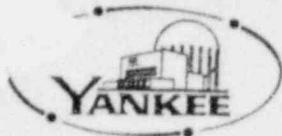
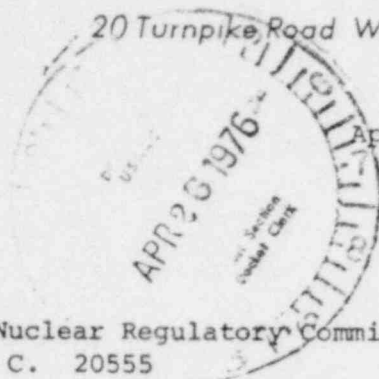


YANKEE ATOMIC ELECTRIC COMPANY

20 Turnpike Road Westborough, Massachusetts 01581



April 21, 1976



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

Attention: Office of Nuclear Reactor Regulation

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

Dear Sir:

Pursuant to Section 50-59 of the Commission's Rules and Regulations Yankee Atomic Electric Company hereby proposes the following modification to Appendix A to the Technical Specifications.

PROPOSED CHANGE: We propose adding a pulsation dampener on the three (3) charging pump discharge header. The design and operation of the Charging and Volume Control System is described in Section 203 of the Facility Hazards Summary Report (FHSP).

We have revised page 203:1 and drawing No. 646J430 (inserted after page 203:1) and added page 203:1A to incorporate the proposed change. Copies of the revised pages and the drawing are attached.

REASON FOR CHANGE: The installation of the pulsation dampener will hopefully eliminate vibrations now being experienced on the discharge header.

SAFETY CONSIDERATIONS: The Proposed Change does not present any significant hazards consideration not described or implied in the reference license as amended.

The proposed change has been reviewed by the Nuclear Safety Audit and Review Committee.

SCHEDULE OF CHANGE: The change will be effected following Commission approval.

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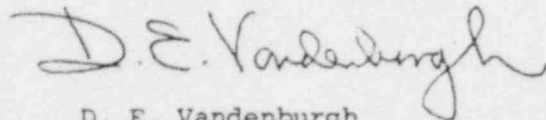
4104

P

We trust you will find this information satisfactory; however, should you desire additional information, please do not hesitate to contact us.

Very truly yours,

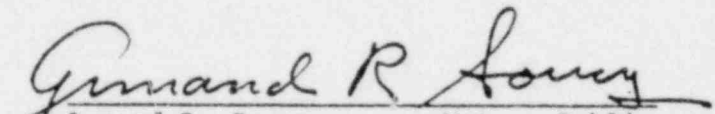
YANKEE ATOMIC ELECTRIC COMPANY



D. E. Vandenburg
Vice President

COMMONWEALTH OF MASSACHUSETTS))ss.
COUNTY OF WORCESTER)

Then personally appeared before me, D. E. Vandenburg, who being duly sworn, did state that he is 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

203 CHARGING AND VOLUME CONTROL SYSTEM

General

The charging and volume control system is an auxiliary system in the primary plant and is designed to accomplish the following major functions:

- Water charging to the main coolant system
- Water removal from the main coolant system
- Boric acid addition and removal for control purposes
- Quenching of relief and safety valve discharge
- Pressurizer vessel cooling and decontamination
- Noncondensable gas removal
- Chemical addition
- Water charging to auxiliary system and equipment

The arrangement of the charging and volume control system is shown on drawing No. 646-J-430. It contains the following major items of equipment, designed in accordance with the following codes:

- Equipment - ASME Section VIII - 1956 - Unfired Pressure Vessels
- Piping - ASA 31.1 - 1955 - Code for Pressure Piping, Sections 1 and 6
- Valves, Fittings - ASA B16.5 - 1953 - Code for Steel Piping and Flanged Fittings

High Pressure Charging Pumps

Three motor driven positive displacement charging pumps are provided in the charging and volume control system. The capacity of each pump is approximately 33 gpm, when operating against a discharge head of 2,100 psi gage. Two of the pumps serve as a spare for the other, and they can be operated singly or simultaneously, if required. Any pump can be isolated from the system for repairs. Two of the pumps are driven through variable speed fluid couplings, so that their flow can be controlled between 11 and 33 gpm. Pump No. 3 may be used in conjunction with the loop fill and chemical injection line to accomplish charging to any isolated loop while one or both of the other charging pumps is servicing the reactor vessel portion of the main coolant system. All of the high pressure charging pumps are provided with a pressure relief valve.

Pulsation Dampener

A homogeneous chrome moly pulsation dampener is installed on the discharge of Number 3 charging pump. It serves to reduce the pressure variation created by the variable speed pump and is employed to reduce fatigue stressing. The dampener basic operation consist of absorbing the potential energy of the pressure shock by the compression of a bladder precharged with nitrogen.

Feed and Bleed Heat Exchanger

The feed and bleed heat exchanger consists of a set of four small individual heat exchangers connected in series, which cool the bleed before it is reduced in pressure. Multiple exchangers are employed in order to reduce the size of metal parts and the corresponding high thermal stresses that may occur during severe thermal transient operation. The bleed flows through the tubes while the feed is passed through the shell side, thus recovering some of the heat otherwise lost in a bleeding process.

50-29

NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL

FILE NUMBER

TO:
NRC

FROM: YANKEE ATOMIC ELECTRIC CO
WESTBOROUGH, MASS

D E VANDENBURGH

DATE OF DOCUMENT
4-21-76
DATE RECEIVED
4-26-76

LETTER
 ORIGINAL
 COPY

NOTORIZED
 UNCLASSIFIED

PROP INPUT FORM

NUMBER OF COPIES RECEIVED
1 Sign
39 cc = 40 cys

DESCRIPTION
LTR NOTORIZED 4-21-76.....
LTR WITH PROPOSED CHANGE NO 137 TO THE TECH SPEC TO ADD A PULSATION DAMPENER ON 3 CHARGING PUMP DISCHARGE HEADER...ALSO PROVIDING REVISED PAGES (203:1A) AND DRAWING NO. 646J430

ENCLOSURE

DO NOT REMOVE

ACKNOWLEDGED

PLANT NAME: **Yankee Rowe**

SAFETY FOR ACTION/INFORMATION ENVIRO 4-27-76 RKB

ASSIGNED AD :		ASSIGNED AD :
<input checked="" type="checkbox"/> BRANCH CHIEF :	PURPLE	BRANCH CHIEF :
PROJECT MANAGER:		PROJECT MANAGER :
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INTERNAL DISTRIBUTION

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GOSSICK & STAFF	ENGINEERING	IPPOLITO	
MIPC	MACCARY		SITE TECH
CASE	KNIGHT	OPERATING REACTORS	GAMMILL
HANAUER	SIHWEIL	STELLO	STEPP
HARLESS	PAWLICKI		HULMAN
		OPERATING TECH	
PROJECT MANAGEMENT	REACTOR SAFETY	EISENHUT	SITE ANALYSIS
BOYD	ROSS	SHAO	VOLLMER
P. COLLINS	NOVAK	BAER	BUNCH
HOUSTON	ROSZTOCZY	SCHWENCER	J. COLLINS
PETERSON	CHECK	GRIMES	KREGER
MELTZ			
HELTEMES	AT & I	SITE SAFETY & ENVIRO	
SKOVHOLT	SALTZMAN	ANALYSIS	
	RUTBERG	DENTON & MULLER	

EXTERNAL DISTRIBUTION

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ACRS 16 INDICATED SENT		

CONTROL NUMBER

4104

cc: NRC PDR
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R. Denise
R. DeYoung
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OR PM
S. Sheppard
R. Fraley, ACRS (16)
SD(3)
OI&E(3)
OELD
B. Faulkenberry, OI&E
Receptionist
Principal Staff Participants

bcc: T. B. Abernathy, TIC
J. R. Buchanan, NSIC