



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 123 TO FACILITY OPERATING LICENSE NO. DPR-72
FLORIDA POWER CORPORATION, ET AL.
CRYSTAL RIVER UNIT NO. 3 NUCLEAR GENERATING PLANT
DOCKET NO. 50-302

INTRODUCTION

By letter dated August 9, 1989, Florida Power Corporation (FPC or the licensee) requested an amendment to the Technical Specifications (TS) appended to Facility Operating License No. DPR-72 for the Crystal River Unit No. 3 Nuclear Generating Plant (CR-3). The proposed amendment would extend, on a one-time basis, the surveillance interval for the diesel generator full load test until the Cycle VII reload. The surveillance interval, as it stands now, ends on October 21, 1989, and Cycle VII reload is scheduled for March 1990.

EVALUATION

CR-3 has two Emergency Diesel Generators (EDG). The continuous rating of each unit is 2750kW, the 2000-hour rating is 2750kW to 3000kW, and the 30-minute rating is 3000kW to 3300kW. The full load test includes operation for 5 minutes in the 30-minute rating and for 55 minutes in the 2000 hour rating. Allowable operation in the 30-minute rating, in which the maximum engineered safeguards auto-start load for EDG 1A presently falls, is cumulative.

Currently, TS 4.8.1.1.2.d.4 and 4.8.1.2.2.d.4 require that a full load test be performed every 18 months. The TS currently allow an extension not to exceed 25% of the surveillance interval.

Due to an unplanned outage to repair a reactor coolant pump, the surveillance interval, with maximum extension, runs out before the end of the current fuel cycle. The licensee's proposed changes would allow operation until the end of the current fuel cycle without conducting the full-load test. This would effectively extend the surveillance interval for 5 to 6 months.

The full load tests were last performed on both EDG on December 7, 1987. Since then, EDG 1A has been operated for less than 200 hours, and EDG 1B for less than 170 hours, at an average load of approximately 2500kW. EDG 1B has also been operated for 2 hours at 2900kW. It is expected that each EDG will accumulate 60-70 additional hours of operation between now and the end of the current fuel cycle.

In March of 1989, the licensee performed an inspection of both EDG in accordance with the manufacturer's recommendations. Based on the results of this inspection, it is expected that the EDG will remain capable of supplying the required

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loads until Reload VII. The run time since the last load test and the expected additional run time are small and the probability of a wear failure in the requested extension period is low.

In addition, other EDG tests have been and will continue to be performed as specified in the TS.

The staff has reviewed the licensee's proposal and, based on the above, concludes that there is little chance of failure of the EDG to carry the required load in the event of a postulated accident during the requested extension period. In addition, the proposed amendment would increase the time the EDG would be available to carry the maximum engineered safeguards load by eliminating running of the EDG in the 30-minute rating. At the next outage, the system will be modified so that the test load will be reduced to below the 30-minute rating. We find, therefore, that the licensee's proposal is acceptable.

EXIGENT CIRCUMSTANCES

In conformance with 10 CFR 50.91, the Commission issued a "Notice of Consideration of Issuance of Amendment to Facility Operating License and Proposed No Significant Hazards Consideration Determination and Opportunity for Hearing" which was published in the Federal Register on September 29, 1989 (54 FR 40221).

As discussed above, the present TS requirements are such that the full load test must be performed by October 21, 1989 or the plant must be shut down. If the test were to be conducted, the portion of the test at a power level within the 30-minute rating would reduce the time that the EDG would be available to carry the maximum engineered safeguards load. Therefore, we conclude that exigent circumstances exist and that the amendment should be issued promptly.

There were no public comments in response to the Federal Register notice.

FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The Commission's regulations in 10 CFR 50.92 state that the Commission may make a final determination that a license amendment involves no significant hazards considerations if operation of the facility in accordance with the amendment 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.

Operation of the facility in accordance with the proposed amendment would not involve a significant increase in the probability or consequences of an accident previously evaluated because the EDGs are expected to be capable of performing their intended function for the remainder of the present fuel cycle.

Operation of the facility in accordance with the proposed amendment would not create the possibility of a new or different kind of accident from any accident previously evaluated because the proposed change introduces no new mode of plant operation nor does it require any physical modifications to the plant.

Operation of the facility in accordance with the proposed amendment would not involve a significant reduction in a margin of safety because previous tests and inspections and the low run time since lead us to conclude that the EDGs are expected to be capable of carrying the required load in the event of a postulated accident. In addition, not performing the full load test would increase the margin of safety since it would increase the length of time the EDG would be available to carry the maximum engineered safeguards load in the event of a postulated accident.

Based on the above, the staff concludes that the amendment meets the three criteria of 10 CFR 50.92. Therefore, the staff has made a final determination that the proposed amendment does not involve significant hazards considerations.

ENVIRONMENTAL CONSIDERATION

This amendment involves a change in a surveillance requirement. We have determined that the amendment involves 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 this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets 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 this amendment.

CONCLUSION

We have concluded, based on the considerations discussed above, that (1) because the requested changes 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 this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: October 17, 1989

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