

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. 6

Pursuant to the provision of paragraph 3.A. of License No. DPR-3, as amended, Yankee Atomic Electric Company in Proposed Change No. 6, dated May 8, 1961, requested authorization to install an additional scram initiation circuit which will provide a reactor scram in the event of high water level in the pressurizer.

A recent analysis of conditions following a loss of station load without accompanying reactor scram indicates a more severe transient than had previously been calculated. The analysis is included in amendment No. 28 which was submitted concurrently with Proposed Change No. 6, and shows that if a loss of load without reactor scram were to occur at the end of core life with the plant operating at 485 Mw, the surge of main coolant volume which would ensue would result in the filling of the pressurizer and the relieving of a small volume of water through the pressure relief valves. In order to reduce the magnitude of this surge and prevent the activation of the relief valves, Yankee proposes to provide an automatic scram which will shut the reactor down if the water level in the pressurizer rises to 155 inches above normal operating level.

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

Edson G. Case, Chief  
Research and Power Reactor Safety Branch  
Division of Licensing and Regulation

Date: MAY 25 1961

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