

DOCKET NO. 50-29

HAZARDS ANALYSIS BY THE RESEARCH AND POWER REACTOR SAFETY BRANCH

DIVISION OF LICENSING AND REGULATION

IN THE MATTER OF

YANKEE ATOMIC ELECTRIC COMPANY

PROPOSED CHANGE NO. 17

Introduction

Pursuant to the provisions of paragraph 3.A of License No. DPR-3, as amended, Yankee Atomic Electric Company in Proposed Change No. 17 dated February 1, 1962 requested authorization to make certain changes in its waste disposal system. These changes involve adding a tubular evaporator reboiler, a cyclone separator and a reboiler circulating pump to the system. The existing electrode evaporator shell and piping connections would be maintained, but all electrical connections to the evaporator would be disconnected. In addition, the present accumulation vent condenser and scrubber system may be isolated, since it is expected that there will be no off-gas produced by the proposed evaporation method. If this Change is authorized, it would be made as soon as practicable following receipt of necessary equipment from suppliers.

Discussion

Yankee desires to change to a new tubular evaporator reboiler because of the inability of the presently installed electrode evaporator equipment to produce processed water of the minimum specification required for re-use in the primary coolant system. Laboratory tests which Yankee has conducted

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indicated that the quality of distillate produced with an external heat source was better by a factor of four than that obtained through electrode evaporation. As a result, Yankee proposes to install a forced circulation, steam heated reboiler and cyclone separator, connected to the present evaporator shell. We believe that the installation and use of the new system for the evaporation of radioactive liquid waste would not represent an increase in potential hazard and, accordingly, that there are no safety considerations which would preclude the authorization of this change.

Conclusion

Based on our review of the Proposed Change, we have concluded that it does not present significant hazards considerations not described or implicit in the license application as amended to June 23, 1961. We have further concluded that there is reasonable assurance that the health and safety of the public would not be endangered by operation of the facility as proposed.

Original signed
by Robert H. Bryan

Date:

MAR 20 1962

Robert H. Bryan, Chief
Research & Power Reactor Safety Branch
Division of Licensing and Regulation