

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Beaver Valley Power Station Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 3 3 4	PAGE (3) 1 OF 0 2
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TITLE (4)  
Reactor Trip on Low-Low Steam Generator Level Due to Personnel Error

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	1 9	8 8	8 8	0 0 2	0 0	0 3	1 8	8 8	N/A		0 5 0 0 0
									N/A		0 5 0 0 0

OPERATING MODE (9) 5	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5. (Check one or more of the following) (11)									
POWER LEVEL (10) 0 0 0	20.402(b)	20.406(c)	<input checked="" type="checkbox"/>	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 356A)					
	20.406(a)(1)(iii)	50.73(a)(2)(i)		50.73(a)(2)(viii)(A)						
	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 T. P. Noonan, Plant Manager	TELEPHONE NUMBER AREA CODE: 4 1 2 6 4 3 - 1 2 5 8
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUF. TURER	REPORTABLE TO NPDOS	CAUSE	SYSTEM	COMPONENT	MANUF. TURER	REPORTABLE TO NPDOS
A	X	X	X	X					

SUPPLEMENTAL REPORT EXPECTED (14)

<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE) <input checked="" type="checkbox"/> NO	EXPECTED SUBMISSION DATE (15) MONTH:    DAY:    YEAR:
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ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single space typewritten lines) (16)

On 2/19/88, with the Unit in Cold Shutdown, the steam generators (SG) were being drained and refilled in order to improve steam generator chemistry for plant startup. On the 00-08 shift prior to this evolution, the reactor trip breakers were closed to support Solid State Protection System testing. All shutdown and control bank rods were fully inserted. Draining of the 1B steam generator was commenced on the 08-16 shift. At 1222 hours, the 1B SG level drained below 12%, initiating a reactor trip on Low-Low SG Level. The reactor trip breakers opened upon the receipt of the trip signal. The cause for this event was personnel error. The personnel conducting the draining evolution had performed prior draining evolutions during periods when the reactor trip breakers were open and did not take the additional actions necessary to avoid trip breaker operation when the trip breakers are closed. The involved individuals were counseled to maintain awareness of plant status and to utilize available procedures for guidance during routine evolutions. Simulated level signals were installed to continue SG draining and filling. This event will be reviewed by all operations shift personnel at shift briefings. There were no safety implications to the public as a result of this event, as the control rods were already inserted and no positive reactivity evolutions were in progress.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		88	002	000	2	OF 02

TEXT (If more space is required, use additional NRC Form 368A (1) (17))

On 2/19/88, with the Unit in Cold Shutdown, steam generator (SG) draining and refilling evolutions were in progress in order to improve steam generator secondary side chemistry for plant startup. These evolutions were to take place on the daylight shift. On the midnight shift immediately preceding the daylight shift, the reactor trip breakers were closed to support Solid State Protection System testing (Maintenance Surveillance Procedure 1.05). Following successful completion of the testing, the reactor trip breakers were left in the closed position. On the 08-16 shift, draining of the 1B SG was commenced, however, since the reactor was shutdown with control rods fully inserted, the SG draining and refilling procedure (Operating Manual Chapter 24 Procedure T, Draining and Refilling Steam Generators) was not consulted for this evolution. This procedure, if consulted, allows simulated level signals to be inserted into the SG level circuitry if draining is expected to go below the low-low level reactor trip setpoint. Simulated level signals were not installed at the time of the draining evolution. At 1222 hours, the 1B SG level drained below the low-low level reactor trip setpoint (12%), initiating a reactor trip. The reactor trip breakers opened as designed upon receipt of the reactor trip signal.

The cause for this event was personnel error. The individuals conducting the evolution had performed prior draining periods when the trip breakers were open and failed to take the additional actions needed to prevent trip breaker operation with the breakers closed.

The involved individuals were counseled to maintain proper awareness of plant status at all times and to utilize available plant procedures appropriate for the plant status during routine evolutions. Simulated level signals were inserted into the steam generator level circuitry in order to continue the draining and refilling evolutions. This event will be reviewed by all operations shift personnel at shift briefings.

There were no safety implications to the public as a result of this event. The reactor trip breakers opened as designed upon receipt of the reactor trip signal. Additionally, the shutdown and control bank rods were already fully inserted into the reactor and there were no positive reactivity additions in progress at the time of the event.



**Duquesne Light**

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March 18, 1988  
ND3SPM:0190

Beaver Valley Power Station, Unit No. 1  
Docket No. 50-334, License No. DPR-66  
LER 88-002-00

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 88-002-00, 10 CFR 50.73.a.2.iv, "Reactor Trip on Low-Low Steam Generator Level Due to Personnel Error".

Very truly yours,

T. P. Noonan  
Plant Manager

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Attachment

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March 18, 1988

ND3SPM:0190

Page two

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