

REGULATORY DOCUMENT

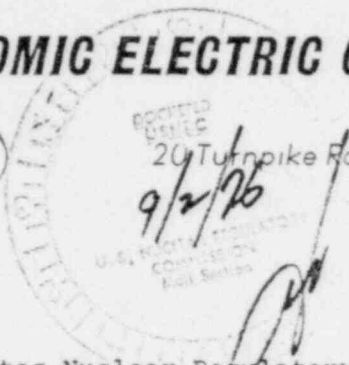
Telephone 617 366-9011

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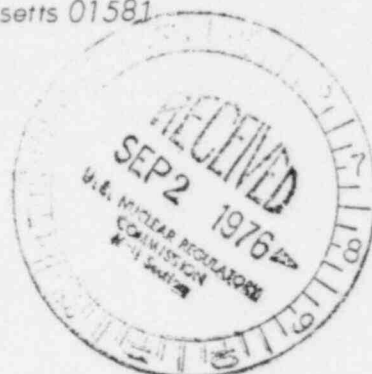
WYR 76-88

YANKEE ATOMIC ELECTRIC COMPANY



20 Turnpike Road Westborough, Massachusetts 01581

August 27, 1976



United States Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Office of Nuclear Reactor Regulation

Subject: Upper Hemispherical Head Temperature

- Reference:
- (1) License No. DPR-3 (Docket No. 50-29)
 - (2) Technical Specification, "Yankee Nuclear Power Station Core XII Performance Analysis" Appendix B, Additional LOCA Analysis, (February 20, 1976).
 - (3) Letter from W. P. Johnson to USNRC, WYR 76-84, (August 23, 1976).
 - (4) Letter from W. P. Johnson to USNRC, WYR 76-86, (August 26, 1976)

Dear Sir:

The re-analysis of the most limiting LOCA break size identified in Reference (2) assuming T_{hot} (560°F) for the coolant temperature in the upper head has been completed. The results of this re-analysis are thus being transmitted to you in accordance with the schedule put forth in Reference (3).

The peak clad temperature (PCT) for Exxon fuel at 10.15 kw/ft and 180 Effective-Full-Power-Days (EFPD) burnup was calculated to be 1987.5°F. This number compares conservatively to the previously calculated PCT value of 2019.0°F for the Exxon fuel at this burnup and 10.5 kw/ft.

In summary, the above results confirm the earlier information transmitted to you in Reference (4) and justifies the .85 kw/ft reduction in the limiting LHGR for Exxon fuel for Yankee Rowe Core XII.

Any further questions regarding this matter please contact our Mr. William J. Szymczak at our Engineering Office, 20 Turnpike Road, Westborough, Massachusetts, 01581, (617) 366-9011, Extension 2844.

Very truly yours,

YANKEE ATOMIC ELECTRIC COMPANY

8929

W. P. Johnson
W. P. Johnson
Vice President

8011050 638

P

MRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL

FILE NUMBER

TO:

N. R. C.

FROM:
Yankee Atomic Electric Co.
Westboro, Mass.
W. P. Johnson

DATE OF DOCUMENT
8/27/76

DATE RECEIVED
9/2/76

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DESCRIPTION

Ltr. re their 2/20/76, 8/23/76 and 8/26/76
ltrs.....concerning Upper Hemispherical
Head Temperature.

(1-P)

PLANT NAME:
Yankee Rowe

ENCLOSURE

ACRIS
DONOR

SAFETY

FOR ACTION/INFORMATION

ENVIRO 9/3/76 RJL

ASSIGNED AD:
BRANCH CHIEF: Schwencer (6)
PROJECT MANAGER: Burger
LIC. ASST.: Sheppard (LMA)
Vassallo

ASSIGNED AD:
BRANCH CHIEF:
PROJECT MANAGER:
LIC. ASST.:

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CONTROL NUMBER

8924