



Nuclear Group  
P.O. Box 4  
Shippingport, PA 15077-0004

Telephone (412) 385-6000

November 9, 1992  
ND3MNO:3373

Beaver Valley Power Station, Unit No. 1  
Docket No. 50-334, Licensee No. DPR-66  
LER 92-009-00

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 92-009-00, 10 CFR 50.73.a.2.iv, "Reactor Trip Due to Reactor Coolant Pump Trip on Ground Fault Indication.

Very truly yours,

T. P. Noonan  
General Manager  
Nuclear Operations

JGT/sl

Attachment

13001  
9211160303 921109  
PDR ADDCK 05000334  
S PDR

*JE27*

November 9, 1992

ND3MNO:3373

Page 2

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

Mr. A. DeAgazio, BVPS Licensing Project Manager  
United States nuclear Regulatory Commission  
Washington, DC 20555

Larry Rossbach, Nuclear Regulatory Commission,  
BVPS Senior Resident Inspector

J. A. Holtz, Ohio Edison  
76 S. Main Street  
Akron, OH 44308

Larry Beck  
Centerior Energy  
6200 Oak Tree Blvd.  
Independence, OH 44101-4661

INPO Records Center  
Suite 1500  
1100 Circle 75 Parkway  
Atlanta, GA 30339

G. E. Muckle,  
Factory Mutual Engineering  
680 Anderson Drive #BLD10  
Pittsburgh, PA 15220-2773

Mr. Richard Janati  
Department of Environmental Resources  
P.O. Box 2063  
16th Floor, Fulton Building  
Harrisburg, PA 17120

Director, Safety Evaluation & Control  
Virginia Electric & Power Co.  
P.O. Box 26666  
One James River Plaza  
Richmond, VA 23261

November 1992  
ND3MN  
Page 3

W. Hartley  
Virginia Power Company  
5000 Dominion Blvd.  
2SW Glenn Allen, VA 23060

J. M. Riddle  
Halliburton NUS  
Foster Plaza 7  
661 Anderson Drive  
Pittsburgh, PA 15220

Bill Wegner, Consultant  
23 Woodlawn Terrace  
Fredricksburg, VA 22404

## LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 60.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, 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)

0 5 0 0 0 3 3 4 1 OF 0 3

PAGE (3)

TITLE (4)

Reactor Trip Due to Reactor Coolant Pump Trip On Ground Fault Indication

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 NAMES	DOCKET NUMBER(S)										
1	0	0	9	9	2	9	2	0	0	9	0	0	0	0	0	0	0	0	0	0
OPERATING MODE (9)										THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 50. (Check one or more of the following) (11)										
1										<input checked="" type="checkbox"/> 20.402(b)										
POWER LEVEL (10)										20.405(a)(1)(i)										
0										50.36(c)(1)										
9										50.36(c)(2)										
0										50.73(a)(2)(i)										
										50.73(a)(2)(ii)										
										50.73(a)(2)(iii)										
										50.73(a)(2)(iv)										
										50.73(a)(2)(v)										
										50.73(a)(2)(vi)										
										50.73(a)(2)(vii)										
										50.73(a)(2)(viii)(A)										
										50.73(a)(2)(viii)(B)										
										50.73(a)(2)(ix)										
										50.73(b)										
										50.73(c)										
										OTHER (Specify in Abstract below and in Text, NRC Form 305A)										

LICENSEE CONTACT FOR THIS LER (12)

NAME

T.P. Noonan, General Manager Nuclear Operations

TELEPHONE NUMBER

AREA CODE

4 1 2 6 4 3 - 1 2 5 8

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC
A	A	B	M	O	W	1	2	0	Y

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE)

☒ NO

EXPECTED SUBMISSION DATE (15)

MONTH DAY YEAR

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On 10/09/92, Unit 1 was operating at Power Operation at 90 percent reactor power. At 1654 hours, the 1A reactor coolant pump (RC-P-1A) tripped on an indicated electrical ground fault. The trip of RC-P-1A generated a one of three reactor coolant pump low flow reactor trip. The reactor trip signal generated a turbine trip signal. Operations personnel performed the Emergency Operating Procedures and stabilized the plant in Hot Shutdown at 1709 hours. Auxiliary Feedwater initiated as expected due to the low-low steam generator levels following the reactor trip. At 1822 hours, the Nuclear Regulatory Commission was notified of the event using the Emergency Notification System. The cause of the trip was a failed top coil in the stator for RC-P-1A. The plant was placed in Cold Shutdown and the stator for RC-P-1A was removed and repaired. There were no safety implications as a result of this event. The reactor trip signal actuated as designed on a low flow condition in one reactor coolant loop. Auxiliary feedwater actuated as designed and expected on the low steam generator levels following the reactor trip.

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 RECORDS AND REPORTS MANAGEMENT BRANCH (F-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, 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)  0 5 0 0 0 3 3 4	LER NUMBER (8)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		9 2	— 0 0 9	— 0 0	0 2	OF	0 3

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

DESCRIPTION OF EVENT

On 10/09/92, Unit 1 was operating at Power Operation (Operating Mode 1) at 90 percent reactor power. At 1654 hours, the 1A reactor coolant pump (RC-P-1A) tripped on an indicated electrical ground fault, due to activation of relay 50-VA-105G (Ground Fault). The trip of RC-P-1A generated a one of three (1/3) reactor coolant pump low flow reactor trip. The reactor trip signal generated a turbine trip signal, as reactor power was above the P-9 permissive of 49 percent. A Safety Injection (SI) signal was not generated and none was expected based on plant parameters. Operations personnel performed the Emergency Operating Procedures and stabilized the plant in Hot Shutdown at 1709 hours. Auxiliary Feedwater initiated as expected due to the low-low steam generator levels following the reactor trip.

CAUSE OF THE EVENT

The cause of the trip was a failed top coil in the stator for the 1A reactor coolant pump, RC-P-1A. This caused the ground in the motor, which was sensed by the ground fault relay. The pump is a Westinghouse Model 93A reactor coolant pump. The pump had been in continuous operation for 317 days prior to the trip. A review of pump parameters including vibration, temperature and bus voltages, showed no indication of pump degradation, nor could the pump vendor identify any material deficiencies which would have caused the fault.

CORRECTIVE ACTIONS

The following corrective actions have been taken as a result of this event:

1. Operations personnel utilized the Emergency Operating Procedures to stabilize the plant in Hot Shutdown (Operating Mode 3), at 1709 hours.
2. A plant cooldown to Cold Shutdown (Operating Mode 5) was initiated at 0923 hours on 10/10/92.
3. The 1A reactor coolant pump motor was uncoupled from the pump and sent offsite for investigation and repair.
4. The failed outer winding on the 1A reactor coolant pump was replaced and the motor was reassembled on the pump on 10/20/92.



LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 600 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (F-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, 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

0 5 0 0 0 3 3 4

YEAR	SEQUENTIAL NUMBER	REVISION NUMBER
9 2	0 0 9	0 0

0 3 OF 0 3

TEXT (If more space is required, use additional NRC Form 306A's) (17)

5. The 1A reactor coolant pump was satisfactorily tested on 10/29/92 and returned to operable status.

REPORTABILITY

This event was reported to the Nuclear Regulatory Commission at 1822 hours on 10/09/92 in accordance with 10CFR50.72.b.2.ii, as an event involving a Reactor Protection System (RPS) and Engineered Safety Features (ESF) actuation. This written report is being submitted in accordance with 10CFR50.73.a.2.iv.

SAFETY IMPLICATIONS

There were no safety implications as a result of this event. The reactor trip signal actuated as designed on a low flow condition in one reactor coolant loop after actuation of the ground fault protection relay for the 1A reactor coolant pump. Auxiliary feedwater actuated as designed and expected on the low steam generator levels resulting from the level "shrink" following the reactor trip.

PREVIOUS SIMILAR EVENTS

This is the first reported event of this type involving a reactor coolant pump.