

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)
Beaver Valley Power Station, Unit 1

DOCKET NUMBER (2)

0 5 0 0 0 3 3 4 1 OF 0 2

PAGE (3)

TITLE (4)

Automatic Actuation of Reactor Protection System

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	5	0	2	8	5	8	5	0	0	8	N/A	0	5	0	0	0
0	5	0	2	8	5	8	5	0	0	8	N/A	0	5	0	0	0

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)																			
POWER LEVEL (10)	0 0 0	20.402(b)					20.406(c)					50.73(a)(2)(iv)					73.71(b)				
		20.406(a)(1)(i)					50.36(e)(1)					50.73(a)(2)(v)					73.71(c)				
		20.406(a)(1)(ii)					50.36(e)(2)					50.73(a)(2)(vii)					OTHER (Specify in Abstract below and in Text, NRC Form 366A)				
		20.406(a)(1)(iii)					50.73(a)(2)(i)					50.73(a)(2)(viii)(F)									
		20.406(a)(1)(iv)					50.73(a)(2)(ii)					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		TELEPHONE NUMBER	
		AREA CODE	
Robert J. Druga, Manager of Technical Services		4 1 2	6 4 3 1 5 3 0 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

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 5/2/85 at 0134 a spurious reactor trip occurred without a valid signal. A Maintenance Surveillance Procedure in progress on one channel of steamline pressure protection was halted and reviewed for procedural errors that may have caused the spurious signal. Initial investigation focused on the multiplexer test switch. Subsequent cycling failed to cause a similar trip signal.

Further investigation was undertaken by Operations and I&C personnel who determined that Reactor Trip Actuation was due to the reset of permissive P-7 (one of two impulse pressure channels greater than 10%) and not the Multiplexer test switch. A recorder was installed on each of the impulse pressure channels. Tests were conducted by keying radio transmitters, and striking welding arcs near the pressure transmitters. No noise signals were recorded. Mechanically exercising the transmitter housing did cause noise signals equivalent to approximately 5% of the normal operating signal. The recorders were maintained by Operation's request until Mode 1 was achieved. No spikes were recorded over the ensuing four day period.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
Beaver Valley Power Station, Unit 1	0 5 0 0 0 3 3 4 8 5	—	0 0 8	—	0 0	0 2	OF 0 2

TEXT (If more space is required, use additional NRC Form 365A's) (17)

On 5/2/85 at 0134 a spurious reactor trip occurred without a valid signal. Maintenance Surveillance Procedure 21.01 - P474 1A Steamline Pressure Protection System 'A' Train Multiplexer Test Switch was moved from the A + B position through inhibit to the normal position per step 13 of SP 21.01. A caution tag had been placed on this switch for I&C technician troubleshooting. An NSS clearance was posted on the 'A' train switch in the A + B position to prevent recurrence of spurious trip signals. Instrument and Control personnel subsequently tested the switch by cycling it from the normal to the A + B position approximately twenty times without inadvertently causing a Reactor Trip.

A meeting was held at 0830 on 5/3/85 between Operations and I&C personnel. The pre-event actions were discussed and the Sequence of Events Recorder printout was reviewed. By SER indication, the multiplexer test switch was moved at 0120 hours and the trip occurred at 0134 hours, thus ruling out further problems associated with the multiplexer switch. At 0134, an apparent reset of P-7 (reset either by 2/4 Power Range Channels greater than 10% or 1/2 Impulse Pressure Channels (446 or 447) greater than 10%) occurred instituting a reactor trip. If it were assumed P-7 reset due to 2/4 NI's greater than 10% (P-10) then source range instruments would have de-energized. This did not occur.

A recorder was installed on PT-MS-446, 447 and several tests were performed to try to generate a signal that would trip either channel. Radios were keyed and welding (TIG type) arcs were struck 10 times near the transmitters and no noise signal was recorded. The transmitter cases were each struck with an open hand and signals equivalent to approximately 5% of the maximum operations signal were generated. Operations requested the recorder be connected until Mode 1 conditions were reached to monitor channel spikes. A review of the strip chart showed no spikes over the ensuing four-day period.



Duquesne Light

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May 28, 1985
ND1SS1:2453

Beaver Valley Power Station, Unit 1
Docket No. 50-334, License No. DPR-66
LER 85-008-00

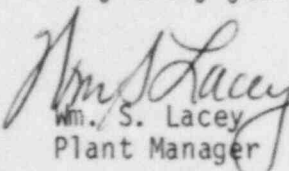
Dr. Thomas E. Murley
Regional Administrator
United States Nuclear Regulatory Commission
Region I
Park Avenue
King of Prussia, PA 19046

Gentlemen:

In accordance with Appendix A, Beaver Valley Technical Specifications,
the following Licensee Event Report is submitted:

LER 85-008-00, 10 CFR 50.73.a.2.i, "Automatic Actuation of Reactor
Protection System".

Very truly yours,


Wm. S. Lacey
Plant Manager

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Attachment

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IE 22

T. E. Murley
May 28, 1985
ND1SS1:2453
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