



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 149 TO FACILITY OPERATING LICENSE NO. DPR-59
POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT
DOCKET NO. 50-333

INTRODUCTION

By letter dated May 31, 1989, the Power Authority of the State of New York (PASNY or the licensee), requested a change to the Technical Specifications (TS) for the James A. FitzPatrick Nuclear Power Plant. The change would modify the Core Spray System pump discharge pressure test criteria given in Specification 4.5.A.1.b to state that the pumps "shall deliver a flow of at least 4625 gpm against a system head corresponding to a reactor vessel pressure of greater than or equal to 113 psi above primary containment pressure." The present criteria states that this flow must be delivered by the Core Spray System pumps "against a system head corresponding to a total pump developed head of greater than or equal to 113 psig." A corresponding change in the Bases to Specification 3.5.A is also proposed. Amplifying information was supplied by the licensee in a letter dated July 7, 1989 in response to a request for additional information.

EVALUATION

The proposed change to the wording of the core spray pump test criteria does not result in changes to the actual system setpoint or system behavior. The loss of coolant accident (LOCA) analysis does not take credit for injection of Core Spray System water into the reactor vessel until the internal pressure of the coolant has fallen to 113 psi above primary containment pressure. The value of 113 psi is derived from data contained in FSAR Figure 6.4-2, which indicates that for injection during a LOCA (Condition IV), the design assumes that the primary containment pressure is 21.7 psia (Point 1) and the reactor pressure is 134.7 psia (Point 7). Since the difference between these two pressures is 113 psi, the value forms the basis for the proposed surveillance requirement. Therefore, the proposed change is consistent with the design criteria stated in the FSAR.

This differential pressure was also assumed in the FitzPatrick SAFER/GESTR-LOCA analysis (NEDC-31317P, dated October 1986) which was submitted to support Reload 7/Cycle 8 Technical Specification changes by letter dated December 23, 1986. Therefore, the proposed change is consistent with the accident analysis.

This change in terminology serves to clarify the method for determining pump operability acceptance criteria. It results in a strengthening of the criteria above that presently stated in the TS. The proposal will ensure that, for primary containment pressures above atmospheric and up to the maximum value assumed in the accident analysis, the Core Spray System pumps are capable of performing as assumed in the accident analysis. In addition, the proposed terminology is consistent with similar terminology for the other pumps used for low pressure emergency core cooling.

For these reasons, and since the core spray pumps have always been able to meet, and administratively are required to meet, the criteria proposed in the amendment, the staff has determined that the proposed change is acceptable.

ENVIRONMENTAL CONSIDERATION

This amendment involves a change to a surveillance requirement. The staff has 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 Sec 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

Based on the considerations discussed above, the staff concludes 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 (3) 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 2, 1990

PRINCIPAL CONTRIBUTOR:

D. LaBarge