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M. J. COONEY
MANAGER
NUCLEAR PRODUCTION
ELECTRIC PRODUCTION DEPARTMENT

January 29, 1986

Docket No. 50-352

Mr. Robert Bernero, Director
Division of Boiling Water Reactor Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Bernero:

The following information is provided in response to a Request for Additional Information (RAI) from Mr. R. E. Martin, Limerick Project Manager, of your staff, in support of a December 18, 1985 Request for Amendment to the Limerick Operating License and Temporary Exemption to the requirements of Appendix J to 10 CFR 50.

This request was directed towards supplying information relative to industry experience with valves similar to those which were the subject of the Amendment Request. In order to support this RAI, a multi-faceted program has been undertaken which includes the following: 1) Review of Nuclear Plant Reliability Data systems; 2) Contact with other utilities identified as having similar valves; 3) Contact with valve manufacturers of the specific valves; and 4) Review of general experience with testing of similar valves at Peach Bottom Atomic Power Station (PBAPS).

Table 1 (attached) addresses item 1 above. Items 2 and 3 remain under investigation. In response to item 4, general experience with similar valves at PBAPS indicates that valve leakage appears to be related to type of service and time in service. Valves which are used in non-modulating applications, such as those which are the subject of this amendment request, tend not to have problems meeting leakage criteria.

Table 2 (attached) is a compilation of information regarding the valves for which temporary relief of the testing requirement is sought.

EB (LIAW)
PSB (L. HULMAN)
EICSB (SRINIVASAN)
RSB (ACTING)
FOB (VASSALLO)
AD - G. LAINAS (Ltr only)

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Add:

Mr. Robert Bernero

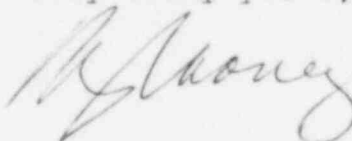
January 29, 1986

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The information gathered thus far has revealed nothing which would alter or affect the conclusions contained within our application.

Should you have any questions or require additional information, please do not hesitate to contact us.

Very truly yours,



Attachments

cc: Dr. Thomas E. Murley, Administrator, Region I, USNRC
E. M. Kelly, Senior Resident Site Inspector
See Attached Service List

Table 1 - Explanation

Results of review of industry experience conducted through Nuclear Plant Reliability Data System

Columns 1, 2, 3, 4

Manufacturer, Model Number, Size and Type of valves which are the subject of the amendment request.

Column 5 - Similar Number Identified

Number of valves identified upon interrogation of NPRD data base. Search was based upon manufacturer, type and size range (e.g. Velan, gate, 2"-6"). Computer generated listing was manually sorted to identify similar model numbers. If no similar model numbers were identified, the number reported represents the numbers of all valves of same manufacturer, type and specific size.

Column 6

NPRD failure reports were obtained for all valves identified and reported in Column 5. These reports were reviewed and those failures which were relevant to leakage rates and isolation function are tabulated. It is notable that the reported failures concern valves which have been in service for significant periods and were reported to NPRD as "wear-out".

Column 7

Identifies those totals which are reported for all valves of same size when similar model numbers could not be identified.

TABLE 1

NPRDS REVIEW
OF
SIMILAR VALVES

MANUFACTURER	MODEL	SIZE	TYPE	SIMILAR NUMBER IDENTIFIED	MEANINGFUL FAILURES REPORTED	COMMENTS
Velan	B12-00054B-02WN B10-00054B-02WN	3"	Gate	30	0	
Crane	Cat. #47XUF	8"	Gate	198	0	
Rockwell	1-3624F316LMP 1 1/2-3624F316LMMT	1" 1 1/2"	Globe Globe	492	28	
Atwood & Morrill	13673-02-03-05-06 13673-01-04	12"	CK	0 (61*)	6*	*All Models.
Anchor/Darling	SJO-2171-52	8"	Gate	0 (337*)	4*	*All Models.
	SJO-2159-15 SJO-2159-16 SJO-5348-06	6"	Globe	0 (46*)	1*	*All Models.
	SJO-5348-07	12"	Gate	0 (226*)	1*	*All Models.
Borg Warner	Part No. 77940	1"	CK	0 (21*)	0	
Circle Seal	NV02-14	1"	CK	0 (14*)	2*	*All Models.

TABLE 2

Penetration Number and Description	Valve Numbers (Size - Inches)	Test Medium	Frequency of Valve Operation	Previous Test Results	Process Fluid	Manufacturer	Valve Type	Model Number
X-3D Instrument Gas Supply	HV-59-151B (1) 59-1112 (1)	Air	N.O. Stroked Quart Check Stroked Refuel	7.54 SCCM 1.45 SCCM	PCIG or Instrument Air	Rockwell Circle Seal	Globe Check	1-3624 F316LMT NV02-14
X-13A 'A' RHR Shutdown Cooling Return	HV-51-1F050A (12) HV-51-151A (1.5)	Air/ Water	Check Stroked Refuel N.C. Not Stroked	0.1 GPM* 0.1 GPM*	Reactor Demineralized Water	Atwood & Morrill Rockwell	Check Globe	13673-01-04 1 1/2-3624F316 LMMT
X-13B 'B' RHR Shutdown Cooling Return	HV-51-1F050B (12) HV-51-151B (15)	Air/ Water	Check Stroked Refuel N.C. Not Stroked	0.0 GPM* 0.0 GPM*	Reactor Demineralized Water	Atwood & Morrill Rockwell	Check Globe	13673-01-04 1 1/2-3624F316 LMMT
X-14 Reactor Water Cleanup Supply	HV-44-1F001 (6) HV-44-1F004 (6)	Air	N.O. Stroked Quart N.O. Stroked Quart	24.0 SCCM 485.75 SCCM	Reactor Demineralized Water	Anchor/Darling Anchor/Darling	Globe Globe	SJO-2159-15 SJO-2159-16
X-23 Reactor Enclosure Cooling Supply	HV-13-106 (4) HV-13-108 (3) HV-13-109 (3)	Air	N.O. Stroked Refuel N.O. Stroked Refuel N.C. Not Stroked	121.8 SCCM 23.25 SCCM* 23.25 SCCM*	React. Encl. Cooling Water Demin. Water	Velan Velan Velan	Gate Gate Gate	B12-00054B-02WN B10-00054B-02WN B10-00054B-02WN
X-24 Reactor Enclosure Cooling Return	HV-13-107 (4) HV-13-110 (3) HV-13-111 (3)	Air	N.O. Stroked Refuel N.C. Not Stroked N.O. Stroked Refuel	5.2 SCCM 3.6 SCCM* 3.6 SCCM*	React. Encl. Cooling Water Demin. Water	Velan Velan Velan	Gate Gate Gate	B12-00054B-02WN B10-00054B-02WN B10-00054B-02WN
X-45A 'A' RHR LPCI	HV-51-1F041A (12) HV-51-1F017A (12) HV-51-142A (1.5)	Air/ Water	Check Stroked Refuel N.C. Stroked Refuel N.C. Not Stroked	0.0198 GPM* 84.75 SCCM 0.0198 GPM*	Suppression Pool Water	Atwood & Morrill Anchor/Darling Rockwell	Check Gate Globe	13673-02-03-05-06 SJO-5348-07 1-3624F316LMMT
X-45C 'C' RHR LPCI	HV-51-1F041C (12) HV-51-1F017C (12) HV-51-142C (1.5)	Air/ Water	Check Stroked Refuel N.C. Stroked Refuel N.C. Not Stroked	0.002 GPM * 148. SCCM 0.002 GPM *	Suppression Pool Water	Atwood & Morrill Anchor/Darling Rockwell	Check Gate Globe	13673-02-03-05-06 SJO-5348-07 1-3624F316LMMT
X-45D 'D' RHR LPCI	HV-51-1F041D (12) HV-51-1F017D (12) HV-51-142D (1.5)	Air/ Water	Check Stroked Refuel N.C. Stroked Refuel N.C. Not Stroked	0.0828 GPM* 976.8 SCCM 0.0828 GPM*	Suppression Pool Water	Atwood & Morrill Anchor/Darling Rockwell	Check Gate Globe	13673-02-03-05-06 SJO-5348-07 1-3624F316LMMT
X-53 Drywell Chilled Water Supply	HV-87-120A (8) HV-87-125A (8) HV-87-128 (8)	Air	N.O. Stroked Quart N.C. Stroked Quart N.O. Stroked Quart	170.5 SCCM* 170.5 SCCM* 32.25 SCCM	Demineralized Water	Crane Crane Anchor/Darling	Gate Gate Gate	Cat. No. 47XUF Cat. No. 47XUF SJO-2171-52

cc: Troy B. Conner, Jr., Esq.
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Atomic Safety & Licensing Appeal Board
Atomic Safety & Licensing Board Panel
Docket & Service Section (3 Copies)
E. M. Kelly
Timothy R. S. Campbell

September, 1985