

Telephone (412) 393-6000

April 1, 1993
ND3MNO:3437

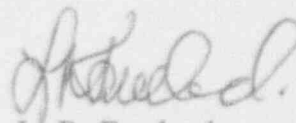
Beaver Valley Power Station, Unit No. 2
Docket No. 50-412, Licensee No. NPF-73
LER 93-004-00

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 93-004-00, 10 CFR 50.73.a.2.iv, "Steam Generator Blowdown Isolation While Troubleshooting DC Ground."


L. R. Freeland
General Manager
Nuclear Operations

DAW/sl

Attachment

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LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Beaver Valley Power Station Unit 2										DOCKET NUMBER (2) 0 5 0 0 0 4 1 2										PAGE (3) 1 OF 0 4									
TITLE (4) Steam Generator Blowdown Isolation While Troubleshooting DC Ground																													

EVENT DATE (5) 0 3 0 2 9 3 9 3									LER NUMBER (6) 0 0 4									REPORT DATE (7) 0 0 0 4 0 1 9 3									OTHER FACILITIES INVOLVED (8) FACILITY NAMES DOCKET NUMBER(S) 0 5 0 0 0											
THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5. (Check one or more of the following) (11)																																						
OPERATING MODE (9) 1			20.402(b)									20.405(c)									<input checked="" type="checkbox"/> 50.73(a)(2)(w)									73.71(b)								
POWER LEVEL (10) 1 0 0			20.405(a)(1)(u)									50.38(c)(1)									50.73(a)(2)(w)									73.71(c)								
			20.405(a)(1)(v)									50.38(c)(2)									50.73(a)(2)(w)									OTHER (Specify in Abstract below and in Text, NRC Form 366A)								
			20.405(a)(1)(iii)									50.73(a)(2)(i)									50.73(a)(2)(vii)(A)																	
			20.405(a)(1)(iv)									50.73(a)(2)(ii)									50.73(a)(2)(vii)(B)																	
			20.405(a)(1)(vi)									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 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	W	I	X	X	X	X	X	X	X	N									
SUPPLEMENTAL REPORT EXPECTED (14)																			
YES (If yes, complete EXPECTED SUBMISSION DATE)										<input checked="" type="checkbox"/> NO					EXPECTED SUBMISSION DATE (15)				

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

On 3/2/93, Unit #2 was experiencing a 130 volt ground on DC-BUS-2-1. Procedure 20M 39.4F, Clearing Grounds (125 VDC Busses 2-1 and 2-2), was in progress. The Nuclear Shift Supervisor and the Assistant Nuclear Shift Supervisor discussed which circuits could be tested to locate the origin of the ground. They decided that breaker 8-1 on Panel DC2-07, power supply to 2MSS-SOV-105A Auxiliary Feedwater Pump Steam Valve, could be tested. By design, 2MSS-SOV-105A fails open when its supply breaker is opened. Consideration was given to the fact that as 2MSS-SOV-105A opened, a sudden surge of steam may cause the next, in series, valve to pop open. This, in turn, would start the Steam Driven Auxiliary Feedwater Pump. In order to prevent this, it was decided to isolate the trip throttle for the steam driven pump while the circuit was being tested. What was not realized was that when 2MSS-SOV-105A opens, with the plant in its current configuration, it completes the logic to initiate a Steam Generator Blowdown Isolation. At 0028 hrs. Breaker 8-1 on panel DC2-07 was opened to test that circuit. 2MSS-SOV-105A opened, as expected, and the Steam Generator Blowdown Outside Containment isolation valves automatically closed. This isolation is considered an unplanned Engineered Safety Features component actuation. There were no safety implication as a result of this event.

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 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 2	DOCKET NUMBER (2) 0 5 0 0 0 4 1 2	LER NUMBER (6)			PAGE (3)		
		YEAR 9 3	SEQUENTIAL NUMBER 0 0 4	REVISION NUMBER 0 0			

TEXT (If more space is required, use additional NRC Form 386A's) (17)

DESCRIPTION OF EVENT

On 3/2/93, Unit #2 was experiencing a 130 volt ground on DC-BUS-2-1. Procedure 20M 39.4F, Clearing Grounds (125 VDC Busses 2-1 and 2-2), was in progress. The Nuclear Shift Supervisor and the Assistant Nuclear Shift Supervisor discussed which circuits could be tested to locate the origin of the ground. They decided that breaker 8-1 on Panel DC2-07, power supply to 2MSS-SOV-105A Auxiliary Feedwater Pump Steam Valve, could be tested. By design, 2MSS-SOV-105A fails open when its supply breaker is opened. Consideration was given to the fact that as 2MSS-SOV-105A opened, a sudden surge of steam may cause the next, in series, valve to pop open. This, in turn, would start the Steam Driven Auxiliary Feedwater Pump. In order to prevent this, the trip throttle valve for the steam driven pump was isolated while the circuit was being tested. An operator was instructed to isolate the trip throttle valve, remain in the area, and establish direct communication with the control room. What was not realized was that when 2MSS-SOV-105A opens, with the plant in its current configuration, it completes the logic to initiate a Steam Generator Blowdown Isolation. At 0028 hrs. Breaker 8-1 on panel DC2-07 was opened to test that circuit. 2MSS-SOV-105A failed open and the Steam Generator Blowdown Outside Containment isolation valves automatically closed. Breaker 8-1 on panel DC2-07 was then closed. At 0034 hrs. the trip throttle valve for the steam driven pump was unisolated and the system was returned to its normal system arrangement. The Blowdown system was then returned to its normal system arrangement. This isolation is considered an unplanned Engineered Safety Features component actuation. There were no safety implications as a result of this event.

CAUSE OF THE EVENT

The cause of this event was personnel error. The Nuclear Shift Supervisor and The Assistant Nuclear Shift Supervisor both directed their attention to preventing the Steam Driven Auxiliary Feedwater pump from starting and failed to realize that a Steam Generator Blowdown Isolation would also occur.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

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 (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 2	DOCKET NUMBER (2) 0 5 0 0 0 4 1 2 9 3 — 0 0 4 — 0 0 0 3 OF 0 4	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			

TEXT (If more space is required, use additional NRC Form 386A's) (17)

CORRECTIVE ACTIONS

The following Human Performance corrective actions have been or will be taken:

- 1) Engineered Safety Features (ESF) Actuation Warning placards were placed on breaker 8-1 as well as other breakers including both trains of the Auxiliary Feed Pump Steam Supply Valves.
- 2) Temporary Caution Tags were placed on the breakers of both trains of the Auxiliary Feed Pump Steam Supply Valves to alert the operator that both, an Auxiliary Feedwater pump start and a Steam Generator Blowdown isolation could occur when the breaker is opened.
- 3) Permanent Caution Tags are being made to replace the temporary Caution Tags.
- 4) The Supervisors involved in the incident will be counselled and the incident will be reviewed in licensed re-training.
- 5) A Human Performance Enhancement System (HPES) evaluation will be performed on this event.

REPORTABILITY

This event was reported to the Nuclear Regulatory Commission at 0120 hours on 3/2/93, in accordance with 10CFR50.72.b.2.ii, as an event involving an unplanned Engineered Safety Features component actuation. This written report is being submitted in accordance with 10CFR50.73.a.2.iv as an event involving an Engineered Safety Features component actuation.

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 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.

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

SAFETY IMPLICATIONS

There were no safety implications as a result of this event. The Steam Generator Blowdown system was returned to normal system arrangement and there were no adverse effects on the plant or its operation.

PREVIOUS OCCURRENCES

There are previously reported incidents of unplanned Steam Generator Blowdown system isolations but none are directly attributable to personnel error.