

YANKEE ATOMIC ELECTRIC COMPANY



20 TURNPIKE ROAD, WESTBORO, MASSACHUSETTS 01581
TELEPHONE 617 366-9011

April 26, 1972

United States Atomic Energy Commission
Washington, D. C. 20545

Attention: Division of Reactor Licensing

Reference: License No. DPR-3 (Docket No. 50-29)

Dear Sirs:

Pursuant to Section 50-59 of the Commission's Regulations, Yankee Atomic Electric Company hereby requests authorization to make the following change:

PROPOSED CHANGE: Reference is made to Section 101 of the license application, Core Mechanical Design, and particularly to Page 101:7. We propose to install two hafnium-Zircaloy unitized control rod-follower assemblies into the core for Core X operation. These two unitized control rod assemblies are new spares purchased when hafnium was used as control rods in Cores III, IV and V.

Reason for Change: Following the installation of core internals and before placement of the reactor vessel head, it is part of the plant's operating procedures to individually withdraw each control rod by the driveshaft a distance of approximately six and one half feet using the fuel handling manipulator crane. This is done to insure that the driveshafts and control rod assemblies are properly coupled and that there is no operational interference.

While the control rod assemblies were being individually withdrawn, difficulty was experienced with two of the Inconel clad AgInCd-Zircaloy control rod assemblies. A complete test program has been conducted and the results are as follows:

1. Distortion was determined to have been the cause for the problem in the Inconel clad AgInCd-Zircaloy control rod assemblies.
2. The remaining twenty two control rods were individually tested and found to be satisfactory.



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United States Atomic Energy Commission
Attn: Division of Reactor Licensing

Proposed Change No. 98
April 26, 1972

The hafnium-Zircaloy control rod assemblies were designed and constructed to be completely interchangeable with the Inconel clad AgInCd-Zircaloy control rod assemblies. Twenty two hafnium-Zircaloy and two Inconel clad AgInCd-Zircaloy control rod assemblies were installed into the core in October 1963 for Core III operation. The only difference in the control rod assemblies of Core X and Core III is that those to be used in Core X are unitized whereas those of Core III were of the earlier break joint design.


Physics test measurements taken during Core III startup showed that the Inconel clad AgInCd-Zircaloy control rod assemblies are worth 95 percent of the hafnium-Zircaloy control rod assemblies. The two hafnium-Zircaloy control rod assemblies will be inserted into shutdown group "D". An engineering review indicates that the only effect this has on Core X is to increase the shutdown worth of group "D".

Safety Considerations: In our opinion, the proposed change does not present significant hazard considerations not described or implicit in the license application, as amended.

Schedule of Change: This change will be put into effect immediately upon receipt of your approval. The schedule indicates that the plant will be ready for initial criticality on or before May 6, 1972; therefore, your prompt approval of this proposed change is requested.

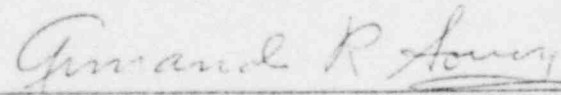
Respectfully submitted,

YANKEE ATOMIC ELECTRIC COMPANY


Wendell P. Johnson
Assistant Vice President

COMMONWEALTH OF MASSACHUSETTS)
) ss.
COUNTY OF WORCESTER)

Then personally appeared before me, Wendell P. Johnson, who, being duly sworn did state that he is an Assistant Vice President of Yankee Atomic Electric Company, that he is duly authorized to execute and file the foregoing request in the name and on the behalf of Yankee Atomic Electric Company, and that the statements therein are true to the best of his knowledge and belief.


Armand R. Soucy Notary Public
My Commission Expires September 9, 1977

POOR ORIGINAL

CONTROL NO: 2275

FROM: Yankee Atomic Electric Co. Westboro, Mass. 01581 Wendell P. Johnson	DATE OF DOC: 4-26-72	DATE REC'D 4-27-72	LTR X	MEMO	RPT	OTHER
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CLASS: <input checked="" type="radio"/> / PROP INFO	INPUT X	NO CYS REC'D 36 cys rec'd	DOCKET NO: 50-29			

DESCRIPTION:
Ltr notarized 4-26-72, submitting Proposed Change No. 98 for Yankee Atomic Electric Co.

ENCLOSURES:

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ACKNOWLEDGED**

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