

Regulatory

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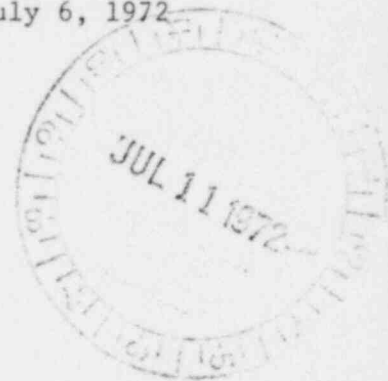
YANKEE ATOMIC ELECTRIC COMPANY



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



July 6, 1972



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

Attention: Directorate of Licensing

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

Dear Sirs:

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

PROPOSED CHANGE: Reference is made to Section 400 of the license application, Safety Analysis, particularly Page 400:2 and to Paragraph D.2.d of the Technical Specifications attached as Appendix A to the license and as amended in Proposed Changes Nos. 99 and 100. We propose the following:

"Operation of the Yankee reactor with increased surveillance and operating restrictions and a control rod dropping with a drop time greater than 2.40 seconds."

Reason for Change: During the control rod exercise and drop time testing portion of the Core X Start-of-Life testing program, difficulty was encountered with control rod No. 18 located in Shutdown Group D. Results of the test program revealed that control rod No. 18 did not properly drop into the Core. During the subsequent increased surveillance program, control rod No. 18 has successfully dropped on the thirteen occasions that all the control rods have been dropped. The average drop time for control rod No. 18 is 2.65 seconds. To assure that the shutdown margin is maintained without compensating for the entire worth of the maximum worth control rod (1.5% $\Delta K/K$ as specified in Proposed Change No. 100, Yankee proposes to conservatively operate the reactor to compensate for the slow control rod. The control rod position for the control rod at 2.40 seconds shall be conservatively determined using an average drop time of 2.65 seconds (Attachment 1). Reactivity worth of the control rod from above the Core to the bottom of the Core can be determined using 1.50% $\Delta K/K$ as the worth of the entire control rod. Either the reactor power output shall be sufficiently reduced and/or the control rod restriction curve (attached) shall be increased to maintain 2.0 times the worth of the slow control rod between 2.40 and the average measured drop time.

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United States Atomic Energy Commission
Attn: Directorate of Licensing

Proposed Change No. 101
July 6, 1972

On June 14, 1972 Yankee submitted a report on the increased drop time for control rod No. 19. The report indicated that prior to the control rod drop surveillance test the plant had cooled down for a repair and subsequently returned to 514°F Tavg. Control rod drop time on July 1, 1972 was 2.02 seconds. Yankee maintains that the temporary increase in control rod No. 19 drop time experienced on June 10, 1972 was attributed to the fact that the drop time was measured after the cool-down and heatup associated with the repair.

SURVEILLANCE PROGRAM

- A. EXERCISE - The normal control rod exercise program shall be continued.
- B. CONTROL ROD DROPS - The plant shall be taken off the line and control rod drop times measured on either Saturday and/or Sunday of the last full weekend in each month for the remaining portion of Core X.

An increase in the measured drop time of any control rod of more than 0.3 seconds compared with the highest drop time measured during the 3 consecutive drop tests during Core X startup testing shall be reason for Yankee to promptly notify the Commission, investigate the control rod performance and submit a report on the findings. The limiting condition for operation shall be that the drop time on 23 control rods shall not exceed 2.40 seconds. Either the reactor power output shall be sufficiently reduced and/or the control rod restriction curve shall be increased to maintain the required shutdown margin.

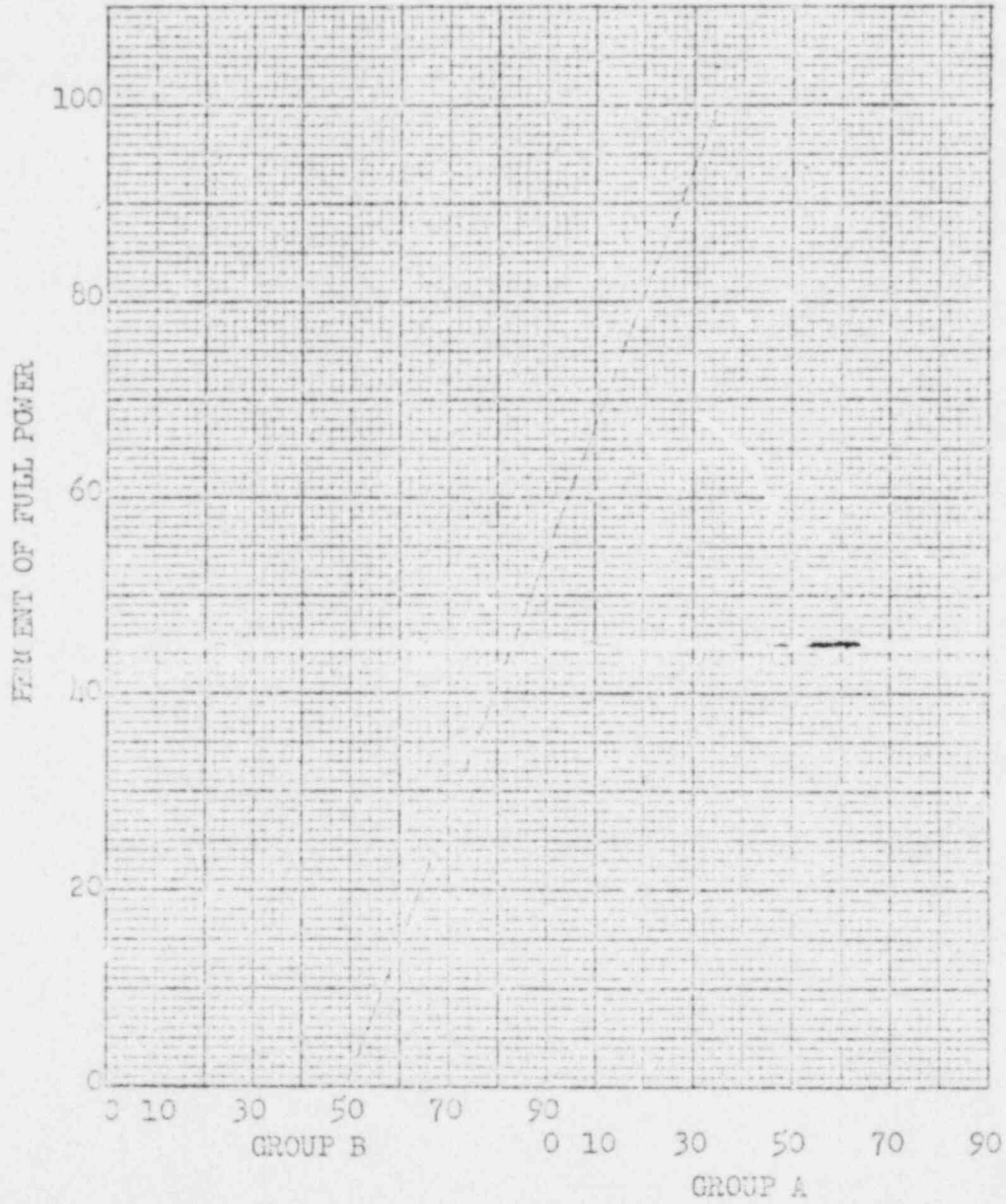
As a result of the detailed review of control rod drop times, the review of Core X accident analyses and the proposed mode of operations, it is our opinion that the plant can be safely operated as outlined, for the duration of Core X.

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

ATTACHMENT NO. 1

CONTROL ROD NO. 18

<u>DATE</u>	<u>TIME</u>
5/25/72	2.62
5/25/72	2.82
5/25/72	2.81
5/25/72	2.98
5/27/72	3.01
6/9/72	2.50
6/9/72	2.45
6/9/72	2.39
6/9/72	2.56
6/10/72	2.65
6/10/72	2.72
7/1/72	2.45
7/1/72	2.47
	<hr/>
	2.65 AVERAGE



CONTROL ROD POSITION, INCHES WITHDRAWN

POOR ORIGINAL

AEC DISTRIBUTION FOR PART 50 DOCKET MATERIAL
(TEMPORARY FORM)

CONTROL NO: 3789

FROM: Yankee Atomic Electric Company Westboro, Massachusetts 01581 Donald E. Vandenburg	DATE OF DOC: 7-6-72	DATE REC'D 7-11-72	LTR x	MEMO	RPT	OTHER
TO: DL	ORIG 3 signed	CC 37	OTHER	SENT AEC PDR	X	
CLASS: <u>U</u> PROP INFO	INPUT X	NO CYS REC'D 40	DOCKET NO: 50-29			

DESCRIPTION:
Ltr requesting change in Tech Specs....
trans the following:

PLANT NAMES: Yankee Rowe

ENCLOSURES:
PROPOSED CHANGE NO. 101 to TECH SPECS notarized
7-6-72 to auth operation with increased
surveillance & operating restrictions & a contro
dropping with a drop time greater than 2.40
seconds.

ACKNOWLEDGED
DO NOT REMOVE

(3 Orig & 37 conf'd cys rec'd)

FOR ACTION/INFORMATION 7-11-72 fod

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