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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 11 TO LICENSE NO. DPR-72

FLORIDA POWER CORPORATION, ET AL

CRYSTAL RIVER UNIT 3 NUCLEAR GENERATING PLANT

DOCKET NO. 50-302

Introduction

By letter dated July 15, 1977, Florida Power Corporation (FPC) proposed changes to the Crystal River Unit No. 3 Technical Specifications. This proposal included changes dealing with reactor building purge exhaust duct isolation trip setpoints, emergency feedwater pump surveillance and the listing of containment isolation valves. We have evaluated the proposed changes.

Evaluation

1. FPC proposed to change the "Trip Setpoint" for Reactor Building Purge Exhaust Duct Isolation from 1×10^2 μCi/sec in Table 3.3-4 and $\leq 2 \times$ background in Table 3.3-6 to "Determined by requirements of Appendix B, Section 2.4.2 - Crystal River 3 Operating License No. DPR-72." In addition, they proposed to change the required "Channel Calibration" frequency from every 18 months to quarterly. FPC states that this change will remove inconsistencies within the Appendix A Technical Specifications and between Appendix A and Appendix B Technical Specifications.

   The monitoring instrumentation referred to in Tables 3.3-3, 3.3-4, and 4.3-2 as the "Reactor Building Purge Isolation ..." is the "Containment Purge and Exhaust Isolation" in Tables 3.3-6 and 4.3-3. Both titles refer to the Reactor Building Purge Exhaust Duct Monitor's function (FSAR Section 11.4.2.1.2.a). To avoid confusion, the titles in the above tables should all read "Reactor Building Purge Exhaust Duct Isolation." FPC has agreed to this change.

   The existing setpoints of 1×10^2 μCi/sec and $\leq 2 \times$ background were based on anticipated flow rates in the purge exhaust duct and expected background levels (FSAR page 11-16). These may be different from the setpoint as determined by the requirements of Appendix B, Section 2.4.2, which is based on an isotopic analysis of each release. Because

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compliance with Section 2.4.2 assures compliance with 10 CFR Part 20 and 10 CFR §50.36a, the trip setpoints specified in Tables 3.3-4 and 3.3-6 should be determined using Section 2.4.2. Furthermore, this change will eliminate the conflict between the three setpoints involved. Based on the above, we have determined that the change to indicate all affected setpoints are determined using Section 2.4.2 is acceptable.

Section 2.4.2 requires quarterly calibration of the Reactor Building Purge Exhaust Duct Monitor while Appendix A requires calibration every 18 months. The proposed change to Appendix A to require quarterly calibration eliminates this conflict with no decrease in the frequency of channel calibration and is therefore acceptable.

2. Currently, Technical Specification 4.7.1.2.a requires verification every 31 days that each steam turbine driven emergency feedwater pump develops a discharge pressure of $\geq$1100 psig on recirculation flow when the secondary steam supply pressure is greater than 200 psig. This requirement is applicable in Modes 1, 2, and 3. Prior to entry into Mode 3 while in Mode 4 (Hot Shutdown - average coolant temperature 200°F to 280°F), there is not adequate steam via the Main Steam System to run the turbine driven pump for this surveillance, as may be required by Technical Specification 4.0.4. FPC has proposed to add a footnote stating that when the plant is not in Modes 1, 2, or 3, surveillance shall be performed within 24 hours after entering Mode 3 and prior to entering Mode 2. It is the intent of this surveillance requirement to check the operability of the turbine driven pump when secondary steam supply pressure is greater than 200 psig and it is not practicable if the operational mode prohibits this initial condition. Therefore, we find this change acceptable.

   There are typographical errors in Technical Specification 3.7.1.2 which FPC has proposed to correct. These changes would correctly indicate that there is only one steam turbine driven emergency feedwater pump and that this is the only emergency feedwater pump which receives an automatic start signal. This is as stated in Chapter 10 of the FSAR and therefore correction of the typographical errors is acceptable.

3. Table 3.6-1 of the Technical Specifications, "Containment Isolation Valves," currently lists MUV-18 and associated check valve MUV-162 as containment isolation valves required to isolate the Makeup System from the Reactor Coolant Pump seals. FPC has stated and we agree that these valves are open during normal operation and high pressure injection and do not have an automatic isolating function via either a containment isolation signal or a containment radiation - high signal.

   The containment isolation valves required to perform a safety related function are those listed in Table 3.6-1. Technical Specification 3.6.3.1, which refers to this list, requires that these valves be operable and imposes surveillance requirements to ensure that these operate upon receipt of isolation and radiation - high signals. Since MUV-18 and 162 are not required to perform a safety related function (they may be open during high pressure injection), and do not receive containment isolation or radiation high signals (FSAR Table 5-4), removal of these valves from Table 3.6-1 is acceptable.

Environmental Consideration

We have determined that the amendment does 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 amendment involves 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 this amendment.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does 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: January 11, 1978