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July 2, 1993
ND3MNO:3467

Beaver Valley Power Station, Unit No. 1
Docket No. 50-334, Licensee No. DPR-66
LER 93-009-00

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

Gentlemen:

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

LER 93-009-00, 10 CFR 50.73.a.2.i.B, "Unlocked High Radiation Area Barrier."

L. R. Freeland
General Manager
Nuclear Operations

JGT/sl

Attachment

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PDR ADDCK 05000334
S PDR

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cc: Mr. T. T. Martin, Regional Administrator
United States Nuclear Regulatory Commission
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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 (MNB 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 1	DOCKET NUMBER (2) 05000 3 3 4	PAGE (3) 1 OF 04
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TITLE (4)
Unlocked High Radiation Area Barrier.

EVENT DATE (5)			LER NUMBER (6)			REPORT NUMBER (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
06	07	93	93	009	00	07	02	93	N/A	05000 N/A
06	07	93	93	009	00	07	02	93	N/A	05000

OPERATING MODE (9) 5	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)									
POWER LEVEL (10) 0	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)						
	20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)						
	20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER						
	20.405(a)(1)(iii)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	(Specify in Abstract below and in Text, NRC Form 896A)						
	20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)							
	20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)							

LICENSEE CONTACT FOR THIS LER (12)

NAME L. R. Freeland, General Manager Nuclear Operations	TELEPHONE NUMBER (include Area Code) 4 1 2 6 4 3 - 1 2 5 8
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRRDS
A	NE	XXXX	XXXX	N					

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
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ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On 6/7/93, with Unit One in Mode 5 for the ninth refueling outage, Health Physics was performing a routine radiation barrier check, which verifies the integrity of the barrier and that the barrier is in place and posted. At 1740 hrs, the east ladder barrier to the Solid Waste area was found open. This area is a High Radiation Area and is required to be barricaded and conspicuously posted in accordance with Technical Specification 6.12. The area was searched and no individuals were present. This barrier was previously verified locked closed during the daylight shift at 0936 hrs. A survey of the area indicated that there were no areas where the radiation levels were greater than 1000 millirem per hour, however an area that had radiation levels greater than 100 millirem per hour was present. With the barrier open, the area was still conspicuously posted as a High Radiation Area, however, it was not adequately barricaded. The barrier was not closed when personnel exited the area. All personnel that had High Radiation Area keys during this time period were interviewed. The results were inconclusive and it could not be ascertained who left the barrier open. No adverse radiological consequences resulted due to the barrier being inadvertently left open. A review of exposure records indicated that no station personnel received any abnormal dose during the time the barrier was open.

REQUIRED NUMBER OF DIGITS/CHARACTERS
FOR EACH BLOCK

BLOCK NUMBER	NUMBER OF DIGITS/CHARACTERS	TITLE
1	UP TO 46	FACILITY NAME
2	8 TOTAL 3 IN ADDITION TO 05000	DOCKET NUMBER
3	VARIES	PAGE NUMBER
4	UP TO 76	TITLE
5	6 TOTAL 2 PER BLOCK	EVENT DATE
6	7 TOTAL 2 FOR YEAR 3 FOR SEQUENTIAL NUMBER 2 FOR REVISION NUMBER	LER NUMBER
7	6 TOTAL 2 PER BLOCK	REPORT DATE
8	UP TO 18 -- FACILITY NAME 8 TOTAL -- DOCKET NUMBER 3 IN ADDITION TO 05000	OTHER FACILITIES INVOLVED
9	1	OPERATING MODE
10	3	POWER LEVEL
11	1 CHECK BOX THAT APPLIES	REQUIREMENTS OF 10 CFR
12	UP TO 50 FOR NAME 14 FOR TELEPHONE	LICENSEE CONTACT
13	CAUSE VARIES 2 FOR SYSTEM 4 FOR COMPONENT 4 FOR MANUFACTURER NPRDS VARIES	EACH COMPONENT FAILURE
14	1 CHECK BOX THAT APPLIES	SUPPLEMENTAL REPORT EXPECTED
15	6 TOTAL 2 PER BLOCK	EXPECTED SUBMISSION DATE

**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 1	05000 3 3 4	YEAR 9 3	SEQUENTIAL NUMBER - 0 0 9 -	REVISION NUMBER 0 0	02 OF 04

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

Description of Event

On 6/7/93 at 1740 hrs, a Radiation Technician was performing a routine radiation barrier surveillance. The surveillance verifies the integrity of the barrier and that the barrier is in place and conspicuously posted. The Radiation Technician found the east wall ladder barrier to the Solid Waste area open. A portion of the Solid Waste area accessible from this ladder is a High Radiation Area (greater than 100 millirem per hour but less than 1000 millirem per hour) and is required to be barricaded and conspicuously posted as a High Radiation Area in accordance with Technical Specification 6.12. This barrier was previously verified locked closed during the previous barrier check at 0936 hrs.

A confirmation survey of the area indicated that there were no accessible areas where the radiation levels were greater than 1000 millirem per hour, however an area at the bottom of another Solid Waste ladder providing access to the 722' elevation had radiation levels where an individual could have received greater than 100 millirem per hour to a major portion of their whole body.

With the barrier open, the area was still conspicuously posted as a High Radiation Area, however the area was not barricaded adequately as required by Technical Specification 6.12.

Cause of the Event

The barricade was not verified closed when an individual or work crew exited the area. All personnel that had High Radiation Area keys signed out during the time period between barrier checks were interviewed. The results were inconclusive and it could not be ascertained who left the barrier open.

Corrective Actions

- 1). At the time of discovery, the area was searched and no individuals were present in the area.
- 2). A comprehensive confirmation survey of the area was performed. It was verified that the radiation levels in the portion of the Solid Waste area accessible from this barrier being left open were less than 1000 millirem per hour. However, an area was accessible where an individual could have received greater than 100 millirem per hour to a major portion of the whole body.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 500 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)
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TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

- 3). All personnel that had High Radiation Area keys signed out during the time period between barrier checks were interviewed. The results were inconclusive and it could not be ascertained who left the barrier open.
- 4). A review of exposure records indicated that no station personnel received any abnormal dose during the time period that the barricade was open.
- 5). A multi-disciplined, human performance oriented task force has been formed to assess the root causes of events involving high radiation barrier controls. The task force is led by the Manager, Health Physics Department and includes members from Operations, Health Physics, Maintenance, and Training. The task force will determine additional corrective actions needed to physical barriers, postings, station procedures, or training to maintain station standards for controlling access to high radiation areas.

Previous Similar Events

A review of station documents revealed three previous similar events:

- 1). Unit 1 LER 93-006 documented an event where two operators entered a locked high radiation area to perform valving, and left the barrier door open. Due to the physical layout of the work area, they were unable to maintain adequate control over the access point.
- 2). Unit 1 LER 92-006 documented an event in which the East Valve Trench Area barrier door was discovered to be open during a routine radiation barrier check. This event was caused by a failure to properly verify that the door was locked upon exit from the area.
- 3). Unit 1 LER 89-014 documented an event in which the East Valve Trench Area barrier door was found open due to a faulty locking mechanism.

Reportability

This event resulted in a condition prohibited by Technical Specification 6.12. As a result, this Licensee Event Report is being submitted in accordance with 10 CFR 50.73.a.2.i.B.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
Beaver Valley Power Station Unit 1	05000 3 3 4	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	04 OF 04
		9 3	.. 0 0 9 -	0 0	

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

Safety Implications

This event is recognized as a violation of Technical Specifications and station radiological practices. No adverse radiological consequences resulted due to the barrier being inadvertently left open. A review of exposure records indicated that no station personnel received any abnormal dose during the time period that the barricade was open.