



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 56 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

Regulatory Guide 1.45, "Reactor Coolant Pressure Boundary Leakage Detection Systems," recommends that there be at least three separate methods to identify reactor coolant system leakage inside containment. Two of these methods should be: (1) sump level and flow monitoring and (2) airborne particulate radioactivity monitors. The third method may be either: (a) primary containment air cooler condensate flow rate monitors or (b) airborne gaseous radioactivity monitor.

The NRC's Standard Technical Specifications (STS) (Reference 1) requires the same recommendations found in the Regulatory Guide. With one of the leakage detection systems inoperable, plant operation may continue for up to 30 days. If the particulate or gaseous monitoring system is inoperable, grab samples must be obtained and analyzed at least once every 24 hours.

The James A. FitzPatrick plant has redundant drywell continuous atmosphere monitoring systems. Each system utilizes a three-channel monitor to provide information on particulate, iodine and noble gas activities in the drywell atmosphere. During normal operation one of the systems is set to monitor particulate while the other monitors gaseous radioactive releases. In addition, there is an equipment drain sump monitoring system and a floor drain sump monitoring system that can identify reactor coolant system leakage.

Although the FitzPatrick plant has the required diversity in leakage detection systems, the plant's technical specifications (Reference 2) have less conservative limiting conditions of operation compared to those found in the NRC's STS's. Action statements included in the FitzPatrick technical specifications include:

- (a) With either sump monitoring system inoperable, reactor operation must terminate after seven days,
- (b) With a redundant component of either sump monitoring system inoperable, reactor operation must terminate after 30 days,
- (c) One of the two drywell continuous monitoring systems may be inoperable without any time restrictions, and

- (d) With both of the drywell continuous monitoring systems inoperable, reactor operation may continue indefinitely provided (1) both of the sump monitoring systems are operable and (2) grab samples of the drywell atmosphere are obtained and analyzed every 96 hours.

By letter dated April 3, 1981 (Reference 3), the licensee proposed amending the FitzPatrick Technical Specifications by deleting item b above. The staff, however, recommended that the entire section regarding reactor coolant leakage detection systems be replaced by Reference 1.

Evaluation

By letter dated June 24, 1981 (Reference 4) the Power Authority superseded the April 3, 1981 proposed Technical Specifications. In essence, the licensee agreed to incorporate the NRC's Standard Technical Specifications regarding the reactor coolant leakage detection system. These specifications comply with the recommendations made in Regulatory Guide 1.45 and are acceptable to the staff. As discussed above, the STS's are more conservative than those presently enforced at FitzPatrick (particularly with regard to operation of the continuous drywell monitoring systems).

Summary

The licensee has proposed to replace that portion of the FitzPatrick Technical Specifications regarding the reactor coolant leakage detection system with Reference 1. The staff has reviewed the proposed change and concludes that the change enhances public health and safety. Therefore the proposed Technical Specification changes as specified in Reference 4 are 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: July 2, 1981

References

1. NRC Standard Technical Specifications for General Electric Plants, Section 3/4.4.3.
2. James A. FitzPatrick Nuclear Power Plant Technical Specifications, Sections 4.6.D and 3.6.D.
3. Letter from Power Authority of the State of New York to NRC (J. P. Bayne to Director, NRR) dated April 3, 1981.
4. Letter from the Power Authority of the State of New York to NRC (J. P. Bayne to T. A. Ippolito) dated June 29, 1981.