



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 125 TO FACILITY OPERATING LICENSE NO. DPR-3
YANKEE ATOMIC ELECTRIC COMPANY
YANKEE NUCLEAR POWER STATION
DOCKET NO. 50-029

INTRODUCTION

By letter dated August 31, 1989, the Yankee Atomic Electric Company (YAEC or the licensee) requested an amendment to Facility Operating License No. DPR-3 for the Yankee Nuclear Power Station (YNPS or the plant). The proposed amendment would incorporate into the Technical Specifications of YNPS new operability and surveillance requirements for equipment installed to meet the criteria of Item II.F.1-1 of NUREG-0737, for the monitoring of noble gas in plant effluent. The specific changes made to the YNPS Technical Specification pages are in accordance with the staff guidance provided in Generic Letter 83-37.

EVALUATION

YAEC has modified existing sample arrangements and installed additional equipment to specifically meet the criteria of NUREG-0737, Item II.F.1, Attachment 1.

The noble gas effluent monitoring systems consist of four isokinetic sampling probes which are installed in the primary vent stack, a low range primary vent stack gas monitor, a high range primary vent stack noble gas monitor, and four main steam line monitors.

Of the four isokinetic probes which are installed in the primary vent stack, two are designed for the flow rate during normal operation, and two are designed for the flow rate during purge operation. The monitors are located within the Primary Vent Stack Monitoring Equipment Building on the roof of the Primary Auxiliary Building. Remote readout is available in the Control Room via a chart recorder and panel alarm.

The four main steam line monitors are the noble gas effluent monitors for releases from the main steam line safety valves. The monitors consist of ion chambers externally mounted over each main steam line, upstream of the safety valves. The monitor readout is located on the radiation monitor panel in the Control Room.

The design and the installation of the equipment at YNPS for the monitoring of noble gases in effluents have been reviewed by the NRC. In Inspection Report No. 50-29/85-05, dated May 16, 1985, it was determined that the installed system meets the requirement of NUREG-0737, Item II.F.1.

Safety Consideration

This change was requested in order to add requirements for the noble gas effluent monitoring equipment installed to meet the requirements of NUREG-0737, Item II.F.1-1. This change incorporates the operability and surveillance requirements for the approved equipment in accordance with model Technical Specifications provided by the staff in Generic Letter 83-37.

This change incorporates equipment used to assess plant conditions and designed to function during accident conditions. The installed equipment has been determined to conform to staff criteria. This change is administrative in nature and incorporates limitations and surveillances modeled from staff guidance, the implementation of which will not create the possibility of a new or different kind of accident. The installed equipment is in response to the requirements of NUREG-0737.

The noble gas monitors are utilized to assess plant conditions, during and following an accident. These monitors are operable in Modes 1 through 4, but are not required for safe shutdown of the plant. In case of failure of the monitor, appropriate actions to be taken in a reasonable period of time have been delineated in accordance with staff criteria.

Based on the considerations contained above, it is concluded that there is reasonable assurance that operation of the Yankee plant, consistent with the proposed Technical Specification, will not endanger the health and safety of the public.

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 occupational radiation exposure. The Commission has previously published a proposed finding that the 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.

CONCLUSION

The Commission made a proposed determination that the amendment involves no significant hazards consideration which was published in the Federal Register (54 FR 38770) on September 20, 1989 and consulted with the State of Massachusetts. No public comments were received and the State of Massachusetts did not have any comments.

The staff has 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 (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.

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Dated: October 23, 1989