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March 28, 1991  
ND3MNO:3116

Beaver Valley Power Station, Unit No. 1  
Docket No. 50-334, License No. DPR-66  
LER 91-007-00

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 91-007-00, 10 CFR 50.73.a.2.i.B, "Partial Loss of Battery Chargers Causing Entry into Technical Specification 3.0.3 "

Very truly yours,

T. P. Noonan  
General Manager  
Nuclear Operations

JGT/sl

Attachment

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## LICENSEE EVENT REPORT (LER)

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 (F-830), 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)

Partial Loss of Battery Chargers Causing Entry into Technical Specification 3.0.3

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)											
0	2	8	9	1	9	1	0	0	7	0	0	0	3	2	8	9	1	0	5	0	0	0
N/A												0	5	0	0	0	0	0				
N/A												0	5	0	0	0	0	0				
OPERATING MODE (9)			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5 (Check one or more of the following) (11)																			
1			20.402(b)			20.405(e)			50.73(a)(2)(iv)			73.71(b)										
POWER LEVEL (10)			20.406(a)(1)(i)			50.38(a)(1)			50.73(a)(2)(iv)			73.71(e)										
1			20.405(a)(1)(ii)			50.38(a)(2)			50.73(a)(2)(vii)			OTHER (Specify in Abstract below and in Text, NRC Form 366A)										
			20.406(a)(1)(iii)			X 50.73(a)(2)(ii)			50.73(a)(2)(viii)(A)													
			20.406(a)(1)(iv)			50.73(a)(2)(iii)			50.73(a)(2)(viii)(B)													
			20.406(a)(1)(v)			50.73(a)(2)(iii)			50.73(a)(2)(ix)													

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	E	J	X	X	X	X	X	X	N

SUPPLEMENTAL REPORT EXPECTED (14)

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

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

On 2/28/91 at 1206 hours, numerous vertical board alarms indicated that the 480V emergency bus 1-8N was deenergized. Operators were dispatched to emergency switchgear to investigate the event. It was discovered that the 480V supply breaker 8N1 was open with a green target, indicating the breaker had been manually opened and had not tripped due to an electrical fault. The upstream 4kV supply breaker, 1E12, was found closed with no protective relays targeted. Breaker 8N1 was cycled satisfactorily in the test position to verify its correct operation and was racked onto the bus. The bus was reenergized and all loads were restored and independently verified by 1300 hours. Investigation into the event determined that the 8N1 breaker had been inadvertently tripped by a vendor procedure writer who was verifying alarm response procedures at the time. During the time from 1206 to 1221 hours, MCC1-E9 was deenergized, rendering Train A battery chargers 1-1 and 1-3 inoperable and causing entry into Technical Specification (TS) 3.0.3. There were no safety implications to the public as a result of this incident. The opposite train of safety systems was fully operable throughout the event.

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 (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 9 1	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	PREVIOUS NUMBER			
		— 0 0 7	— 0 0	0 2	OF	0 3	

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

DESCRIPTION OF EVENT:

On 2/28/91 at 1206 hours, the control room received numerous vertical board alarms which indicated that the 480V emergency bus 1-8N was deenergized. Operators were dispatched to emergency switchgear to investigate the event. At 1215 hours, it was discovered that 480V supply breaker 8N1 was open with a green target, indicating the breaker had been manually opened and had not tripped due to an electrical fault. The target is a mechanical flag on the breaker control switch handle which changes from red to green when the breaker is manually opened. The upstream 4kV supply breaker, 1E12, was found closed with no protective relays targeted. Breaker 8N1 was cycled satisfactorily in the test position to verify its correct operation and was racked onto the bus. After the operators stripped the loads from the affected emergency Motor Control Centers (MCCs), the MCC supply breakers were closed and all loads were restored and independently verified by 1300 hours. During the time from 1206 to 1221 hours, MCC1-E9 was deenergized. This rendered Train A battery chargers 1-1 and 1-3 inoperable, causing entry into Technical Specification 3.0.3. There were no other loads lost that had a significant impact on plant operation.

CAUSE OF EVENT:

It was determined that breaker 8N1 was most likely tripped inadvertently by a vendor procedure writer who was verifying revised alarm response procedures. Included in the verification was the response for annunciator A9-66, "480V Emerg Bus 1N PT Blown Fuse." At the time the bus was deenergized, the procedure writer had opened the substation control compartment door, which houses the fuses in question and which also contains the control switch for supply breaker 8N1. He was verifying that the fuse designations used in the procedure matched the actual labels on the fuses. The procedure writer was looking into the compartment when he reached around the door for the closure handle. It is suspected that the control switch for breaker 8N1 was inadvertently bumped at this time, causing the event.

CORRECTIVE ACTIONS:

The requirements for access to all station panels and cabinets is controlled by the on duty Nuclear Shift Supervisor (NSS). The Unit NSS must be contacted to arrange for access. This requirement was emphasized with all vendor personnel involved with the procedures group. Also, the vendor procedure writer involved in this event has been individually counseled to ensure his understanding of and adherence to these requirements.

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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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
Beaver Valley Power Station Unit 1	0 5 0 0 0 3 3 4	9 1	— 0 0 7	— 0 0	0 3	OF	0 3

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

PREVIOUS OCCURRENCES:

A review of station documents revealed one previous similar event:

Beaver Valley Unit 1 LER 89-007 concerned an event which resulted in a reactor trip and safety injection when the electrical supply breaker to the Anticipated Transient Without Scram (ATWS) Mitigating System Actuation Circuitry (AMSAC) was accidentally opened during a breaker labelling verification evolution.

REPORTABILITY:

This written report is being submitted in accordance with 10CFR50.73.a.2.i.B, as a condition in violation of Technical Specifications.

SAFETY IMPLICATIONS:

There were no safety implications to the public as a result of this event. Train B of Engineered Safety Features equipment was fully operable throughout the event. In addition, station batteries No. 1 and 3 supplied the DC loads which are normally supplied by battery chargers 1-1 and 1-3. The batteries are sized for two hours of operation without benefit of any station power. In this event, they were required to supply the Train A DC load for only 15 minutes.