

# Duquesne Light Company

Beaver Valley Power Station  
P.O. Box 4  
Shippingport, PA 15077-0004

RONALD L. LeGRAND  
Division Vice President -  
Nuclear Operations and Plant Manager

(412) 393-7622  
Fax (412) 393-4905

April 21, 1997  
NPD1VPO:0662

Beaver Valley Power Station, Unit No. 1  
Docket No. 50-334 License No. DPR-66  
LER 97-007-00

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 97-007-00, 10 CFR 50.73(a)(2)(i), "Failure to Test Control Room Emergency Bottled Air Pressurization Subsystem in Accordance with Technical Specifications."

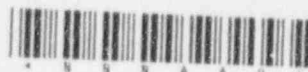


R. L. LeGrand

Attachment

250052

9704250136 970421  
PDR ADOCK 05000334  
S PDR



April 21, 1997  
NPD1VPO: 0662  
Page 2

cc: Mr. H. J. Miller, Regional Administrator  
United States Nuclear Regulatory Commission  
Region 1  
475 Allendale Road  
King of Prussia, PA 19406

Mr. D. S. Brinkman  
BVPS Licensing Project Manager  
United States Nuclear Regulatory Commission  
Washington, DC 20555

Mr. David Kern  
BVPS Senior Resident Inspector  
United States Nuclear Regulatory Commission

Mr. J. A. Hultz  
Ohio Edison Company  
76 S. Main Street  
Akron, OH 44308

Mr. Steven Dumek  
Centerior Energy Corporation  
6670 Beta Drive  
Mayfield Valley, OH 44143

INPO Records Center  
700 Galleria Parkway  
Atlanta, GA 30339-5957

Mr. Michael P. Murphy  
Bureau of Radiation Protection  
Department of Environmental Protection  
RCSOB-13th Floor  
P.O. Box 8469  
Harrisburg, PA 17105-8569

Director, Safety Evaluation and Control  
Virginia Electric & Power Company  
5000 Dominion Blvd.  
Innsbrook Technical Center  
Glen Allen, VA 23060

## LICENSEE EVENT REPORT (LER)

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

FACILITY NAME (1) Beaver Valley Power Station Unit 1	DOCKET NUMBER (2) 05000334	PAGE (3) 1 OF 4
---	-------------------------------	--------------------

## TITLE

Failure to Test Control Room Emergency Bottled Air Pressurization Subsystem in Accordance with Technical Specifications

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
03	22	97	97	007	00	04	21	97	Beaver Valley Power Station Unit 2	05000412
OPERATING MODE (9)										
5			20.402(b)							
			20.405(c)							
			50.73(a)(2)(iv)							
			73.71(b)							
POWER LEVEL (10)			20.405(a)(1)(i)							
0%			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)							
			X 50.73(a)(2)(i)							
			50.73(a)(2)(viii)(A)							
			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 R. L. LeGrand, 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 NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

## 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 March 22, 1997, Beaver Valley Power Station (BVPS) Units 1 and 2 were both in Cold Shutdown (Mode 5). At approximately 1230 hours, during a review of the surveillance records from the Control Room Emergency Habitability System Monthly Retest Log, it was identified that the common Control Room Emergency Bottled Air Pressurization Subsystem (CREBAPS) discharge trip valves were not tested in accordance with Technical Specifications (TS). Failure to adequately demonstrate operability of these valves renders the associated subsystem inoperable and is a condition prohibited by TS. This is reportable pursuant to the requirements of 10CFR50.73(a)(2)(i).

TS require that the CREBAPS be demonstrated operable at least once per 18 months by verifying that a chlorine/control room high radiation/containment phase B isolation test signal from either unit will initiate system operation. The acceptance criteria for the Operating Surveillance Test (OST) which implements these TS Surveillance Requirements (TSSR), requires that the stroke times for the discharge trip valves do not exceed a prescribed ASME limiting stroke time. These OST acceptance criteria also require that, if the discharge trip valves exceed their previously recorded stroke times (from the last performance of the 18 month test), by greater than 50%, the test frequency will be increased to monthly. During the performance of the discharge trip valve stroke test on January 28, 1997, valves TV-VS-101B, D, and E had stroke times with increases greater than 50% from their previously recorded stroke times. Contrary to the requirements of the OST acceptance criteria, these valves were not retested on February 28, 1997. On March 23, 1997, by 1414 hours, CREBAPS discharge trip valves TV-VS-101B, D and E were successfully tested in accordance with OST 44A.11, "Chlorine Actuation of Control Room Isolation/CREBAPS Systems," and CREBAPS operability was fully restored for the common Control Room.

The apparent cause of this event was inadequate coordination and communication between responsible site organizations, and inadequate procedures. A contributing cause was the fact that the Technical Specification surveillance testing program is not the responsibility of a single department.

There were no automatically or manually initiated safety system responses in response to this event.

Surveillance Testing of the CREBAPS discharge trip valves TV-VS-101B, D and E performed on March 23, 1997 demonstrated that there was no loss of safety function. There were no implications to the health and safety of the public as a result of this event.

## LICENSEE EVENT REPORT (LER)

## TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Beaver Valley Power Station Unit 1	05000334	97	007	00	2 OF 4

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

**PLANT AND SYSTEM VERIFICATION**

Westinghouse Pressurized Water Reactor (PWR)

Control Room Emergency Habitability System (VI)

Control Room Emergency Bottled Air Pressurization Subsystem (CREBAPS) {VI}

CREBAPS Discharge Trip Valves TV-VS-101B, D and E {VI/ISV/M120}

\* Energy Industry Identification System (EIIS), component function identifier, and manufacturer codes appear in the text as (SS/CCC/MMMM).

**CONDITION PRIOR TO OCCURRENCE**

Unit 1: Mode 5, 0% Reactor Power

Unit 2: Mode 5, 0% Reactor Power

**DESCRIPTION OF EVENT**

On March 22, 1997, Beaver Valley Power Station (BVPS) Units 1 and 2 were both in Cold Shutdown (Mode 5). At approximately 1230 hours, during a review of the surveillance records from the Control Room Emergency Habitability System {VI} Monthly Retest Log, it was identified that the common Control Room Emergency Bottled Air Pressurization Subsystem (CREBAPS) {VI} discharge trip valves {VI/ISV/M120} were not tested in accordance with Technical Specifications (TS). Failure to adequately demonstrate operability of these valves renders the associated subsystem inoperable and is a condition prohibited by TS. This is reportable pursuant to the requirements of 10CFR50.73(a)(2)(i).

TS require that the CREBAPS be demonstrated operable at least once per 18 months by verifying that a chlorine/control room high radiation/containment phase B isolation test signal from either unit will initiate system operation. The acceptance criteria for the Operating Surveillance Test (OST) which implements these TS Surveillance Requirements (TSSR), requires that the stroke times for the discharge trip valves do not exceed a prescribed ASME limiting stroke time. These OST acceptance criteria also require that, if the discharge trip valves exceed their previously recorded stroke times (from the last performance of the 18 month test), by greater than 50%, the test frequency will be increased to monthly. During the performance of the discharge trip valve stroke test on January 28, 1997, valves TV-VS-101B, D, and E had stroke times with increases greater than 50% from their previously recorded stroke times. Contrary to the requirements of the OST acceptance criteria, these valves were not retested on February 28, 1997.

On March 23, 1997, by 1414 hours, CREBAPS discharge trip valves TV-VS-101B, D and E were successfully tested in accordance with OST 44A.11, "Chlorine Actuation of Control Room Isolation/CREBAPS Systems," and CREBAPS operability was fully restored for the common Control Room.

**CAUSE OF EVENT**

The apparent cause of this event was inadequate coordination and communication between responsible site organizations, and inadequate procedures. A contributing cause was the fact that the Technical Specification surveillance testing program is not the responsibility of a single department.

**ANALYSIS OF EVENT**

The current approach to scheduling and performing TS surveillance testing is dependent upon communication and coordination

## LICENSEE EVENT REPORT (LER)

## TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
Beaver Valley Power Station Unit 1	05000334	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	3 OF 4
		97	007	00	

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

between multiple site organizations. The following describes the administrative procedures and interfaces involved in this event.

Nuclear Power Division Administrative Manual Procedure NPDAP 8.2, "Inservice Test Program," requires that the Operating Experience Department is responsible for "monitoring the IST Programs to ensure that inservice tests are performed at the required frequencies and recommending to the Operations Department that corrective action be initiated when test parameters are out of the acceptable range." Valves which require an increase in test frequency are currently logged on the "Valve Retest Log" in the Control Room. Notification to the Operations Scheduler may be done informally via a memo or "E-mail." There is no requirement or guidance in the Operating Experience procedures instructing this to be done.

NPDAP 8.2 also states that the IST Coordinator (System and Performance Engineering Department) is responsible for "monitoring that the station's actions are completed in accordance with the [ASME] Code." OSTs require that the IST Coordinator be provided a "copy of the appropriate pages from the test data sheet" for any valve which requires an increase in test frequency. Verification of the testing of the valve in accordance with the increased frequency requirement is done after the fact. Independent confirmation of the scheduling of the valve at the increased frequency is not required. The Operations Department is responsible for the scheduling and performance of OSTs, however, there is currently no requirement that the "Valve Retest Log" be periodically reviewed to determine if test frequencies need to be increased. The Operations Scheduler depends on notification from either the Operating Experience Department or the IST Coordinator.

**CORRECTIVE ACTIONS****Immediate Corrective Actions:**

1. On March 23, 1997, by 1414 hours, CREBAPS discharge trip valves TV-VS-101B, D and E were successfully tested in accordance with OST 44A.11, "Chlorine Actuation of Control Room Isolation/CREBAPS Systems," and CREBAPS operability was fully restored for the common Control Room.
2. As an interim corrective action, Operations Management issued a memo on April 3, 1997, requiring the Operating Experience Department to notify the Operations Scheduler and the IST Coordinator when surveillance test results require an increase in test frequencies.

**Follow-Up Corrective Actions:****Interim:**

1. The Operating Experience Department will establish procedural requirements by May 23, 1997 to follow when an IST parameter falls outside of established limits.
2. The IST Coordinating Group will establish procedural requirements by May 23, 1997 to verify items identified by the OED have been properly scheduled by the Operations Department.

**Long-term:**

1. An evaluation will be conducted of the overall Technical Specification surveillance test scheduling and coordination process for both units, with emphasis on centralizing such scheduling and coordination under the responsibility of one department. The results of this evaluation and associated recommendations will be provided in a summary report to BVPS management by June 30, 1997. Implementation of any resulting corrective actions will be tracked under the BVPS Corrective Action Program.



## LICENSEE EVENT REPORT (LER)

## TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Beaver Valley Power Station Unit 1	05000334	97	007	00	4 OF 4

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

**REPORTABILITY**

Failure to adequately demonstrate operability of the CREBAPS pursuant to the requirements of TS LCO 3.7.7.1.b.1 in Modes 1 through 4, is reportable pursuant to the requirements of 10CFR50.73(a)(2)(i) as "any operation or condition prohibited by the plant's Technical Specifications."

**SAFETY IMPLICATIONS**

Surveillance Testing of the CREBAPS discharge trip valves TV-VS-101B, D and E performed on March 23, 1997 demonstrated that there was no loss of safety function. Based upon this information, there were no implications to the health and safety of the public as a result of this event.

**SIMILAR EVENTS**

A review of Licensee Event Reports for the past two years identified the following similar events:

1. LER 1-95-009-00, "ASME Valves Not Tested within Technical Specification Surveillance Interval," December 6, 1995.
2. LER 1-95-011-00, "Condition Prohibited by Technical Specifications - Missed Source Range Surveillance," January 18, 1996.
3. LER 2-95-005-00, "Missed Surveillance - Quadrant Power Tilt Ratio Calculation Not Performed," September 1, 1995.
4. LER 2-96-009-00, "Missed Technical Specification Surveillance Test - Quadrant Power Tilt Ratio Manual Calculation," January 20, 1997.