is added to modify the surveillance requirements for conducting periodic tests of the auxiliary feedwater system during cold or refueling shutdowns.

The proposed amendment has been reviewed and the conclusion reached that it does not involve a significant hazards consideration, therefore, prenoticing pursuant to 10 CFR 2.105 should not be required. A written safety evaluation is attached.

Very truly yours,

Robert E. Uhrig
Vice President

REU/MAS/cpc

Attachment

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

STATE OF FLORIDA)
) SS
COUNTY OF DADE)

Robert E. Uhrig, being first duly sworn, deposes and says:

That he is a Vice President of Florida Power & Light Company, the Licensee 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.

Robert E. Uhrig
Robert E. Uhrig

Subscribed and sworn to before me

this 1st day of April, 1976

Nancy C. Holmes
Notary Public, in and for the
County of Dade, State of Florida

NOTARY PUBLIC STATE OF FLORIDA at LARGE
MY COMMISSION EXPIRES AUGUST 27, 1979
BONDED THRU MAYNARD BONDING AGENCY

My Commission expires _____

Regulatory Docket File

Revised Page Dated 3-26-76

4.0 SURVEILLANCE REQUIREMENTS

4.0.1 Specified intervals may be adjusted plus or minus 25% to accommodate normal test schedules.

4.0.2 When the reactor is in a shutdown condition, some of the surveillance requirements discussed in this section are not required to be satisfied provided that the safety limits or limiting conditions for operation for the shutdown status are satisfied. When a surveillance activity is not completed because the reactor is shutdown and the surveillance is not required, the surveillance requirement shall be met prior to the time indicated in the applicable footnote.

4.1 OPERATIONAL SAFETY REVIEW

Applicability: Applies to items directly related to safety limits and limiting conditions for operation.

Objective: To specify the minimum frequency and type of surveillance to be applied to equipment and conditions.

Specification: Calibration, testing, and checking of analog channels and testing of logic channels shall be performed as specified in Table 4.1-1.

Equipment and sampling tests shall be conducted as specified in Table 4.1-2.

TABLE 4.1-1 SHEET 2

Channel Description	Check	Calibrate	Test	Remarks
10. Rod Position Bank Counters	S†	N.A.	N.A.	With analog Rod Position
11. Steam Generator Level	S†	R	M†	
12. Charging Flow	N.A.	R	N.A.	
13. Residual Heat Removal Pump Flow	N.A.	R	N.A.	
14. Boric Acid Tank Level	W	R	N.A.	
15. Refueling Water Storage Tank Level	W†	R.	N.A.	
16. Volume Control Tank Level	N.A.	R	N.A.	
17A. Containment Pressure	W††	R	M††	Wide Range
17B. Containment Pressure	W††	R	M††	Narrow Range
18A. Process Radiation	D	A***	M	
18B. Area Radiation	D	A	M	
19. Boric Acid Control	N.A.	N.A.	R	
20. Containment Sump Level	N.A.	R	N.A.	
21. Accumulator Level and Pressure	S†	R	N.A.	
22. Steam Line Pressure	S†	R	M†	

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TABLE 4.1-1 SHEET 3

	Channel Description	Check	Calibrate	Test	Remarks
23.	Environmental Radiological Monitors	N.A.	A(1)	M(1)	(1) Flow
24.	Logic Channels	N.A.	N.A.	M†	
25.	Emer. Portable Survey Instruments	N.A.	A	M	
26.	Seismograph	N.A.	N.A.	Q	Make trace Test battery (change semi-annually)

* Using moveable in-core detector system.
** Frequency only
*** Effluent monitors only. Calibration shall be as specified in 3.9.

S - Each Shift
D - Daily
W - Weekly
B/W - Every Two Weeks
M - Monthly
Q - Quarterly
P - Prior to each startup if not done previous week
R - Each Refueling Shutdown
A - Annually
N.A. - Not applicable
† - N.A. during cold or refueling shutdowns. The specified tests, however, shall be performed within one surveillance interval prior to startup.
†† - N.A. during cold or refueling shutdowns. The specified tests, however, shall be performed within one surveillance interval prior to heatup above 200F.

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TABLE 4.1-2

MINIMUM FREQUENCIES FOR EQUIPMENT AND SAMPLING TESTS

		Check	Frequency	Max. Time Between Tests (Days)
1.	Reactor Coolant Samples	Radiochem. ($T_{\frac{1}{2}}$>30 Min)	Monthly	45
		Cl & O_2	5/Week	3
		Tritium Activity	Weekly	10
		Gross β,γ Activity (μCi/cc)	5/Week	3
		Boron Concentration	2/Week	5
		Ⓔ Determination	Semi-annually	30Wks.
2.	Refueling Water Storage Tank Water Sample	Boron Concentration	Weekly †	10
3.	Boric Acid Tank	Boron Concentration	2/Week	5
4.	Boron Injection Tank	Boron Concentration	Monthly †	45
5.	Control Rods	Rod drop times of all full length rods	Each refueling shutdown and following maintenance	NA
		Partial movement of full length rods	Biweekly while critical	20
6.	Pressurizer Safety Valves	Set point	Each refueling shutdown	NA
7.	Main Steam Safety Valves	Set point	Each refueling shutdown	NA
8.	Containment Isolation Trip	Functioning	Each refueling shutdown	NA
9.	Refueling System Interlocks	Functioning	Prior to each refueling shutdown	NA
10.	Accumulator	Boron Concentration	Monthly †	45
11.	Reactor Coolant System Leakage	Evaluate	Daily	NA
12.	Diesel Fuel Supply	Fuel inventory	Weekly	10
13.	Spent Fuel Pit	Boron Concentration	Prior to refueling	NA
14.	Secondary Coolant	I-131 Concentration	Weekly * ††	10
15.	Vent Gas & Particulates	I-131 & Particulate Activity	Weekly *	10
16.	Fire Protection Pump & Power Supply	Operable	Monthly	45
17.	Turbine Stop and Control Valves, Reheater Stop and Intercept Valves	Closure	Monthly **	
18.	LP Turbine Rotor Inspection (w/o rotor disassembly)	V, MT, PT	Every 5 Years	6 years

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TABLE 4.1-2 SHEET 2

† - N.A. during cold or refueling shutdowns. The specified tests, however, shall be performed prior to heatup above 200 F.

†† - N.A. when reactor power is less than 2 percent during and after a cold or refueling shutdown. The sampling surveillance shall commence within 24 hours after sustained operation above 2 percent power.

* - When activity exceeds 10% of spec, frequency shall be changed to Daily.

** - N.A. during cold or refueling shutdowns, or at hot shutdown, when all main steam isolation valves are shut. The specified tests, however, shall be performed within one surveillance period prior to starting the turbine.

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2. Pumps shall start and reach required head for normal or recirculation flow, whichever is applicable to the operating condition; the instruments and visual observations shall indicate proper functioning. Test operation shall be for a least 15 minutes.

b. Valves

1. The boron injection tank isolation valves receiving a Safety Injection signal shall be cycled monthly.††

2. The containment recirculation sump suction valves shall be cycled monthly.†

3. Accumulator check valves shall be checked for operability during each refueling shutdown.

4. The refueling water storage tank outlet valves shall be tested in performing the respective pump tests.†

† - N.A. during cold or refueling shutdowns. The specified tests, however, shall be performed within one surveillance interval prior to reactor startup.

†† - N.A. during cold or refueling shutdowns. The specified tests, however, shall be performed within one surveillance interval prior to heatup above 200 F.

2. COMPONENT TESTS

Pumps and Fans

The containment spray pumps and the Emergency Containment Cooling fans shall be started at intervals not greater than one (1) month. ††

Acceptable levels of performance shall be that the pumps reach their rated shut off heads, the fan motors reach their nominal operating current for the containment atmosphere during the test, and both operate for at least fifteen minutes.

Valves

The systems motor operated isolation valves will be tested for operation during system tests.

†† - N.A. during cold or refueling shutdowns. The specified tests, however, shall be performed within one surveillance interval prior to heatup above 200 F.

4.7 EMERGENCY CONTAINMENT FILTERING AND POST ACCIDENT CONTAINMENT VENT SYSTEMS

Applicability: Applies to the Emergency Containment Filtering and the Post Accident Containment Vent System components.

Objectives: To verify that these systems and components will be able to perform their design functions.

Specification:

4.7.1 EMERGENCY CONTAINMENT FILTERING SYSTEM

1. OPERATING TESTS

System tests shall be performed at approximately quarterly intervals.†† These tests shall consist of visual inspection and pressure drop measurements across each filter bank. Visual inspection shall include inspection of general condition for evidence of: water, oil, or other foreign material; gasket deterioration adhesive deterioration in the HEPA units; excessive dust cake on the demisters; and unusual or excessive noise or vibration when the fan motor is running. Pressure drop across any filter bank shall not exceed two times the pressure drop when new and shall not be less than the pressure drop when new.

2.. PERFORMANCE TESTS

During each refueling operation, "in-place" DOP and freon tests shall be conducted at design flow on each unit (all flow paths). 99.9% DOP removal and 99.5% freon removal shall constitute acceptable performance.

††- N.A. during cold or refueling shutdowns. The specified tests, however, shall be performed within one surveillance interval prior to heatup above 200 F.

4.10 AUXILIARY FEEDWATER SYSTEM

Applicability: Applies to periodic testing requirements of the auxiliary feedwater system.†

Objective: To verify the operability of the auxiliary feedwater system and its ability to respond properly when required.

Specifications:

1. Each turbine-driven auxiliary feedwater pump shall be started at intervals not greater than one month; run for 15 minutes and a flow rate of 600 gpm established to the steam generators.

2. The auxiliary feedwater discharge valves shall be tested by operator action during pump tests.

3. Steam supply and turbine pressure valves shall be tested during pump tests.

4. These tests shall be considered satisfactory if control panel indication and visual observation of the equipment demonstrate that all components have operated properly.

†- N.A. during cold or refueling shutdowns (only for the Unit at cold or refueling shutdown). The specified tests, however, shall be performed within one surveillance interval prior to starting the turbine.

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SAFETY EVALUATION

INTRODUCTION

The limiting conditions for operation of the Technical Specifications describe the instrumentation and equipment required for specific plant conditions. They also describe the remedial action necessary to place the reactor in a safe condition should a limiting condition for operation not be met. The bases for the various limiting conditions for operation and safety limits are included in the Technical Specifications.

This submittal proposes Technical Specification changes to permit waiver of surveillance testing requirements during cold or refueling shutdown conditions. The specific changes are discussed below. The changes do not eliminate any test, but simply permit delaying certain tests until such time as the associated limiting condition for operation is applicable.

DISCUSSION

1. Table 4.1-1, Items 17A & 17B:

   The containment pressure channels are needed to initiate signals for LOCA or steam break accidents in the containment and to indicate containment pressure during operation. They have no safety function when the reactor is cooled below 200°F and the waiver of the testing presents no hazard.

2. Table 4.1-2, Items 2, 4, 10:

   The boron concentration specification for the Refueling Water Storage Tank (RWST), Boron Injection Tank (BIT), and the Accumulators has been provided to ensure adequate boron is available to insert negative reactivity into the core in the event of a steam break or LOCA accident.

   At cold or refueling shutdown conditions, these accidents cannot occur and the requirement to sample these tanks may be waived. The tanks will be verified to be at the required boron concentration prior to heating up the unit above 200°F.

3. Table 4.1-2, Item 14:

   The sampling of secondary coolant for I-131 is to insure, in the event of a load rejection accident during operation, that the I-131 released to the atmosphere via the steam generator safety valves does not pose a hazard to the health and safety of the public.

If the reactor is in a cold condition, no steam will be generated and no I-131 can be released. It is therefore safe to waive this sampling requirement at cold or refueling shutdown.

Below 2 percent power, the reactor would not be maintaining any electrical load and therefore the load rejection accident could not occur. The I-131 is also dependent upon reactor power for its creation; below 2 percent power no significant I-131 is created. Even if there was a primary to steam generator secondary tube leak, only insignificant trace amounts of I-131 would be found.

4. Table 4.1-2, Item 17:

The turbine stop and control valves and the reheater stop and intercept valves are provided with automatic closure devices to prevent turbine overspeed and missile accidents as described in the FSAR. In a cold condition, no steam is being generated and there is no need to test the closure of these valves. Also, with all main steam isolation valves closed, the turbine cannot be started.

5. Item 4.5.2.a.2:

The provision to allow the acceptance criteria to be "required head at normal or recirculation flow; is in keeping with good engineering practice. The test is to demonstrate that the pumping characteristics continue to be satisfactory. Normally, at refueling or cold shutdowns the RHR pumps are operated to remove decay heat, and it is necessary to check head vs. normal flow and not recirculation flow.

6. Item 4.5.2.b.1:

The boron injection tank (BIT) was provided to insure adequate poisoning of the core in the event of a steam line break accident. At cold or refueling shutdown, it is not required to have the BIT available to assure reactor safety because the reactor is already borated to a safe shutdown margin at that time and little if any reactivity will be inserted by temperature change after cooldown. Therefore, it is not necessary to test the BIT isolation valves during cold or refueling shutdowns.

7. Item 4.5.2.b.2:

The containment recirculation sump suction valves are required to be opened when a LOCA has occurred and recirculation from the containment floor is required. When the reactor is in a cold or refueling shutdown condition, the RHR system is in operation to remove decay heat. The sump suction valves connect to the RHR system and it is not feasible to secure the RHR system in order to cycle these valves. The probability

7. Item 4.5.2.b.2: (Continued)

that these valves would be required below 350°F is sufficiently remote to conclude that no hazard is presented by delaying the surveillance test of these valves.

8. Item 4.5.2.b.4:

The refueling water storage tank outlet valves are normally left open during reactor operation to assure a ready suction supply to the low and high head safety injection pumps. These valves are shut when shifting to the recirculation phase during a LOCA or when the refueling cavity has been flooded. Testing the valves to assure they will operate when the plant is already in a cold or refueling condition does nothing to improve the assurance that the reactor is in a safe condition.

9. Item 4.6.2:

The containment spray pumps and emergency containment coolers are provided to reduce containment pressure in the event of a LOCA or steam break accident. When the reactor is in a cold or refueling condition, these accidents cannot occur and pressurize the containment; therefore, increasing the test interval presents no safety hazard.

10. Item 4.7.1.1:

The emergency containment filters are provided to remove radioactive airborne particles from the containment atmosphere in the event of a LOCA. At cold or refueling shutdown the probability of a LOCA occurring and generating airborne activity is very remote; therefore, no safety hazard is presented by waiving its surveillance testing interval.

11. Item 4.10:

The auxiliary feedwater system has both individual unit and shared unit safety features.

At cold or refueling shutdown conditions, the affected unit's steam supply and feedwater control cannot be tested because the unit is cold and cannot generate steam. The function of these systems is to help cool down a hot unit; since the unit is already cold no safety hazard is presented by not testing these features.

Also, unless the reactor is critical enough steam cannot be generated to run the auxiliary feed pumps long enough to verify the required 200 gpm per steam generator feed flow.

CONCLUSIONS

Based on these considerations, (1) the proposed change does not increase the probability or consequences of accidents or malfunctions of equipment important to safety and does not reduce the margin of safety as defined in the basis for any technical specification, therefore, the change 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.