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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 120 TO FACILITY OPERATING LICENSE NO. DPR-31

AND AMENDMENT NO. 114 TO FACILITY OPERATING LICENSE NO. DPR-41

FLORIDA POWER AND LIGHT COMPANY

TURKEY POINT UNIT NOS. 3 AND 4

DOCKET NOS. 50-250 AND 50-251

I. INTRODUCTION

By letter dated October 20, 1986, Florida Power and Light Company (the licensee), submitted a request for amendments to the facility operating licenses proposing Technical Specifications relating to requirements for periodic diesel generator inspections. The staff review of this matter included the existing Technical Specifications, as well as the proposed changes and supporting technical justification.

The licensee indicated that the surveillance requirements contained in the existing Technical Specifications are designed to assure that the quality of the equipment and components is maintained, that the facility operation will be within the safety limits and that the limiting conditions for operation of the system will be met. The inspection and test frequencies specified are often enough to identify and correct any mechanical or electrical failure before it can result in a system failure.

Each diesel generator is required to be subjected to an inspection in accordance with the manufacturer's recommendations at least once each eighteen months and the interval may be adjusted plus or minus 25% to accommodate normal test schedules. This inspection was last completed on the "A" and "B" diesel generators on December 23, 1984, and January 13, 1985, respectively. This would require the next inspections to be performed no later than November 11, 1986, and November 27, 1986.

II. EVALUATION

The purpose of the proposed Technical Specifications is to assure that the required inspection intervals of at least once each eighteen months for each diesel generator will be performed only while one of the two Turkey Point Units is in refueling. The existing Technical Specifications have no restrictions on the status of the units when the inspections are performed. Thus, the inspections could be performed in the proposed unit configuration with one unit in refueling or with both units at power.

The maximum electrical loads required with one unit operating and the other unit in refueling could be potentially less than required to safely shutdown one unit and mitigate an accident in the other unit if both units were operating.

Specifically, the operators would have more flexibility in load management of the single operating diesel due to the significantly smaller decay heat loads in the unit being refueled. The required inspection of a diesel generator would be performed during that portion of the refueling outage which would assure that the decay heat removal requirement is low for that unit when there is only a single operable diesel generator.

The one time extension of approximately 4 months will not significantly increase the probability of undetected degradation of the diesel generators based on previous operating history. The licensee has indicated that the eighteen month preventive maintenance inspection performed in December 1984 and January 1986 indicated no excessive wear of engine internals (after approximately 550 hours of operation on each diesel generator). Also, a review of the "A" and "B" diesel generator operating and maintenance history since that time has indicated no existence of problems. Excessive wear of the engine internals which could affect operability is not expected due to the infrequent and short duration of operation. In addition, the licensee has contacted the diesel generator engine manufacturer who has indicated that the requested one time 4 month deferral of the diesel generator inspections would not adversely affect their operability.

The licensee also has five non-safety diesel generators which are hard wired to the electrical distribution system. This power source has been tested and demonstrated that it can provide power to the safety buses, thus increasing the probability of restoring a power source to the safety-related buses if necessary.

III. FINDINGS

The staff has concluded that the proposed one time extension of approximately 4 months and the requirement to have one unit in a refueling mode while performing required diesel generator inspections are acceptable based on the details discussed above.

IV. EMERGENCY CIRCUMSTANCES

On October 27, 1986, a short notice was published in the Federal Register (51 FR 37992) requesting public comments by November 10, 1986. In that notice the staff indicated that the Commission has determined that failure to act in a timely manner would result in requiring the licensee to perform the diesel generator inspections during dual unit operation as required by the existing specification or result in shutting the units down to perform the required inspections. The NRC staff has determined that the overall safety of the plant would be enhanced if the inspection of each diesel generator was performed while one unit is in refueling. The one time extension of approximately 4 months would not significantly increase the probability of undetected degradation of the diesel generators based on previous operating history.

Inspecting the diesels while one unit is in refueling will allow the operators additional means and time for coping with a transient or accident. Thus, requiring the inspections in accordance with the existing Technical Specifications would not be in the best interest of overall plant safety. To be in compliance with the existing Technical Specifications it would be necessary to perform the

required inspections by November 11, 1986, for diesel generator A and November 27, 1986, for diesel generator B. Thus, the Commission had insufficient time to issue its usual 30 day notice of the proposed action for public comment. The concern was only recently identified as the result of detailed reviews of the diesel generators by the licensee and discussions with the NRC staff. Therefore, we have determined that the licensee did not purposely create this situation to avoid the normal notice period for the proposed license amendments.

V. FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The standards used to arrive at a proposed determination that a request for amendments involves no significant hazards consideration are included in the Commission's regulations, 10 CFR 50.92, which state that the operation of the facilities in accordance with the proposed amendments would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

The following evaluation in relation to the three standards demonstrates that the proposed amendments do not involve a significant hazards consideration.

First Standard - Involve a significant increase in the probability or consequences of an accident previously evaluated.

The requested amendments do not result in any change to the operational limits or physical design of the emergency power system. The only effect of this change is to extend for short time the period between diesel generator inspections, during which there might be undetected degradation of the diesel generators. However, as stated in the staff's safety evaluation, the one time extension of approximately 4 months will not significantly increase the probability of such undetected degradation. The primary basis for this conclusion is that the diesel generators are operated infrequently and for short durations. The operating and maintenance history accumulated during the past several years provide no evidence of excessive wear of the engine intervals. Thus, the one time change in the surveillance interval has no effect on the consequences of any accident.

The requirement that the diesel generators be tested only while one unit is in refueling does not change the existing requirement of once per eighteen months. The proposed change only limits the operating status of the units during which the required inspections can be performed for the reasons discussed in the staff's safety evaluation. The existing Technical Specifications allow the inspections to be performed at any time independent of the unit's operating status which includes the proposed configuration. Therefore, neither the 4 months extension nor the requirement that one unit be in refueling while the required inspections are performed involve a significant increase in the probability or consequences of an accident previously evaluated.

Second Standard - Create the possibility of a new or different kind of accident from any accident previously evaluated.

Since the change does not involve a change in the operational limits of physical design of the emergency power systems, neither the staff nor licensee could identify a new or different kind of accident from any accident previously evaluated. As stated above, the one time change in the surveillance interval does not significantly increase the probability or consequences of undetected degradation.

Third Standard - Involve a significant reduction in margin of safety.

The limiting conditions for operation (LCO) and other required surveillances to verify the operability of the diesel generators, as defined in the Technical Specifications, remain in effect and unchanged by the proposed amendments. Therefore, neither the 4 month extension nor the requirement that one unit be in refueling while the required inspections are performed involve a significant reduction in margin of safety due to the existing LCOs, surveillance requirements and the reasons discussed in the First Standard.

Based on the foregoing, the Commission has concluded that the standards of 10 CFR 50.92 are satisfied. Therefore, the Commission has made a final determination that the proposed amendments do not involve a significant hazards consideration.

ENVIRONMENTAL CONSIDERATION

These amendments involve changes in the installation or use of the facilities components located within the restricted areas as defined in 10 CFR 20. The staff has determined that these amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that these amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, these amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of these amendments.

CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) 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.

Dated: November 10, 1986

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