

YANKEE ATOMIC ELECTRIC COMPANY



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September 12, 1980

Mr. Darrell G. Eisenhut, Director
Division of Licensing
Office of Nuclear Reactor Regulation
United States Nuclear Regulatory Commission
Washington, D. C. 20555

References: (a) License No. DPR-3 (Docket No. 50-29)
(b) USNRC Letter to YAEC, dated August 4, 1980

Subject: Yankee Nuclear Power Station Seismic Evaluation

Dear Mr. Eisenhut:

Your letter of August 4, 1980 [Reference (b)], requests information on our program for seismic evaluation and upgrade of the Rowe plant. The following is in response to that request.

Reactor Support Modifications

In February 1980 we met with members of your staff to discuss the seismic evaluation which we have performed on the reactor containment and the concrete reactor support structure. We also presented our plans for design and installation of hardware modifications to increase the seismic capacity of the reactor support structure. These modifications consist of collars and anchor bolts at the base of the columns that hold up the concrete reactor support structure. Installation of this equipment will be started before the end of this year and be complete in early 1981.

Steam Generator Supports

In April 1980, we met again with your staff and informed them of our plans to initiate the SEP seismic evaluation, as well as our plans to proceed with the design and installation of lateral supports on the steam generators to increase the seismic capacity of the reactor coolant system pressure boundary. Work on these steam generator supports is already underway and it will be completed within 60 days.

Probabilistic Risk Assessment

In addition, we have undertaken a site-oriented, probabilistic risk assessment for the Rowe plant. This work is expected to show that the risk to the public from the Rowe plant is much lower than from other comparable licensed plants.

Seismic Analysis

Our major effort at this time is the development of analytical methods and computer codes for a comprehensive seismic analysis of (1) the reactor coolant pressure boundary, (2) other systems related to safe shutdown capability, and (3) engineered safety systems and equipment, including the reactor containment. This development work should be completed early in 1981. We then plan to analyze the critical components and systems for at least two combinations of ground acceleration and response spectra. This approach will give us a better picture of the true seismic capability of the plant than would analyses at a single seismic level. We will establish these seismic levels in early 1981. By that time you indicate that the NRC will have finalized its position. Methods and code development will occupy us until then, so no time will be lost.

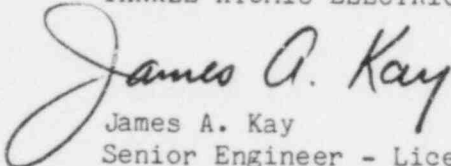
We will do our best to complete all of this analytical work by January 1, 1982, as your letter [Reference (b)] suggests. This will be difficult, but it should be possible.

We cannot, however, be sure that any modifications to the facility that may be necessary can be installed within one year thereafter. Until the analytical work is done, nobody knows what modifications are necessary. They may be simple and easily accomplished in one year, or they may be very complex and require some time to complete. We suggest that a decision regarding the schedule for further hardware modifications (beyond those to which we are currently committed) be deferred until we have some idea of what those modifications are.

We trust this letter adequately responds to your request of August 4th. Should you have any questions or require additional information please feel free to call.

Very truly yours,

YANKEE ATOMIC ELECTRIC COMPANY



James A. Kay
Senior Engineer - Licensing