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May 24, 1996
NPD2VPO:0481

Beaver Valley Power Station, Unit No. 2
Docket No. 50-412, Licensee No. NPF-73
LER-96-002-00

United States Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

In accordance with Appendix A, Beaver Valley Technical Specifications, the following Licensee Event Report is submitted:

LER 96-002-00, 10 CFR 50.73.a.2.i.B, "Condition Prohibited by Technical Specifications -Containment Penetration not Isolated Within the Time Limit".

T. P. Noonan
Division Vice President
Nuclear Operations/Plant Manager

AMD/jcd

Attachment

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LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)

Beaver Valley Power Station Unit 2

DOCKET NUMBER (2)

05000412

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Containment Penetration not Isolated within the Time Limit

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)		
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER	
2	20	96	96	002	00	05	24	96	N/A	05000	
OPERATING MODE (9)			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more) (11)								
1			20.402(b)			20.405(c)			50.73(a)(2)(iv)		73.71(b)
POWER LEVEL (10)			20.405(a)(1)(i)			50.36(c)(1)			50.73(a)(2)(v)		73.71(c)
100			20.405(a)(1)(ii)			50.36(c)(2)			50.73(a)(2)(vii)		OTHER
			20.405(a)(1)(iii)			X 50.73(a)(2)(i)			50.73(a)(2)(viii)(A)		(Specify in abstract below and in Text
			20.405(a)(1)(iv)			50.73(a)(2)(ii)			50.73(a)(2)(viii)(1)		
			20.405(a)(1)(v)			50.73(a)(2)(iii)			50.73(a)(2)(x)		NRC Form 366A)

LICENSEE CONTACT FOR THIS LER (12)

NAME

T. P. Noonan, Vice President Nuclear Operations and Plant Manager

TELEPHONE NUMBER (include Area Code)

(412) 393-7622

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC				COMPONENT	MANUFACTURER	REPORTABLE TO NRC
E	BD	XXXX	XXXX	N						

SUPPLEMENTAL REPORT EXPECTED (14)

YES (if yes, complete EXPECTED SUBMISSION DATE)	X	NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR

ABSTRACT (Limited to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On February 20, 1996, with Beaver Valley Unit 2 in Mode 1, at 100% power, valve 2MSS*SOV120 failed to stroke properly during the performance of an Operating Surveillance Test (OST). After several attempts to stroke the valve shut, the closed indicating light extinguished and the open indicating light remained energized. At 1735, 2MSS*SOV120 was declared inoperable.

Technical Specification 3.6.3.1 requires isolation of the penetration within 4 hours of an inoperable containment isolation valve. Since 2MSS*SOV120 was not listed in the containment isolation valve table, the actions of Technical Specification 3.6.3.1, were not performed. A yellow caution tag was placed on the bench board control switch informing operators that the valve was inoperable, and a maintenance work request was written for repair.

At 0700 on February 21, 1996, the oncoming Nuclear Shift Supervisor questioned the applicability of Technical Specification 3.6.3.1. At 0907 on February 21, 1996, manual isolation valves were closed, isolating the penetration as required by the Technical Specifications. These actions were completed 15 hours and 32 minutes after the initial failure.

Maintenance adjusted the limit switch for 2MSS*SOV120 and returned the valve to service on March 4, 1996. During troubleshooting, the as-found position of the valve was closed.

**LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION**

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)		DOCKET NUMBER (2)		LER NUMBER (6)			PAGE (3)
Beaver Valley Power Station Unit 2		05000412		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 4
				96	002	00	

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

DESCRIPTION OF EVENT

On February 20, 1996, with Beaver Valley Unit 2 in Mode 1, at 100% power, normally shut valve 2MSS*SOV120 failed to stroke properly during the performance of Operating Surveillance Test (OST) 2.43.5, "Noble Gas Effluent Monitor Channel Functional Test".

The OST requires the valve to be open in order to test the steam portion of main steam radiation monitors 2MSS*RQI101A, B, and C. At 1725, while closing the valve at the completion to the test, dual indication was observed. After several attempts to stroke the valve shut, the closed indicating light extinguished and the open indicating light remained energized. At 1735, 2MSS*SOV120 was declared inoperable. The administrative Containment Isolation Valve Table was reviewed by control room operators to determine the applicability of Technical Specification 3.6.3.1 to this valve. Since the valve was not listed in the table, the actions of Technical Specification 3.6.3.1, requiring manual isolation of the penetration in 4 hours, were not performed. A yellow caution tag was placed on the control room, bench board control switch for 2MSS*SOV120 informing operators that the valve was inoperable, and a maintenance work request was written for repair.

At 0700 on February 21, 1996, the oncoming Nuclear Shift Supervisor questioned the applicability of Technical Specification 3.6.3.1. A Nuclear Safety Department Notice written in 1994, was located that described the valve as a containment isolation valve requiring compliance with Technical Specification 3.6.3.1. At 0907 on February 21, 1996, manual isolation valves were closed, as required by Technical Specification 3.6.3.1. Time elapsed between initial valve failure and manual isolation of the affected penetration was 15 hours and 36 minutes. The penetration was isolated since 2MSS*SOV120 was found in the closed position.

Maintenance adjusted the limit switch for 2MSS*SOV120 and returned the valve to operable status March 4, 1996. During troubleshooting the as-found position of the valve was closed.

On April 24, 1996, during a management review of Problem Reports 2-96-110 and 2-96-113, it was determined that the events described above are reportable under the 10CFR50.73 criteria. Previous reportability assessments were found to be inadequate and resulted in not submitting the required Licensee Event Report 30 days from previous discovery dates.

CAUSE OF EVENT:

Main Steam radiation monitors 2MSS*RQI101A, B, and C discharge isolation valve 2MSS*SOV120 were installed in 1985 to assist the operators in monitoring steam generators for tube leaks or ruptures. At the time of installation, 2MSS*SOV120 met the criteria for a containment isolation valve of Title 10 General Design Criteria number 57 but it was not included in the, then existing Technical Specifications Table 3.6-1 listing the containment isolation valves. In 1994 the discrepancy was discovered while investigating a failure of 2MSS*SOV120. At that time, 2MSS*SOV120 was identified as a containment isolation valve and added to UFSAR Table 6.2-60. On June 10, 1994, a Nuclear Safety Department Notice was generated informing the Unit 2 Operations Department that 2MSS*SOV120 was a containment isolation valve and that Technical Specification 3.6.3.1 applied to this valve. The Notice documented the need to update the Technical Specification Table 3.6-1, but it was not updated at that time because of a pending Technical Specification amendment that allowed the removal of the containment isolation valve Table 3.6-1 from the Technical Specifications. Table 3.6-1 was removed from the Technical Specifications in accordance with GL 91-08 by Amendment No. 66 on March 28, 1995. The inclusion of 2MSS*SOV120 in the administrative table of containment isolation valves, that resulted from this amendment, was not properly handled and, as a result, the change was not made.

**LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION**

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TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

DESCRIPTION OF EVENT: (cont.)

When the valve failed in February, 1996, the on shift control room personnel consulted the administrative containment isolation valve table but did not find a reference to 2MSS*SOV120 and did not execute the requirements of Technical Specifications 3.6.3.1.

The causes of this event were: 1) A breakdown in the administrative controls governing document updates during initial plant construction in 1985. 2) Inadequate follow-up of actions documented in the Nuclear Safety Department Notice dated June 10, 1994.

The root cause for not submitting the required Licensee Event Reports previously is inadequate reportability review. The not reportable interpretation was based on the fact that 2MSS*SOV120 was not included in the containment isolation tables and as such, the requirements of Technical Specification 3.6.3.1 were not applicable to the failures of 2MSS*SOV120.

CORRECTIVE ACTIONS:

- Manual isolation valves were shut to isolate the affected penetration.
- Limit switches were adjusted on 2MSS*SOV120, and the valve was returned to service.
- Upon discovery on April 24, 1996, a Unit 2 night order was issued immediately to remind the operating shift crews of the need to apply the requirements of Technical Specifications 3.6.3.1 to 2MSS*SOV120.
- Valve 2MSS*SOV120 was added to the administrative containment isolation valve table on May 1, 1996.
- Unit 1 was reviewed for applicability and it was found that this particular main steam radiation monitoring configuration does not exist.
- Improvements have been implemented since 1985 to the configuration control management process. This event is considered to be resulting from previous administrative controls used during the 1985 time frame during initial plant construction.
- The Operations Experience and Nuclear Safety departments are presently enhancing the process and coordination of tracking action items. These enhancements will assist in maintaining control of action items and evaluate their effectiveness in preventing recurrences.
- A review of previous Nuclear Safety Department Notices will be performed to ensure that similar conditions do not exist. This action will be completed by June 30, 1996.
- Additional training in the area of reportability determinations will be evaluated and deficiencies will be corrected in the Operations Experience Department. Enhancements to administrative procedure NPDAP 5.2, Problem Reports are being implemented to include a final reportability assessment to be performed and documented for Level 2 Problem Reports. This action will be completed by June 30, 1996.

**LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION**

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REPORTABILITY

This written report is being submitted in accordance with 10CFR50.73.a.2.i.B as an operation prohibited by the plant's technical specifications. The root cause for not submitting this report within the time requirements of 10CFR50.73, is described in the cause section of this report.

SAFETY IMPLICATIONS

There were no safety implications as a result of this event. The safety function of 2MSS*SOV120 is to open and remain open on receipt of a safety injection signal in order to provide flow through effluent radiation monitors 2MSS*RQ1101A, B, and C (one for each main steam header). In the event of a steam generator tube rupture (SGTR) these monitors assist in monitoring plant effluents from the power operated dump valves and the main steam safety valves to the environment. The SGTR analysis assumes a stuck open power operated dump valve which is ultimately isolated. A total steam mass release to the atmosphere of 79,500 pounds is assumed over a period of eight hours. The radiation monitors discharge flow is restricted to no greater than 1085 SCFM and is assumed to be in operation for the duration of a SGTR. Since the purpose of this valve is to be open in order to allow monitoring of steam release during SGTR, and it has been confirmed that there was no evidence of primary to secondary leakage, there are no adverse consequences associated with the failure of this valve during the 15 hour and 32 minute time interval that the penetration was not manually isolated. The as-found condition of 2MSS*SOV120 was closed. Thus, the penetration remained isolated during this time frame.

The design specifications of 10 CFR GDC 57 for this penetration type does not require automatic closure of 2MSS*SOV120. Instead, it requires the valves to be capable of remote manual closure.

SIMILAR EVENTS:

There are no previous events reported involving 2MSS*SOV120. There are no recent events involving containment isolation valves not included in the administrative technical specification table.