

YANKEE ATOMIC ELECTRIC COMPANY



20 Turnpike Road Westborough, Massachusetts 01581

June 16, 1976

Regulatory Docket File

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

Attention: Office of Nuclear Reactor Regulation

Subject: YR Core XII Small Break LOCA Analysis

- Reference:
- (1) License No. DPR-3 (Docket No. 50-29)
 - (2) Letter from D.E. Vandenburg to USNRC (May 19, 1976).
 - (3) Letter from D.E. Vandenburg to USNRC (May 11, 1976).
 - (4) Proposed Change No. 138 (May 11, 1976).
 - (5) Proposed Change No. 125, Supplement No. 8 (February 20, 1976).



Dear Sir:

Please find attached to this letter the results of a confirmatory small break LOCA analysis for YR Core XII submitted in accordance with Reference (2) above. This analysis was performed with the corrected accumulator flow rates as described in Reference (3), and with the accumulator pressure setpoint designated in Reference (4). This analysis includes:

- (a) a reanalysis of the 4-inch ID pipe rupture previously reported to be the limiting small break
- (b) an analysis of a 5-inch ID, a 10-inch ID, and a safety injection (2.25 inch ID) pipe rupture, and
- (c) an analysis of a 2-inch ID pipe rupture with no direct ECCS spillage to the containment.

The results of the analysis reported herein are within the limits specified in 10CFR50.46. The safety injection (2.25-inch ID) pipe rupture has been identified as the most limiting small LOCA break size but not more limiting than the results previously reported in Reference (5).

Any further questions regarding this analysis should be directed to Mr. W. J. Szymczak at our Engineering Office, 20 Turnpike Road, Westboro, Massachusetts 01581, (617) 366-9011, extension 2844.

Respectfully submitted,

YANKEE ATOMIC ELECTRIC COMPANY

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

8010810-705

WJS/kg

5155

NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL

TO: NRC		FROM: Yankee Atomic Elec. Co. Westborough, Mass. 01581 J.L. French		FILE NUMBER	
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PLANT NAME: Yankee Rowe

ENCLOSURE Suppl info for the purposes of Evaluation of 10 CFR Part 50 Appendix I....

(40 cys enclrec'd)

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ACKNOWLEDGED

FOR ACTION/INFORMATION

DHL 6-5-76

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OELD		LAINAS	SPANGLER
COSSICK & STAFF	ENGINEERING	IPPOLITO	SITE TECH
MIFC	MCCARY		GASULL
CASE	KNIGHT	OPERATING REACTORS	STEPP
HANAUER	SIHWEIL	STELLO	HULMAN
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		OPERATING TECH	
PROJECT MANAGEMENT	REACTOR SAFETY	<input checked="" type="checkbox"/> EISENHUT	SITE ANALYSIS
FOYD	ROSS	<input checked="" type="checkbox"/> SHAO	VOLLMER
P COLLINS	NOVAK	<input checked="" type="checkbox"/> BAER	FUNCH
HOUSTON	ROSZTOCZY	<input checked="" type="checkbox"/> SCHWENCER	J. COLLINS
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MELTZ			Verdery
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the following:

566 rot

NOTE: Distribution same as control #5170.

PLANT NAME: (1-P)
Yankee Rowe

ENCLOSURE

Small Break LOCA Analysis
for the
Yankee Nuclear Power Station

June 17, 1976
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ACKNOWLEDGED

(60-P)

SAFETY FOR ACTION/INFORMATION ENVIRO 6/18/76 RJL

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<input checked="" type="checkbox"/> I & E (2)	SCHROEDER	BENAROYA	DENTON & MULLER
<input checked="" type="checkbox"/> OELD		LAINAS	
<input checked="" type="checkbox"/> GOSSICK & STAFF	ENGINEERING	IPPOLITO	ENVIRO TECH.
MIPC	MACCARRY	KIRKWOOD	ERNST
CASE	KNIGHT		BALLARD
HANAUER	SIHWEIL	OPERATING REACTORS	SPANGLER
HARLESS	PAWLICKI	STELLO	
			SITE TECH.
PROJECT MANAGEMENT	REACTOR SAFETY	OPERATING TECH.	GAMMILL
BOYD	ROSS	<input checked="" type="checkbox"/> EISENHUT	STEPP
P. COLLINS	NOVAK	<input checked="" type="checkbox"/> SHAO	HULMAN
HOUSTON	ROSZTOCZY	<input checked="" type="checkbox"/> BAER	
PETERSON	CHECK	<input checked="" type="checkbox"/> BUTLER	SITE ANALYSIS
MELTZ		<input checked="" type="checkbox"/> GRIMES	VOLLMER
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