See correction #1 of 2 ltr of 8/13/82
See correction #2 of 2 ltr of 10/22/82

Docket Nos. 50-250
50-251

JUL 30 1982

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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. 87 to Facility Operating License No. DPR-31 and Amendment No. 81 to Facility Operating License No. DPR-41 for the Turkey Point Plant Unit Nos. 3 and 4, respectively. The amendments consist of changes to the Technical Specifications in response to your application transmitted by letter dated December 30, 1980.

These amendments provide for redundancy in the residual heat removal system.

We note that your letter dated July 22, 1980 deals with the testing frequency of the residual heat removal system. Upon discussion of that letter with your staff they have agreed to withdraw that amendment request.

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. 87 to DPR-31
2. Amendment No. 81 to DPR-41
3. Safety Evaluation
4. Notice of Issuance

cc w/encls:
See next page

OFFICE	DL:ORB#1	DL:ORB#1	DL:ORB#1	DL:OR	OELD	DL:ORB-1	
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DATE	5/12/82	5/11/82	5/19/82	5/19/82	7/21/82	5/14/82	

FRN dated only

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Florida Power and Light Company

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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. 87
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 December 30, 1980 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, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Facility Operating License No. DPR-31 is hereby amended to read as follows:

   (B) Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 87 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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: July 30, 1982

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

FLORIDA POWER AND LIGHT COMPANY

DOCKET NO. 50-250

TURKEY POINT PLANT UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 81
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 December 30, 1980, 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, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Facility Operating License No. DPR-41 is hereby amended to read as follows:

   (B) Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 81 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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: July 30, 1982

ATTACHMENT TO LICENSE AMENDMENTS

AMENDMENT NO. 87 TO FACILITY OPERATING LICENSE NO. DPR-31

AMENDMENT NO. 81 TO FACILITY OPERATING LICENSE NO. DPR-41

DOCKET NOS. 50-250 AND 50-251

Revise Appendix A as follows:

Remove Pages	Insert Pages
--	1-7
3.4-2	3.4-2
--	3.4-2a
3.4-3	3.4-3
Table 4.1-2 (sheet 2 of 3)	Table 4.1-2 (sheet 2 of 3)
Table 4.1-2 (sheet 3 of 3)	Table 4.1-2 (sheet 3 of 3)
4.4-3	4.4-3
B.3.1-1	B.3.1-1
--	B.3.1-1a

1.23 COOLANT LOOP

Each of the following is defined as being a Coolant Loop:

1. Reactor Coolant Loop A and its associated reactor coolant pump and steam generator with secondary side level greater than or equal to 10%.

2. Reactor Coolant Loop B and its associated reactor coolant pump and steam generator with secondary side level greater than or equal to 10%.

3. Reactor Coolant Loop C and is associated reactor coolant pump and steam generator with secondary side level greater than or equal to 10%.

4. Residual Heat Removal Loop A and its associated residual heat removal pump and heat exchanger.

5. Residual Heat Removal Loop B and its associated residual heat removal pump and heat exchanger.

5. TWO residual heat removal pumps shall be operable.

6. TWO residual heat exchangers shall be operable.

7. All valves, interlocks and piping assoicated with the above components and required for post accident operation, shall be operable, except valves that are positioned and locked. Valves 864-A, B, 862-A,B, 865-A, B, C; 866-A, B shall have power removed from their motor operators by locking open the circuit breakers at the Motor Control Centers. The air supply to valve 758 shall be shut off to the valve operator.

b. During power operation, the requirements of 3.4.1a may be modified to allow one of the following components to be inoperable (including associated valves and piping) at any one time except for the cases stated in 3.4.1.b.2. If the system is not restored to meet the requirements of 3.4.1a within the time period specified, the reactor shall be placed in the hot shutdown condition. If the requirements of 3.4.1a are not satisfied within an additional 48 hours the reactor shall be placed in the cold shutdown condition. Specification 3.0.1 applies to 3.4.1.b.

1. ONE accumulator may be out of service for a period of up to 4 hours.

2. ONE of FOUR safety injection pumps may be out of service for 30 days. A second safety injection pump may be out of service, provided the pump is restored to operable status within 24 hours. TWO of the FOUR safety injection pumps shall be tested to demonstrate operability before initiating maintenance of the inoperable pumps.

3. ONE channel of heat tracing on the flow path may be out of service for 24 hours.*

*See reference (11) on page B.3.4-2

c. During power operation three Reactor Coolant Loops shall be in operation.

1. With less than three Reactor Coolant Loops in operation the reactor must be in Hot Shutdown within one hour.

d. In Hot Shutdown at least two Reactor Coolant Loops shall be operable and at least one Reactor Coolant Loop shall be in operation.*

1. With less than two Reactor Coolant Loops operable, restore the required Coolant Loops to operable status within 72 hours or reduce T_{avg} to less than or equal to 350 F within the next 12 hours.

2. With no Reactor Coolant Loop in operation, suspend all operations involving a reduction in boron concentration of the Reactor Coolant System and immediately initiate corrective action to return the required Coolant Loop to operation.

e. With average coolant temperature less than 350 F, at least two Coolant Loops shall be operable or immediate corrective action must be taken to return two Coolant Loops to operable as soon as possible. One of these Coolant Loops shall be in Operation.*

1. With no Coolant Loop in operation, suspend all operations involving a reduction in boron concentration of the Reactor Coolant System and immediately initiate corrective action to return the required Coolant Loop to operation.

* All reactor coolant pumps and residual heat removal pumps may be de-energized for up to 1 hour provided 1) no operations are permitted that would cause dilution of the reactor coolant system boron concentration, and 2) core outlet temperature is maintained at last 10 F below saturation temperature.

f. In Refueling Shutdown, at least one residual heat removal Coolant Loop shall be in operation or all operations involving an increase in the reactor decay heat load or a reduction in boron concentration in the Reactor Coolant System must be suspended, and all containment penetrations providing direct access from the containment atmosphere to the outside atmosphere must be closed in four hours. As an exception, the single residual heat removal Coolant Loop may be removed from operation during the performance of core alterations in the vicinity of the reactor pressure vessel hot legs, provided core outlet temperature is maintained below 160 F.

g. In Refueling Shutdown, when the water level above the top of the pressure vessel flange is less than 23 feet, two residual heat removal Coolant Loops shall be operable or action to return two residual heat removal Coolant Loops to operable shall be taken as soon as possible.

2. EMERGENCY CONTAINMENT COOLING SYSTEMS

a. The reactor shall not be made critical, except for low power physics tests unless the following conditions are met:

1. Three emergency containment cooling units are operable.

2. Two containment spray pumps are operable.

3. All valves and piping associated with the above components, and required for post accident operation, are operable.

b. During power operation, the requirements of 3.4.2a may be modified to allow one of the following components to be inoperable (including associated valves and piping) at any one time. If the system is not restored to meet the requirements of 3.4.2a within the time period specified, the reactor shall be placed in the hot shutdown condition. If the requirements of 3.4.2a are not satisified within an additional 48 hours the reactor shall be placed in the cold shutdown condition. Specification 3.0.1 applies to 3.4.2.b.

TABLE 4.1-2 (SHEET 2 OF 3)

MINIMUM FREQUENCIES FOR EQUIPMENT AND SAMPLING TESTS

11.	Reactor Coolant System Leakage	Evaluate	Daily	NA
12.	Disel 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	Weekly	45
17.	Turbine Stop and Control Valves, Reheater Stop and Intercept Valves	Closure	Monthly***	45
18.	LP Turbine Rotor Inspector (w/o rotor disassembly)	V, MT, PT	Every 5 Years	6 Years
19.	Spent Fuel	Functioning	Within 7 days	7 days when crane is being used to measure spent fuel cask

TABLE 4.1-2 (SHEETS 3 OF 3)
MINIMUM FREQUENCIES FOR EQUIPMENT AND SAMPLING TESTS

20.	Coolant Loops	During power operation, verify three (3) reactor Coolant Loops in operation and circulating reactor coolant.	Once every 12 hrs.	12 hrs.
		At shutdown with average coolant temperature $\geq$ 350 F, verify		
		a. One (1) reactor Coolant Loop in operation and circulating reactor coolant.	Once every 12 hrs.	12 hrs.
		b. A second Coolant Loop operable.	Once every 7 days	7 days
		At shutdown (not refueling) with average coolant temperature < 350 F, verify		
		a. One (1) Coolant Loop is in operation and circulating reactor coolant.	Once every 12 hrs.	12 hrs.
		b A second Coolant Loop operable.	Once every 7 days	7 days
		At refueling shutdown, verify that one (1) residual heat removal Coolant Loop is in operation and circulating sufficient reactor coolant to maintain core outlet temperature below 160 F.	Once every 4 hrs.	4 hrs.

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

* When activity exceeds 10% of specification, 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.

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 suddent 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 283,300 lbs. per hr. of saturated steam at the valve set point. 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 grater than the maximum surge rate resulting from complex loss of load.(2)

The 50°F limit on maximum differential between steam generator secondary water temperature and reactor coolant temperature assures that the pressure transient caused by starting a reactor coolant pump when cold leg temperature is $\leq$ 275°F can be relieved by operation of one Power Operated Relief Valve (PORV). The 50°F limit includes instrument error.

The plant is designed to operate with all reactor coolant loops in operation, and maintain DNBR above 1.30 during all normal operations and anticipated transients. In power operation with one reactor coolant loop not in operation this specification requires that the plant be in at least Hot Shutdown within 1 hour.

In Hot Shutdown a single reactor coolant loop provides sufficient heat removal capability for removing decay heat, however, single failure considerations require that two loops be operable.

In Cold Shutdown, a single ractor coolant loop or RHR coolant loop provides sufficient heat removal capability for removing decay heat, but single failure considerations require that at least two loops be operable. Thus, if the reactor coolant loops are not operable, this specification requires two RHR loops to be operable.

The operation of one Reactor Coolant Pump or one RHR pump provides adequate flow to ensure mixing, prevent stratification and produce gradual reactivity changes during boron concentration reductions in the Reactor Coolant System. The reactivity change rate associated with boron reduction will, therefore, be within the capability of operator recognition and control.

The requirement that at least one residual heat removal (RHR) loop be in operation during Refueling Shutdown ensures that (1) sufficient cooling capacity is available to remove decay heat and maintain the water in the reactor pressure vessel below 160 F as required during Refueling Shutdown and (2) sufficient coolant circulation is maintained through the reactor core to minimize the effect of a boron dilution stratification.

The requirement to have two RHR loops operable when there is less than 23 feet of water above the core ensures that a single failure of the operating RHR loop will not result in a complete loss of residual heat removal capability. With the reactor vessel head removed and 23 feet of water above the core, a large heat sink is available for core cooling. Thus, in the event of a failure of the operating RHR loop, adequate time is provided to initiate emergency procedures to cool the core.

2. Pressure/Temperature Limits

All components in the Reactor Coolant System are designed to withstand the effects of cyclic loads due to system temperature and pressure changes. These cyclic loads are introduced by normal load transients, reactor trips, and startup and shutdown operations. The various categories of load cycles used for design purposes are provided in

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 87 TO FACILITY OPERATING LICENSE NO. DPR-31

AND AMENDMENT NO. 81 TO FACILITY OPERATING LICENSE NO. DPR-41

FLORIDA POWER AND LIGHT COMPANY

TURKEY POINT PLANT UNIT NOS. 3 AND 4

DOCKET NOS. 50-250 AND 50-251

Introduction

By letter dated December 30, 1980 Florida Power and Light Company (the licensee) submitted an amendment request related to the redundancy of the Residual Heat Removal (RHR) Systems for the Turkey Point Plant Unit Nos. 3 and 4. The request responds to a letter dated June 11, 1980 from D. G. Eisenhut. A related amendment request dated July 22, 1980 was discussed with the licensee staff and that request has been withdrawn.

Evaluation

The amendment request dated December 30, 1980 has been reviewed by an NRC contractor, EG&G. The Technical Evaluation Report (TER) has been reviewed by the staff and is incorporated in this Safety Evaluation Report (SER) by reference (copy attached).

The TER notes that, while the licensee has generally complied, there are departures from the model Technical Specifications (MTS) attached to the June 11, 1980 NRC letter. The Turkey Point Technical Specifications (TS) are not in the MTS format and, therefore, cannot be identical. In addition, the Turkey Point Plant predates the MTS and, therefore, some requirements are not identical. In our review we shall determine whether the differences are significant.

TS 3.4.2.a requires two RHR loops to be operable; if not they must be restored in 72 hours or be at a temperature of less than 350°F in 12 hours. This is somewhat different than the MTS but we find that there is no significant loss of safety margin and therefore acceptable.

Table 4.1.2 has no specific check for SG operability; however, the requirements for "Coolant loop operability" will cover this requirement adequately.

Other minor departures are as follows:

1. TS 3.4 for the Turkey Point Plant maintains the core outlet temperature below 160°F rather than 140°F.

2. The Turkey Point Plant puts no time limit on removing RHR loop from service as the standard Technical Specifications do, rather it is controlled by temperature.

3. Finally, surveillance of the RHR loop in the Turkey Point Plant is done by checking core outlet temperature rather than flow rate.

We have reviewed these differences and find that they are plant specific design differences which are not significant and are, therefore, acceptable.

Summary

The proposed revisions to the TS 3.4-1 and Table 4.1.2 are necessary to comply with the NRC letter dated June 11, 1981. The changes provide for redundancy of residual heat removal systems to ensure adequate decay heat removal capability during all phases of reactor plant operation and are acceptable to the staff.

Environmental Consideration

We have determined that the amendments do 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 amendments involve 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 these amendments.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendments do not involve a significant increase in the probability or consequences of an accident previously evaluated, do not create the possibility of an accident of a type different from any evaluated previously, and do not involve a significant reduction in a margin of safety, the amendments do 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 the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Date: July 30, 1982

Principal Contributor:
M. Grotenhuis

EG&G Idaho, Inc

FORM EG&G-398
(Rev. 03-82)

Accession No. _____
Report No. EGG-EA-5761

Contract Program or Project Title:
Selected Operating Reactors Issues Program (III)

Subject of this Document:
Technical Specifications for Redundant Decay Heat Removal Capability, Turkey Point, Unit Nos. 3 and 4

Type of Document:
Technical Evaluation Report

Author(s):
J. W. Stoffel

Date of Document:
March 1982

Responsible NRC Individual and NRC Office or Division:
J. N. Donohew, Division of Licensing

This document was prepared primarily for preliminary or internal use. It has not received full review and approval. Since there may be substantive changes, this document should not be considered final.

EG&G Idaho, Inc.
Idaho Falls, Idaho 83415

Prepared for the
U.S. Nuclear Regulatory Commission
Washington, D.C.
Under DOE Contract No. DE-AC07-76ID01570
NRC FIN No. A6429

0021j

TECHNICAL SPECIFICATIONS FOR REDUNDANT DECAY HEAT REMOVAL CAPABILITY

TURKEY POINT, UNIT NOS. 3 AND 4

Docket Nos. 50-250 and 50-251

March 1982

J. W. Stoffel
Reliability and Statistics Branch
Engineering Analysis Division
EG&G Idaho, Inc.

TAC No. 42103
and 42104

ABSTRACT

This report reviews the Turkey Point, Unit Nos. 3 and 4 technical specification requirements for redundancy in decay heat removal capability in all modes of operation.

FOREWORD

This report is supplied as part of the "Selected Operating Reactor Issues Program (III)" being conducted for the U.S. Nuclear Regulatory Commission, Office of Nuclear Reactor Regulation, Division of Licensing, by EG&G Idaho, Inc., Reliability and Statistics Branch.

The U.S. Nuclear Regulatory Commission funded the work under the authorization, B&R 20 19 01 06, FIN No. A6429.

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TECHNICAL EVALUATION REPORT

TECHNICAL SPECIFICATIONS FOR REDUNDANT DECAY HEAT REMOVAL CAPABILITY

TURKEY POINT, UNIT NOS. 3 AND 4

1.0 INTRODUCTION

A number of events have occurred at operating PWR facilities where decay heat removal capability has been seriously degraded due to inadequate administrative controls during shutdown modes of operation. One of these events, described in IE Information Notice 80-20,[1] occurred at the Davis-Besse, Unit No. 1 plant on April 19, 1980. In IE Bulletin 80-12[2] dated May 9, 1980, licensees were requested to immediately implement administrative controls which would ensure that proper means are available to provide redundant methods of decay heat removal. While the function of the bulletin was to effect immediate action with regard to this problem, the NRC considered it necessary that an amendment of each license be made to provide for permanent long term assurance that redundancy in decay heat removal capability will be maintained. By letter dated June 11, 1980,[3] all PWR licensees were requested to propose technical specification (TS) changes that provide for redundancy in decay heat removal capability in all modes of operation; use the NRC model TS which provide an acceptable solution of the concern and include an appropriate safety analysis as a basis; and submit the proposed TS with the basis by October 11, 1980.

Florida Power and Light Company submitted proposed revisions for decay heat removal to their technical specifications (TS) for Turkey Point, Unit Nos. 3 and 4[4] on December 30, 1980.

2.0 REVIEW CRITERIA

The review criteria for this task are contained in the June 11, 1980 letter from the NRC to all PWR licensees. The NRC provided the model technical specifications (MTS) which identify the normal redundant coolant systems and the actions when redundant systems are not available for a typical Westinghouse plant. This review will determine if the licensees existing and/or proposed plant TS are in agreement with the MTS.

3.0 DISCUSSION AND EVALUATION

Turkey Point, Unit Nos. 3 and 4 are three loop Westinghouse PWR plants. The TS for these units are of the older variety and are not in the same format as the NRC MTS. The NRC Standard Technical Specifications (STS)[5] define six operational modes, which are based on conditions of reactivity, percent rated thermal power, and average coolant temperature. These modes do not correspond with the Turkey Point TS[6] defined operating modes. Because the licensee's defined operating modes differ from the NRC MTS, this review will compare the proposed Turkey Point TS against the NRC MTS during equivalent reactor operating conditions.

3.1 Power Operation and Startup--MODES 1 and 2.

The Turkey Point TS define POWER OPERATION as: Reactor critical and power greater than 2%. STARTUP is not defined separately.

The Turkey Point proposed TS are in agreement with the NRC MTS, except that they do not use HOT STANDBY as one of their operating modes. With less than three Reactor Coolant Loops in operation, the Turkey Point requirement is to be in HOT SHUTDOWN within one hour. HOT SHUTDOWN is subcritical with average coolant temperature above 540°F.

3.2 Hot Standby--MODE 3.

The Turkey Point TS do not use HOT STANDBY as one of their operating modes.

3.3 Hot and Cold Shutdown--Mode 4 and 5.

The Turkey Point TS define HOT SHUTDOWN as subcritical with T_{ave} above 540°F. COLD SHUTDOWN is defined as subcritical by at least 1% $\Delta k/k$ and T_{ave} less than 200°F.

The NRC MTS state that at least two Residual Heat Removal (RHR) Loops shall be OPERABLE and at least one of these loops shall be in operation. With less than the above loops OPERABLE, immediately initiate corrective action to return the loops to OPERABLE status as soon as possible; be in COLD SHUTDOWN within 20 hours. Page 3.4.2a, Paragraph I and I.1, of the Turkey Point proposed TS cover the RHR loop requirements; however, nothing is stated that takes the plant to COLD SHUTDOWN within 20 hours with less than the required loops OPERABLE. The Turkey Point proposed TS state that with less than two Reactor Coolant Loops OPERABLE, restore the required Coolant Loops to OPERABLE status within 72 hours or reduce T_{ave} to less than 350°F within the next 12 hours. Table 4.1.2 of the Turkey Point proposed TS SURVEILLANCE REQUIREMENTS is the same as the NRC MTS, except they do not require checking the steam generator(s) OPERABLE by verifying secondary side level to be adequate at least once per 12 hours.

3.4 Refueling--MODE 6.

The Turkey Point TS define REFUELING SHUTDOWN as subcritical by at least 10% $\Delta k/k$ and T_{ave} below 160°F.

Page 3.4-3, Paragraph f and g, of the Turkey Point proposed TS covers the points of the NRC MTS with the three following exceptions. (1) Turkey Point defines REFUELING SHUTDOWN as being below a T_{ave} of 160°F. The NRC STS defines REFUELING SHUTDOWN as T_{ave} at or below 140°F. (2) The Turkey Point proposed TS allows the removal of the RHR loop from operation during the performance of core alterations as long as the core outlet temperature is maintained below 160°F. The NRC MTS restricts the stopping of the RHR loop to 1 hour out of an 8 hour period. (3) The Turkey Point proposed TS SURVEILLANCE REQUIREMENT is to check every four hours to ensure that the outlet temperature is below 160°F. The NRC MTS requires checking every four hours that the RHR flow rate is greater than or equal to 2800 gpm.

4.0 CONCLUSION

A comparison of the proposed TS for Turkey Point, Unit Nos. 3 and 4 indicate that, for MODES 1, 2, and 3, the only difference is in terminology, due to the fact that Turkey Point does not use STARTUP and HOT STANDBY as defined operating modes. For MODES 4 and 5 the Turkey Point TS define what to do if less than the required RHR loops are operating. This description is different from that described in the NRC MTS. In addition, the Turkey Point TS Surveillance Table 4.1-2 does not say to determine the required steam generator(s) OPERABLE by checking the secondary side level at least once per 12 hours. For MODE 6 there is a difference in the maximum temperature for REFUELING SHUTDOWN. The Turkey Point TS puts no time restriction on removing the single RHR loop from operation for core alteration. The SURVEILLANCE REQUIREMENT to ensure proper operation of the RHR loop every 4 hours is done by checking the core outlet temperature in tne Turkey Point TS and by checking the flow rate in the NRC MTS.

5.0 REFERENCES

1. NRC IE Information Notice 80-20, May 8, 1980.

2. NRC IE Bulletin 80-12, May 9, 1980.

3. NRC Letter, D. G. Eisenhut, To All Operating Pressurized Water Reactors (PWR's), dated June 11, 1980.

4. Florida Power and Light Company Letter, Robert E. Uhrig to NRC, Darrell G. Eisenhut, December 30, 1980.

5. Standard Technical Specifications for Westinghouse Pressurized Water Reactors, NUREG-0452, Rev. 3, Fall 1980.

6. Turkey Point Units 3 and 4 Technical Specifications Docket 50250-85, July 1972.

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NOS. 50-250 AND 50-251

FLORIDA POWER AND LIGHT COMPANY

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSES

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 87 to Facility Operating License No. DPR-31, and Amendment No. 81 to Facility Operating License No. DPR-41 issued to Florida Power and Light Company (the licensee), which revised Technical Specifications for operation of Turkey Point Plant, Unit Nos. 3 and 4 (the facilities) located in Dade County, Florida. The amendments are effective as of the date of issuance.

The amendments provide for redundancy in the residual heat removal system.

The application for the amendments 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 amendments. Prior public notice of these amendments was not required since the amendments do not involve a significant hazards consideration.

The Commission has determined that the issuance of these amendments 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 these amendments.

For further details with respect to this action, see (1) the application for amendments dated December 30, 1980, (2) Amendment Nos. 87 and 81 to License Nos. DPR-31 and 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, NW., 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 30th day of July, 1982.

FOR THE NUCLEAR REGULATORY COMMISSION

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