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December 12, 1991
ND3MNO:3224

Beaver Valley Power Station, Unit No. 1
Docket No. 50-334, License No. DPR-66
LER 91-031-00

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 91-031-00, 10 CFR 50.73.a.2.iv, "Engineered Safety Features Actuation - Auto Start of 1B River Water Pump During Maintenance Activities".

Very truly yours,

T. P. Noonan
General Manager
Nuclear Operations

JGT/sl

Attachment

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Bill Wegner, Consultant
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LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST. SEE HRS FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-330), U.S. NUCLEAR REGULATORY COMMISSION WASHINGTON, DC 20545, 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)

Engineered Safety Features Actuation - Auto Start of 1B River Water Pump During Maintenance Activities

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)											
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV. OR NUMBER	MONTH	DAY	YEAR	FACILITY NAMES		DOCKET NUMBER(S)									
1	1	1	4	9	1	9	1	0	3	1	0	0	1	2	1	2	9	1	N/A	0 5 0 0 0
OPERATING MODE (9)			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 C.F.R. 5. (Check one or more of the following) (11)																	
1			<input checked="" type="checkbox"/> 20.402(b) <input type="checkbox"/> 20.405(c) <input type="checkbox"/> 20.734(2)(iv) <input type="checkbox"/> 20.735(b)																	
POWER LEVEL (10)			<input type="checkbox"/> 20.405(a)(1)(ii) <input type="checkbox"/> 20.405(c)(1) <input type="checkbox"/> 20.734(2)(iv) <input type="checkbox"/> 20.735(c)																	
1 0 0			<input type="checkbox"/> 20.405(a)(1)(iii) <input type="checkbox"/> 20.405(c)(2) <input type="checkbox"/> 20.734(2)(iv) <input type="checkbox"/> OTHER (Specify in Abstract below and in Text NRC Form 306A)																	
			<input type="checkbox"/> 20.405(a)(1)(iv) <input type="checkbox"/> 20.734(2)(i) <input type="checkbox"/> 20.734(2)(ii) <input type="checkbox"/> 20.734(2)(iii) <input type="checkbox"/> 20.734(2)(iv) <input type="checkbox"/> 20.734(2)(v) <input type="checkbox"/> 20.734(2)(vi) <input type="checkbox"/> 20.734(2)(vii) <input type="checkbox"/> 20.734(2)(viii) <input type="checkbox"/> 20.734(2)(ix) <input type="checkbox"/> 20.734(2)(x)																	

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 NRRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRRDS
A	B	S B K R	X X X X	N					

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 spaced typewritten lines) (16)

On 11/14/91, with the Unit in Operating Mode 5 (Cold Shutdown), electricians began performance of a preventive maintenance procedure (PMP) on Cubicle E14 on the 1AE 4160 Volt Emergency Bus. This cubicle is one of the breakers used for the 1C river water (RW) pump. During the performance of the PMP, a spring clip was observed lying on the cubicle floor near the cell switch linkage. While replacing the clip, the electricians inadvertently actuated the cell switch. Because of a mechanical interlock, this caused the running 1A RW pump to trip and the standby 1B RW pump to start on low header pressure. The cause for this event was personnel error. The 1A RW pump was restarted and the 1B RW pump was shutdown. This event will be reviewed by maintenance personnel. There were no safety implications as a result of this event. The standby RW pump immediately started upon loss of the running RW pump. River water cooling flow was maintained at all times.

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 (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20545 AND TO THE PAPERWORK REDUCTION PROJECT (0150-0104), 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

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

DESCRIPTION OF EVENT

On 11/14/91, with the Unit in Operating Mode C (Cold Shutdown), electricians began performance of a preventive maintenance procedure (PMP) on Cubicle E14 on the 1AE 4160 Volt Emergency Bus.

This cubicle is one of the breakers used for the 1C river water (RW) pump. The 1C river water is a "swing" pump which can be powered from either 4160 Volt emergency bus. The station design allows for two RW pumps to be supplied from the 1AE 4160 Volt Emergency Bus. However, to prevent overloading the diesel generator, a mechanical interlock is provided to only allow one RW pump to be closed in on the bus at a time. In the event of a mechanical interlock failure, an electrical cell switch contact on the breaker will actuate to trip the running RW pump if a second RW pump breaker is closed on the bus.

Prior to the performance of the PMP, the 1A RW pump was running and being supplied from the 1AE 4160 Volt Emergency Bus. During the performance of the PMP, a spring clip was observed lying on the 1C RW pump breaker cubicle floor near the cell switch linkage. While replacing the pin, the electricians inadvertently moved the linkage, actuating the cell switch. This caused the running 1A RW pump to trip and the standby 1B RW pump to start on low header pressure, at 1325 hours. The start of the standby RW pump is considered an Engineered Safety Features System Actuation.

CAUSE OF THE EVENT

The cause for this event was personnel error.

CORRECTIVE ACTIONS

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

1. Operations personnel verified restoration of river water system pressure. The river water pumps were restored to their configurations prior to receipt of the automatic start signal.
2. The involved personnel were counseled regarding work practices.

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-30), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20545, 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)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
Beaver Valley Power Station Unit 1	0530033491	031	00	03	03	OF	03

TEXT (If more space is required, use additional NRC Form 355A's) (17)

3. All electrical maintenance personnel will review this event.
4. This event will be included in the Electrical Maintenance personnel retraining/continuing training program.

REPORTABILITY

This event was reported to the Nuclear Regulatory Commission at 1359 hours on 11/14/91, in accordance with 10 CFR 50.72.b.2.ii, as an event involving an Engineered Safety Features (ESF) system actuation. This written report is being submitted in accordance with 10 CFR 50.73.a.2.iv.

SAFETY IMPLICATIONS

There were no safety implications as a result of this event. The standby river water pump automatically started immediately upon a loss of the running river water pump and the loss of river water header pressure. River water cooling flow was maintained at all times.