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DEC 24 1981

Docket Nos. 50-250
and 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. 75 to Facility Operating License No. DPR-31 and Amendment No. 69 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 April 13, 1981.

These amendments change the Technical Specifications to conform with our Bulletins and Orders Task Force review of the Auxiliary Feedwater System following the Three Mile Island accident.

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

Sincerely,

ORIGINAL SIGNED

Marshall Grotenhuis, Project Manager
Operating Reactors Branch No. 1
Division of Licensing

Enclosures:

- 1. Amendment No. 75 to DPR-31
- 2. Amendment No. 69 to DPR-41
- 3. Safety Evaluation
- 4. Notice of Issuance

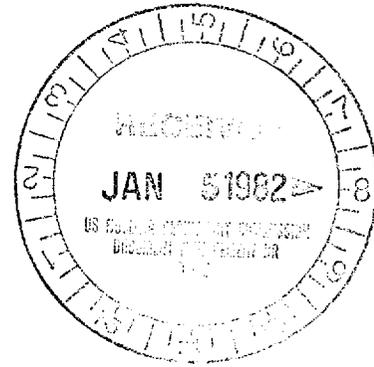
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Robert E. Uhrig
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

FLORIDA POWER AND LIGHT COMPANY

DOCKET NO. 50-250

TURKEY POINT PLANT UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 75
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 April 13, 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.

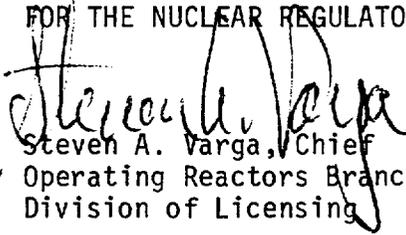
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Facility Operating License No. DPR-31 is hereby amended to read as follows:

(B) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 75, 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 No. 1
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: December 24, 1981



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. 69
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 13, 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;
 - 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.

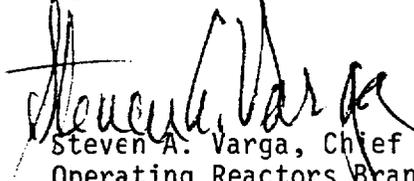
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Facility Operating License No. DPR-41 is hereby amended to read as follows:

(B) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 69, 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 No. 1
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: December 24, 1981

ATTACHMENT TO LICENSE AMENDMENTS

AMENDMENT NO. 75 TO FACILITY OPERATING LICENSE NO. DPR-31

AMENDMENT NO. 69 TO FACILITY OPERATING LICENSE NO. DPR-41

DOCKET NOS. 50-250 AND 50-251

Revise Appendix A as follows:

<u>Remove Pages</u>	<u>Insert Pages</u>
3.8-1	3.8-1
	3.8-2
B3.8-1	B3.8-1

3.8 STEAM AND POWER CONVERSION SYSTEMS

Applicability: Applies to the operating status of the steam and power conversion systems.

Objective: To define conditions of the steam-relieving capacity and auxiliary feedwater system.

- Specification:
1. When the reactor coolant of a nuclear unit is heated above 350°F the following conditions must be met:
 - a. TWELVE (12) of its steam generator safety valves shall be operable (except for testing).
 - b. System piping, interlocks and valves directly associated with the related components shall be operable.
 - c. Its condensate storage tank shall contain a minimum of 185,000 gallons of water.
 - d. Its main steam stop valves shall be operable and capable of closing in 5 seconds or less.
 2. The iodine-131 activity on the secondary side of a steam generator shall not exceed 0.67 Ci/cc.
 3. During power operation, if any of the conditions of 3.8.1 or 3.8.2 cannot be met within 48 hours, the reactor shall be shut down and the reactor coolant temperature reduced below 350°F.
 4. The following number of independent steam generator auxiliary feedwater pumps and associated flow path shall be operable when the reactor coolant is heated above 350°F:
 - a. Single Nuclear Unit Operation
Two auxiliary feedwater pumps capable of being powered from an operable steam supply.
 - b. Dual Nuclear Unit Operation
Three auxiliary feedwater pumps capable of being powered from an operable steam supply.
 5. During power operation, if any of the conditions of 3.8.4 cannot be met, the reactor shall be shut down and the reactor coolant temperature reduced below 350°F, unless one of the following conditions can be met;

- a. For single unit operation with one of the two required auxiliary feedwater pumps inoperable, restore the inoperable pump to operable status within 72 hours or the reactor shall be shut down and the reactor coolant temperature reduced below 350°F within the next 12 hours.
- b. For dual unit operation with one of the three required auxiliary feedwater pumps inoperable, restore the inoperable pump to operable status within 72 hours or a reactor shall be shut down and its reactor coolant temperature reduced below 350°F within the next 12 hours.

B3.8 BASES FOR LIMITING CONDITIONS FOR OPERATION, STEAM AND POWER CONVERSION SYSTEMS

In the unlikely event of complete loss of electrical power to the nuclear units, decay heat removal will be assured by the availability of the steam-driven auxiliary feedwater pumps and steam discharge to the atmosphere via the steam generator safety valves and power relief valves. (1) The operability of the auxiliary feedwater system ensures that the Reactor Coolant System can be cooled down to less than 350°F from normal operating conditions in the event of a total loss of off-site power. Each steam driven auxiliary feedwater pump is capable of delivering a total feedwater flow of 600 gpm to the entrance of the steam generators. This capacity is sufficient to ensure that adequate feedwater flow is available to remove decay heat and reduce the Reactor Coolant System temperature to less than 350°F when the Residual Heat Removal System may be placed into operation. The minimum amount of water in the condensate storage tanks is established from FSAR Figure 9.11-1, and meets safe shutdown requirements. (2)

The limit on secondary coolant iodine-131 specific activity is based on a postulated release of secondary coolant equivalent to the contents of three steam generators to the atmosphere due to a net load rejection. The limiting dose for this case would result from radioactive iodine in the secondary coolant. I-131 is the dominant isotope because of its low MPC in air and because the other shorter lived iodine isotopes cannot build up to significant concentrations in the secondary coolant under the limits of primary system leak rate and activity. One tenth of the iodine in the secondary coolant is assumed to reach the site boundary making allowance for plate-out and retention in water droplets. The inhalation thyroid dose at the site boundary is then:

$$\text{Dose (Rem)} = C \cdot V \cdot B \cdot \text{DCF} \cdot X/Q \cdot 0.1$$

Where: C = secondary coolant I-131 specific activity
= 1.34 curies/m³ (μCi/cc) or 0.67 Ci/m³, each unit
V = equivalent secondary coolant volume released = 214 m³
B = Breathing rate = 3.47x10⁻⁴ m³/sec.
X/Q = atmospheric dispersion parameter = 1.54x10⁻⁴ sec/m³
0.1 = equivalent fraction of activity released
DCF = Dose conversion factor, Rem/Ci

The resultant thyroid dose is less than 1.5 Rem.

References

- (1) FSAR - Section 10.3
- (2) FSAR - Section 14.2.5



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 75 TO FACILITY OPERATING LICENSE NO. DPR-31
AND AMENDMENT NO. 69 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

I. INTRODUCTION

By letter dated April 13, 1981 the Florida Power and Light Company (the licensee) submitted a request to modify the Technical Specifications for the Turkey Point Plant Unit Nos. 3 and 4. The amendments would change the Technical Specifications to conform to our Bulletins and Orders Task Force review following the Three Mile Island Accident. The requirements of this Task Force regarding Auxiliary Feedwater System were set forth in our letter dated October 16, 1979. The licensee responded on December 20, 1979, July 22, 1980 and January 14, July 23, 1981, in addition to the April 13, 1981 amendment request. As noted in the following evaluation some responses are not complete and some of our review is not complete. Those items for which additional information is necessary to complete our review will be specifically requested from the licensee in a separate letter.

II. BACKGROUND

The Three Mile Island Unit 2 (TMI-2) accident and subsequent investigations and studies highlighted the importance of the Auxiliary Feedwater System (AFWS) in the mitigation of transients and accidents. As part of our assessment of the TMI-2 accident and related implications for operating plants, we evaluated the AFW systems for all operating plants having nuclear steam supply systems (NSSS) designed by Westinghouse (NUREG-0611) or Combustion Engineering (NUREG-0635). Our evaluations of these system designs are contained in the NUREGs along with our recommendations for each plant and the concerns which led to each recommendation. The objectives of the evaluation were to: (1) identify necessary changes to AFW system design or related procedures at the operating facilities in order to assure the continued safe operation of these plants, and (2) to identify other system characteristics of the AFW systems which, on a long term basis, may require system modifications. To accomplish these objectives, we:

- (1) Reviewed plant specific AFW system designs in light of current regulatory requirements (SRP) and,
- (2) Assessed the relative reliability of the various AFW systems under various loss of feedwater transients (one of which was the initiating event of TMI-2) and other postulated failure conditions by determining the potential for AFW system failure due to common causes, single point vulnerabilities, and human error.

We concluded that the implementation of the recommendations identified during this review can be expected to improve the reliability of the AFW systems for each operating plant.

The following plant specific recommendations did not apply to this plant: GS-3, GS-8, GL-1, GL-2, and GL-4. The basis for these recommendations can be found in Appendix III of NUREG-0611 and the system description which determined the basis for not applying these recommendations can be found in Section X of NUREG-0611.

III. IMPLEMENTATION OF OUR RECOMMENDATIONS

A. Short Term Recommendations

1. Recommendation GS-1 - The licensee should propose modifications to the Technical Specifications to limit the time period that one AFW system pump and its associated flow train and essential instrumentation can be inoperable. The outage time limit and subsequent action time should be as required in current Technical Specifications; i.e., 72 hours and 12 hours, respectively.

The licensee responded in a letter dated December 20, 1979, and agreed to submit a proposed Technical Specification amendment to include the outage time limit and subsequent action time as stated in the Standard Technical Specifications; i.e., 72 hours and 12 hours.

The proposed Technical Specification was submitted in a letter dated April 13, 1981. We have reviewed the licensee's response to this recommendation and conclude that it meets the requirements of this recommendation and is therefore acceptable. The proposed Technical Specification has also been reviewed and found acceptable. It is hereby incorporated into Appendix A of the licenses for the Turkey Point Units.

2. Recommendation GS-2 - The licensee should lock open single valves or multiple valves in series in the AFW system pump suction piping and lock open other single valves or multiple valves in series that could interrupt all AFW flow. Monthly inspections should be performed to verify that these valves are locked and in the open position. These inspections should be proposed for incorporation into the surveillance requirements of the plant Technical Specifications.

The licensee responded in a letter dated December 20, 1979, stating that the AFWS operability is verified on a monthly basis in accordance with Technical Specification 4.10 by starting the AFW pumps and establishing flow to the steam generators. Valves that could affect AFW flow are locked open and their positions are verified monthly by procedure as specified in the Technical Specifications. However, the steam admission valves to the AFW pump turbine are part of the AFW control system and cannot be locked open because that could activate the AFW system. The steam pressure control valves, located between the steam admission valves and the AFW pump turbines, cannot be locked in any position because they are part of the AFW control system. The operability of these valves is tested monthly in compliance with Technical Specification 4.10.

We have reviewed the licensee's response and conclude that it meets the requirement of this recommendation and is, therefore, acceptable.

3. Recommendation GS-4 - Emergency procedures for transferring to alternate sources of AFW supply should be available to the plant operators. These procedures should include criteria to inform the operators when, and in what order, the transfer to alternate water sources should take place. The following cases should be covered by the procedures:

- (1) The case in which the primary water supply is not initially available. The procedures for this case should include any operator actions required to protect the AFW system pumps against self-damage before water flow is initiated; and
- (2) The case in which the primary water supply is being depleted. The procedure for this case should provide for transfer to the alternate water sources prior to draining of the primary water supply.

The licensee responded in a letter dated December 20, 1980, stating that Turkey Point Units 3 and 4 share two safety grade condensate storage tanks (CST) between the two units. Make-up water to the CST can be provided from non-safety grade equipment such as the condenser hot well, the primary water storage tank or the fire main system. The licensee further stated that a non-safety grade 500,000 gallon deaerated water storage tank is being constructed and will be available to supply the CSTs.

We find the licensee's response incomplete in that the procedures the operators are to follow in the two cases required by this recommendation are not mentioned. Further the use of the 500,000 gallon deaerated water storage tank is not spelled out. The AFW sources of water are appropriately restricted by Technical Specifications (3.8.1c and 3.8.3) which spell out the minimum volume of water which must be available to the AFW pumps (185,000) and the action to take should the supply drop below the 185,000 gallons.

4. Recommendation GS-5 - The as-built plant should be capable of providing the required AFW flow for at least two hours from one AFW pump train independent of any alternating current power source. If manual AFW system initiation of flow control is required following a complete loss of alternating current power, emergency procedures should be established for manually initiating and controlling the system under these conditions. Since the water for cooling the lube oil for the turbine-driven pump may be dependent on alternating current power, design or procedural changes shall be made to eliminate this dependency as soon as practicable. Until this is done, the emergency procedures should provide for an individual to be stationed at the turbine-driven pump in the event of the loss of all alternating current power to monitor pump bearing and/or lube oil temperatures. If necessary, this operator would operate the turbine-driven pump in an on-off mode until alternating current power is restored. Adequate lighting powered by direct current power sources and communications at local stations for manual initiation and control of the AFW system should also be provided if manual initiation and control of the AFW system is needed. (See Recommendation GL-3 for the longer term resolution of this concern.)

The licensee responded in a letter dated December 20, 1979, stating that the as-built AFWS is capable of providing required flow for at least two hours from one AFW train independent of any AC power source after AFW initiation. No manual operation is required upon loss of AC power because the steam control and AFW discharge control system have a nitrogen backup for operation of air control valves. Service water used for cooling the turbine driven pumps lube oil is supplied by gravity feed. The licensee stated that procedures would be prepared to describe how to assure at least two hour supply of lube oil cooling water in the event of loss of all AC power. The licensee also proposed to install a sound powered phone line from the AFW pumps to the control room. The modifications are planned to be completed during 1981. In conjunction with this modification, DC lighting will also be installed at the AFW pump location.

We have reviewed the licensee's response and conclude that it meets the requirements of the recommendation and is therefore acceptable.

5. Recommendation GS-6 - The licensee should confirm flow path availability of an AFW system flow train that has been out of service to perform periodic testing or maintenance as follows:

- (1) Procedures should be implemented to require an operator to determine that the AFW system valves are properly aligned and a second operator to independently verify that the valves are properly aligned.
- (2) The licensee should propose Technical Specifications to assure that prior to plant startup following an extended cold shutdown, a flow test would be performed to verify the normal flow path from the primary AFW system water source to the steam generators. The flow test should be conducted with AFW system valves in their normal alignment.

The licensee responded in a letter dated December 20, 1979, stating that a proposed Technical Specification amendment will be provided to specify performing a flow test to verify the normal flow path. In addition, valve position will be determined by an operator and verified by a second operator and incorporated into the appropriate procedures.

The proposed Technical Specification was submitted by letter dated April 13, 1981. We have reviewed the licensee's response to this recommendation and conclude that it meets the requirements of this recommendation and is therefore acceptable. The proposed Technical Specification has also been reviewed and found acceptable. It is hereby incorporated into Appendix A to the licenses for the Turkey Point Plant.

6. Recommendation GS-7 - The licensee should verify that the automatic start AFW system signals and associated circuitry are safety-grade. If this cannot be verified, the AFW system automatic initiation system should be modified in the short-term to meet the functional requirements listed below. For the longer term, the automatic initiation signals and circuits should be upgraded to meet safety-grade requirements as indicated in Recommendation GS-5.

- (1) The design should provide for the automatic initiation of the auxiliary feedwater system flow.
- (2) The automatic initiation signals and circuits should be designed so that a single failure will not result in the loss of auxiliary feedwater system function.

- (3) Testability of the initiation signals and circuits shall be a feature of the design.
- (4) The initiation signals and circuits should be powered from the emergency buses.
- (5) Manual capability to initiate the auxiliary feedwater system from the control room should be retained and should be implemented so that a single failure in the manual circuits will not result in the loss of system function.
- (6) The alternating current motor-driven pumps and valves in the auxiliary feedwater system should be included in the automatic actuation (simultaneous and/or sequential) of the loads to the emergency buses.
- (7) The automatic initiation signals and circuits shall be designed so that their failure will not result in the loss of manual capability to initiate the AFW system from the control room.

The licensee responded in a letter dated December 20, 1979, stating that the as-built system is safety grade with one exception. The actuation of the pressure regulating valves for steam supply to the AFW pump turbines is not designed in accordance with the single failure criterion. However, the licensee committed to modify the system to meet the single failure criterion.

We conclude that the licensee's response meets this Short Term Recommendation (control grade) and is therefore acceptable. However, the proposed modification of pressure regulating valves actuation to meet the single failure criterion (safety grade) is still under review. This review will be reported in a supplement to this report.

B. Additional Short Term Recommendations

1. Recommendation - The licensee should provide redundant level indications and low level alarms in the control room for the AFW system primary water supply to allow the operator to anticipate the need to make up water or transfer to an alternate water supply and prevent a low pump suction pressure condition from occurring. The low level alarm set-point should allow at least 20 minutes for operator actions, assuming that the largest capacity AFW pump is operating.

The licensee responded in a letter dated December 20, 1979, stating that redundant level indicators and low level alarms for the AFW primary water supply (CSTs) will be provided in the control room. The setpoint of the existing non-redundant low level alarm has been adjusted to allow at least 20 minutes for operator action assuming the largest capacity AFW pump is operating. The setpoint of the second, to be added, low level alarm will be similarly adjusted when it is installed.

We have reviewed the licensee's response to this recommendation and conclude that it meets the requirements of this recommendation and it is therefore acceptable.

2. Recommendation (This recommendation has been revised from the original recommendation in NUREG-0611 - The licensee should perform a 48-hour endurance test on all AFW system pumps, if such a test or continuous period of operation has not been accomplished to date. Following the 48-hour pump run, the pumps should be shut down and cooled down and then restarted and run for one hour. Test acceptance criteria should include demonstrating that the pumps remain within design limits with respect to bearing/bearing oil temperatures and vibration and that pump room ambient conditions (temperature, humidity) do not exceed environmental qualification limits for safety-related equipment in the room.

The licensee should provide a summary of the conditions and results of the tests. The summary should include the following: (1) A brief description of the test method (including flow schematic diagram) and how the test was instrumented (i.e., where and how bearing temperatures were measured). (2) A discussion of how the test conditions (pump flow, head, speed and steam temperature) compare to design operating conditions. (3) Plots of bearing/bearing oil temperature vs. time for each bearing of each AFW pump/driven demonstrating that temperature design limits were not exceeded. (4) A plot of pump room ambient conditions do not exceed environmental qualification limits for safety-related equipment in the room. (5) A statement confirming that the pump vibration did not exceed allowable limits during tests.

By letter dated January 14, 1981, the licensee provided the results of the 48-hour endurance tests for the AFW pumps. The test was conducted according to conditions specified in the recommendation. Data on the bearing oil temperature for each pump-driver indicated that the design temperature limits were not exceeded during test. Data on pump environment indicated that ambient conditions did not exceed the environmental qualification limits for the AFW pumps. Pump vibration data taken during the test demonstrate that the allowable limits for the AFW pumps were satisfactory during any of the testing.

We have reviewed the licensee's response and conclude that it meets this recommendation and is, therefore, acceptable.

3. Recommendation - The licensee should implement the following requirements as specified by Item 2.1.7.b on page A-32 of NUREG-0578:

"Safety-grade indication of auxiliary feedwater flow to each steam generator shall be provided in the control room. The auxiliary feedwater flow instrument channels shall be powered from the emergency buses consistent with satisfying the emergency power diversity requirements for the auxiliary feedwater system set forth in Auxiliary Systems Branch Technical Position 10-1 of the Standard Review Plan, Section 10.4.9."

In a letter dated November 21, 1979, the licensee committed to provide control grade indication and safety grade indication.

We have reviewed the licensee's response regarding the control grade modification and conclude that it meets the requirements of this recommendation and is therefore acceptable. The safety grade modification is still under review. This review will be updated in a supplement to this report.

4. Recommendation - Licensees with plants which require local manual realignment of valves to conduct periodic tests on one AFW system train, and there is only one remaining AFW train available for operation, should propose Technical Specifications to provide that a dedicated individual who is in communication with the control room be stationed at the manual valves. Upon instruction from the control room, this operator would realign the valves in the AFW system train from the test mode to its operational alignment.

The licensee responded in a letter dated December 20, 1979, indicating that a proposed Technical Specification amendment to enhance the current specification on AFWS surveillance tests will be submitted to NRC for review.

To date the proposed Technical Specification has not been received. We will review the proposed Technical Specification when it becomes available and provide our evaluation in a supplement to this SER input.

C. Long Term Recommendations

1. Recommendation GS-3 - At least one AFW system pump and its associated flow path and essential instrumentation should automatically initiate AFW system flow and be capable of being operated independently of any AC power source for at least two hours. Conversion of DC power to AC power is acceptable.

In a letter dated July 20, 1980, the licensee stated that the as-built AFWS in Turkey Point Units 3 and 4 relies on the operation of AC motor operated steam admission valves to supply steam to the AFW turbine driven pumps. However, the licensee has committed to make design modification to the steam supply valves. Two of the three valves will be converted to DC power operated.

We have reviewed the licensee's response to this recommendation and conclude that it meets the requirement of this recommendation and is therefore acceptable.

2. Recommendation GL-5 - The licensee should upgrade the AFW system automatic initiation signals and circuits to meet safety-grade requirements.

The licensee responded in a letter dated December 20, 1979, stating that the as-built system is safety grade with one exception. The actuation of the pressure regulating valve for steam supply to the AFW pump turbine is not designed in accordance with the single failure criterion. The licensee committed to modify the system to meet the single failure criterion.

The licensee's safety grade automatic initiation system design is still under review. This review will be reported in a supplement to this report.

3. Recommendation - The AFW pump discharge lines and turbine driven AFW pump steam supply lines for each unit combine into single lines through which all water and steam respectively from either unit must flow. A pipe break in either of these single flow paths would cause loss of the capability to provide AFW flow to all the steam generators of one unit. The licensee should evaluate the consequences of a postulated pipe break in these sections of the AFW discharge or steam supply, assuming a concurrent single active failure and (1) determine any AFW system modifications or procedures necessary to detect and isolate the break, and direct the required AFW flow to the steam generators before they boil dry or (2) describe how the plant can be brought to a safe shutdown condition by use of other available systems following such a postulated pipe break.

The licensee in a letter dated December 20, 1979, stated that operating procedures will be in place by 1981 to provide direction to the operations regarding isolation of AFWS steam supply lines or feedwater line piping breaks. Procedures regarding unit shutdown using other available means will also be in place by 1981. In conjunction with the proposed operating procedures, steam and feedwater piping modifications are being developed by the licensee to ensure redundancy in the common AFW discharge header and the common steam supply header to the AFW pump turbine. The modifications are planned during the Unit 4 steam generator replacement outage, currently scheduled to begin in the fall of 1982.

We require the licensee to provide details of the proposed piping modification being developed to provide redundancy in the discharge header and common steam supply header. We will review the information when it becomes available and provide a supplement to this SER input.

4. Recommendation - The lube oil cooling of the three turbine driven AFW pumps is provided from a common source, namely the service (city) water system. The licensee should evaluate this cooling water system to determine if there are potential common mode (electrical or mechanical) failures that could disable the lube oil cooling for all three turbine driven pumps. The licensee should provide the results of the evaluation and (1) indicate any system modifications or procedures necessary to prevent a common mode failure of the lube oil cooling system or (2) provide information that demonstrates that the turbine driven AFW pumps can operate for at least two hours without lube oil cooling water and independent of AC power.

The licensee responded in a letter dated December 20, 1979, stating that the AFW pump lube oil cooling system will be modified to provide lube oil cooling water from the AFW pump discharge.

We have reviewed the licensee's response and conclude that it meets the requirements of this recommendation and is therefore acceptable.

5. Basis for AFWS Flow Requirement - In our letter dated October 16, 1979, we requested the licensee to respond to Enclosure 2, regarding the AFWS Flow design basis. The licensee has not yet responded to this recommendation. We will provide our evaluation of their response in a supplement to this report.

IV. 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.

V. 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 accidents previously considered and do not involve a significant decrease in a safety margin, the amendments do not involve a significant

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 these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Date: December 24, 1981

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NOS. 50-250 AND 50-251FLORIDA POWER AND LIGHT COMPANYNOTICE OF ISSUANCE OF AMENDMENT TO FACILITY
OPERATING LICENSES

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 75 to Facility Operating License No. DPR-31, and Amendment No. 69 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 change the Technical Specifications to conform with the Commission's Bulletins and Orders Task Force review regarding Auxiliary Feedwater Pump requirements following the Three Mile Island Accident.

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.

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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 April 13, 1981, (2) Amendment Nos. 75 and 69 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, 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 24th day of December, 1981.

FOR THE NUCLEAR REGULATORY COMMISSION



Steven A. Varga, Chief
Operating Reactors Branch No. 1
Division of Licensing