



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 54 TO FACILITY OPERATING LICENSE NO. DPR-6
CONSUMERS POWER COMPANY
BIG ROCK POINT PLANT
DOCKET NO. 50-155

1.0 INTRODUCTION

By letters dated October 30, 1979, December 19, 1980, July 9, 1981, December 15, 1981, and March 8, 1982, Consumers Power Company (CPC) (1) committed to install two high-range gamma radiation monitors at Big Rock Point and (2) proposed changes to the Technical Specifications appended to Facility Operating License No. DPR-6 for Big Rock Point Plant to address those monitors. We have discussed these changes with CPC and made certain revisions to the licensee's proposed changes. CPC has agreed to these changes.

By letter dated January 7, 1980, CPC proposed changes to the Technical Specifications appended to Facility Operating License No. DPR-6 for Big Rock Point Plant. The proposed changes make the testing intervals, for the Type B and C leak tests required by Appendix J to 10 CFR Part 50, in the Technical Specifications the same as the testing intervals in Appendix J.

Also, we have agreed with CPC to rectify a typographic error in Amendment No. 53.

2.0 EVALUATION

2.1 High Range Monitor

The NRC position, as set forth in NUREG-0737, Item II.F.1(3), "Additional Accident Monitoring Instrumentation, Containment High-Range Radiation Monitor," is described below. Radiation monitors with a maximum range of 10^7 Rad/hr. for gamma radiation shall be installed inside containment. A minimum of two such monitors should be installed and they should be physically separated. The monitors should be qualified to function in an accident environment.

The licensee has proposed locating the monitors outside of the containment shell, which has a 3/4 inch thick steel wall. Except for the location outside containment, the monitors proposed by CPC meet the acceptance criteria of Table II.F.1-3 of NUREG-0737.

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Consumers Power Company has developed a procedure for correction of the reading from the containment monitors, located outside of the containment shell, to correspond to actual dose rates in containment as a function of time and isotopic composition.

In addition, the licensee as part of their site emergency procedure, "Procedure to Determine Extent of Core Damage (For 0% to 100% core melt down) 5 D," has included a method to translate the containment monitor's reading in R/hr into the percent of core damage.

The staff has evaluated the licensee's proposed alternative to placing the monitors inside containment and finds it acceptable.

The staff has also evaluated the licensee's proposed technical specification for their containment monitors. The proposed technical specifications as revised are acceptable.

2.2 Leak Test Intervals

The test intervals proposed by CPC for the Type B and C leak tests required by Appendix J to 10 CFR Part 50 are the same as the requirements of Appendix J.

3.0 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.

4.0 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 an accident previously evaluated, does not create the possibility of an accident of a type different from any evaluated previously, and does not involve a significant reduction in a margin of safety, 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.

5.0 ACKNOWLEDGEMENTS

The following NRC personnel have contributed to this evaluation:

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Date: October 18, 1982