



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 124 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 July 26, 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 add operability, action, and surveillance requirements for core exit thermocouples and the Reactor Coolant Inventory Tracking System (RCITS) to the TS.

EVALUATION

Core exit thermocouples and the RCITS are post-accident monitoring instruments. Core exit thermocouples measure the temperature of reactor coolant as it leaves the core. This temperature is indicated over a range of 0 - 2500 degrees F. The RCITS uses a differential pressure measurement to help operators determine the level of reactor coolant within the reactor vessel. This level is indicated over a range of 0 - 100%. These instruments, when used in conjunction with other available indications, can help an operator determine the status of the Reactor Coolant System following a postulated loss of coolant accident. This information will allow the operator to take prompt corrective action to mitigate the effect of the accident.

Currently, the TS do not address operability or surveillance requirements for core exit thermocouples or the RCITS. The proposed amendment would add these systems to a list of instruments that must be operable. Should one channel of the core exit thermocouple instrumentation become inoperable, the proposed TS would require that it be restored within 30 days. If it were not restored within this period, the plant would have to be shut down. Should one channel of the RCITS become inoperable, the proposed TS would allow the licensee 30 days to submit a formal plan for restoring the inoperable channel. Should both channels become inoperable, the proposed TS would require the licensee to restore at least one channel within 7 days. If the licensee were unable to meet this requirement, the TS would again require the plant to be shut down.

The proposed amendment also addresses surveillance requirements for core exit thermocouples and the RCITS. Specifically, they require monthly channel checks for core exit thermocouples and channel calibration every 18 months for both core exit thermocouples and the RCITS.

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Core exit thermocouples and the RCITS are currently installed at CR-3. The proposed TS will ensure that these instruments are available, and the proposed surveillance requirements will ensure that the instruments are operable if they are needed.

Core exit thermocouples and the RCITS are part of the post-accident monitoring system required by NUREG-0737. Generic Letter 83-37 proposed sample TS for this instrumentation. The licensee's proposed changes are consistent with the requirements of both NUREG-0737 and Generic Letter 83-37. The addition of these TS constitutes an additional restriction and in no way decreases a margin of safety. Therefore, based on our review, the changes proposed in this request are acceptable.

ENVIRONMENTAL CONSIDERATION

This amendment involves a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and adds surveillance requirements. 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) 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 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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