



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 82 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

1.0 Introduction

By letter dated February 25, 1983, the Power Authority of the State of New York (the licensee) submitted a proposed four part amendment to Facility Operating License No. DPR-59 for the James A. FitzPatrick Nuclear Power Plant, one part of which would change the frequency of the surveillance check for operability of the unit coolers serving the emergency core cooling system (ECCS) components in the East and West Crescent Areas of the reactor building. Specifically, the proposed change in Section 4.11.B of the FitzPatrick Technical Specifications (TSs) surveillance requirement stipulates that these coolers be checked for operability once each three months. This change replaces the existing requirement that these coolers be checked for operability during the surveillance testing of the associated ECCS pumps. By letter dated May 3, 1984, the licensee has provided additional clarifications regarding the proposed change. The remaining three parts of this proposed four part amendment have been treated as a separate action.

2.0 Evaluation

The licensee states in its submittals that the existing requirement on frequency of surveillance tests on these unit coolers requires that they be tested several times a month. This results from the fact that none of the coolers is uniquely associated with any one specific ECCS pump. Instead, each cooler in either of the two crescent areas is associated with all of the ECCS (core spray, residual heat removal (RHR) and high pressure coolant injection (HPCI)) pumps in that area. Therefore, all of the coolers in an individual area collectively ensure proper temperature conditions in that area. The two crescent areas together contain a total of seven ECCS pumps, each of which is required to be tested at least once per month for operability in accordance with the existing FitzPatrick TSs. Each crescent area also contains five unit coolers. In addition, should one of the two core spray pumps or one of the four RHR pumps become inoperable, existing TSs surveillance stipulations will require daily tests on either the operable core spray system pump or all of the remaining RHR pumps, whichever is appropriate. This, in turn, will result in daily tests on all the coolers in applicable areas.

The licensee contends that the existing test frequency for these coolers is excessive and creates an unnecessary operational burden, particularly since personnel must enter these areas to conduct the tests. The licensee further notes, since testing is performed during normal plant operation, frequent entry into the crescent areas to perform those tests conflicts with ALARA considerations on radiological exposure to personnel. Finally, the licensee's submittals state that these coolers are reliable and dependable as evidenced by their operating history.

We have reviewed the existing surveillance requirement on the testing frequency for the unit coolers and the licensee's proposed changes. We have also compared the Standard Technical Specifications (STS) for BWR/4 Reactors, Surveillance Requirement Section 4.5 for the ECCS pumps, to the proposed FitzPatrick TS change. Based on our review of the licensee's submittals and the STS, we conclude the following:

- The coolers are reliable as evidenced by their operating history.
- The units coolers serve the crescent areas during normal plant operation as well as during operation of the ECCS pumps. Because of this continuous service, there is additional assurance that they will be operable during accident situations and perform their intended function.
- We consider it inappropriate to require a more stringent test frequency for the coolers which serve the areas housing the ECCS pumps than that for the pumps themselves. The current staff position on the frequency of surveillance testing of the ECCS pumps for operability as stated in the STS is once per three months. The STS refers to Section XI of the ASME Boiler and Pressure Vessel Code for inservice testing of these pumps which currently specifies a test frequency of once per three months.
- The existing surveillance requirement on the operability of the unit coolers requires an excessive number of tests.
- Performance of the periodic surveillance test requires personnel to enter the crescent areas. Frequent testing, as required by the existing surveillance requirements, may result in unnecessary radiation exposures to personnel, thus conflicting with sound ALARA practices.
- Existing surveillance testing requirements on the ECCS pumps are not changed as a result of the proposed TS revision.

Based on the above considerations, we conclude that the licensee's proposed frequency of tests for operability of the crescent area unit coolers (once per three months) meets the current staff guidelines in this regard, and is therefore acceptable.

### 3.0 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. 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 occupation 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.

### 4.0 Conclusions

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.

Principal Contributor: T. Chandrasekaran

Dated: August 3, 1984