



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 45 TO FACILITY OPERATING LICENSE NPF-35
AND AMENDMENT NO. 38 TO FACILITY OPERATING LICENSE NPF-52

DUKE POWER COMPANY, ET AL.

CATAWBA NUCLEAR STATION, UNITS 1 AND 2

DOCKET NOS. 50-413 AND 50-414

I. INTRODUCTION

By letter dated March 23, 1988, Duke Power Company, et al., (the licensee) proposed amendments to the operating licenses for Catawba Nuclear Station, Units 1 and 2, which would revise Technical Specification (TS) Tables 3.3-12, 3.3-13, 4.3-8, 4.3-9, 4.11-1 and 4.11-2 to add TS requirements to cover operation of systems and components associated with the Monitor Tank Building (MTB) which is being constructed at Catawba Nuclear Station. Also, TS Figure 5.1-4 "Unrestricted Area and Site Boundary for Radioactive Gaseous Effluent" will be revised to show the MTB as a potential release point.

II. EVALUATION

At the present time, Catawba does not have the capability to process large volumes of liquid radwaste due to restrictions on releases and release rates. This is particularly true for peak load conditions associated with routine plant operations such as during refueling outages.

The MTB and associated components, including additional tankage, will increase process rates and ensure segregation for the various liquid waste streams. By providing a piping arrangement and process area to accommodate portable temporary equipment, the facility will provide surge capacity and processing flexibility to incorporate such future problems as load cycling, ice condenser ice melt and potential volume reduction requirements.

The MTB includes many ALARA design features that will reduce the maintenance and operations dose currently received. Its primary functions are to provide additional processing capacity for high radwaste inventories during normal operation, primary to secondary leaks, and contaminated powdex processing.

The MTB and associated trenches do not house any equipment which is important to safety and being a remote facility, cannot adversely affect any equipment which is important to safety. An accident or malfunction within the facility can, however, result in a radioactive release to the environment. The most severe consequences would be those following a tank failure.

The accident which is already analyzed in the FSAR is the failure of the refueling water storage tank (RWST) which results in the release of 395,000 gallons of contaminated water directly to Lake Wylie. Since the total volume

of all MTB tankage is much less than that of the RWST and since the radionuclide concentrations of liquids within the MTB will be less than those assumed in the RWST analysis, the consequences of the MTB accident will be much less severe than the RWST accident. The releases resulting from the postulated RWST failure were determined to be within the limits of 10 CFR 20, Appendix B.

Accidents and malfunctions within the MTB will, therefore, not affect the safe operation or shutdown of the plant and will not adversely affect the health and safety of the public.

Based on our evaluation, we conclude that the licensee's proposed changes to the Radiological Effluent Technical Specifications (RETS) meet the intent of the NRC staff's model, NUREG-0472, "Standard Radiological Effluent Technical Specifications for Pressurized Water Reactors," Revision 2, dated February 1, 1980, and are therefore acceptable.

III. ENVIRONMENTAL CONSIDERATION

Pursuant to 10 CFR 51.32, the Commission has determined that the issuance of these amendments will have no significant impact on the environment (53 FR19059).

IV. CONCLUSION

The Commission issued a Notice of Consideration of Issuance of Amendments and Opportunity for Hearing which was published in the Federal Register (53 FR 14874) on April 26, 1988. The Commission consulted with the state of South Carolina. No public comments were received, and the state of South Carolina did not have any comments.

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 these amendments will not be inimical to the common defense and security or to the health and safety of the public.

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Dated: May 27, 1988