

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

TITLE (4): Discrepancies in Reactor Trip Response Time Testing

EVENT DATE (6): MONTH 0 DAY 4 YEAR 2 9 8 5
LER NUMBER (8): YEAR 0 5 SEQUENTIAL NUMBER 0 0 9 REVISION NUMBER 0 0 0
REPORT DATE (7): MONTH 0 5 DAY 2 2 YEAR 8 5
OTHER FACILITIES INVOLVED (8): FACILITY NAMES N/A DOCKET NUMBER(S) 0 5 0 0 0 0 0 0
N/A 0 5 0 0 0 0 0 0THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5. (Check one or more of the following) (11):
OPERATING MODE (9): 1
POWER LEVEL (10): 1.0 0
20.402(a) 20.402(b) 20.731(a)(2)(iv) 20.731(b)
20.402(a)(1)(i) 20.361(a)(1) 20.731(a)(2)(iv) 20.731(c)
20.402(a)(1)(ii) 20.361(a)(2) 20.731(a)(2)(iv) 20.731(a)(2)(iv)(A)
20.402(a)(1)(iii) X 20.731(a)(2)(iv) 20.731(a)(2)(iv)(B)
20.402(a)(1)(iv) 20.731(a)(2)(iv) 20.731(a)(2)(iv)
20.402(a)(1)(v) 20.731(a)(2)(iv)LICENSEE CONTACT FOR THIS LER (12): NAME Robert J. Druga, Manager of Technical Services
TELEPHONE NUMBER AREA CODE 4 1 2 6 4 3 - 5 3 0 8COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13):
CAUSE SYSTEM COMPONENT MANUFACTURER REPORTABLE TO NRC
CAUSE SYSTEM COMPONENT MANUFACTURER REPORTABLE TO NRCSUPPLEMENTAL REPORT EXPECTED (14): YES (if yes, complete EXPECTED SUBMISSION DATE) X NO
EXPECTED SUBMISSION DATE (15): MONTH DAY YEAR

ABSTRACT (Limit to 1400 words, i.e., approximately fifteen single-spaced typewritten lines) (16):

On 2/27/85, Beaver Valley's Testing and Plant Performance Group issued their Reactor Trip Response Time evaluation report. Two potential discrepancies were noted at this time: (1) In one instance, the logic train testing had not been performed on a staggered test basis, and (2) one OT-delta-T channel response time was in excess of the UFSAR assumptions although it was within the Technical Specifications requirements. Beaver Valley's Licensing Department determined on 4/29/85 that testing the logic trains on a non-staggered basis had resulted in not completing the train A test within its required frequency. It was also determined that the Technical Specification OT-delta-T limit was incorrect and that the UFSAR limit should be followed.

An in-depth investigation revealed that the cause of the logic testing being performed on a non-staggered test basis was a tracking deficiency concerning Reactor Trip Response Time testing. Action has been initiated to correct this scheduling problem. A Technical Specification change is being issued to correct the discrepancy between the Technical Specifications and the UFSAR. The transmitter whose response time was greater than the UFSAR requirements was replaced in April of 1982 due to Environmental Qualification considerations.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED DATE NO. 0780-0104
EXPIRES 02-01-88

FACILITY NAME (1)	EVENT NUMBER (2)	LER NUMBER (3)			PAGE (3)
		FOUR	SEVENTEEN	REVISION	
Beaver Valley Power Station, Unit 1	0 8 0 0 0 3 3 4 8 5	0 10 9	0 0 2	OF 0 2	

NOTE: If more space is required, use additional NRC Form 200a (11)

On 2/27/85, Beaver Valley Testing and Plant Performance Group issued their Reactor Trip Response Time (RTT) evaluation report. Two potential problems were identified at that time. One involved the Logic Train Testing program. The two logic trains (A and B) are normally tested on a staggered test basis with one train being tested every 18 months. It was determined there was an instance when these tests were not executed in their normal order. Specifically, first train A was tested. Then 18 months later train B was tested as per normal. Eighteen months after that, train B was again tested. It was not until another 18 month period had elapsed that train A was again tested for a total period of 54 months between train A tests.

The other potential problem identified in the RTT report concerned a discrepancy between the required Over Temperature Delta Temperature (OT-delta-T) reactor trip response time in the Updated Final Safety Analysis Report (UFSAR) and the Technical Specifications. The Technical Specifications allow the OT-delta-T reactor trip response time to be as long as six (6) seconds. The UFSAR assumes the OT-delta-T reactor trip response time to be no longer than four (4) seconds allows an additional two (2) seconds for primary coolant sample transport and thermal lag response delays associated with the RTD bypass manifold measurement of reactor coolant temperature. In July of 1979, Westinghouse measured Beaver Valley's RTD response times. At that time it was found that [TE 412 B] had a response time of 5.200 seconds. Although it was recognized at the time that this was a longer than normal response time no further investigation was performed. [TE 412B] feeds a channel that was not scheduled to be tested that year and the administrative procedures at that time instructed personnel to only verify that the channel scheduled for testing was operable.

On April 29, 1985, Beaver Valley's Licensing Group determined that testing the logic trains on a non-staggered test basis had resulted in not completing the train A test within its required frequency. The Licensing Department also determined at this time that OT-delta-T response time limit in the Technical Specifications was incorrect and that the UFSAR limits should be followed.

An in-depth investigation revealed that the cause of the logic testing being performed on a non-staggered test basis was a tracking deficiency concerning Reactor Trip Response Time Testing. Beaver Valley has corrected this by reprogramming its WSP tracking system to insure alternate trains are tested. Additionally, Beaver Valley has initiated a new testing procedure (BVT 1.3-1.1.8) which will calculate all reactor trip response times every 18 months. This procedure includes two sign-offs to verify that each logic train has been tested within its required frequency. This procedure will verify that the reactor trip response times of all channels are within their required limits.

Beaver Valley's Licensing Department is preparing a Technical Specification change to bring the Technical Specification Limits into agreement with the UFSAR assumptions. However, BVT 1.3-1.1.8 already has as its acceptance criteria for OT-Delta-T tests, that the reactor trip response time must be less than or equal to four (4) seconds. This acceptance criterion is in accordance with the UFSAR. The RTD which was determined to have a response time of 5.2 seconds in 1979 was a Sostman RTD. Due to environmental qualification considerations this RTD was replaced with a Rosemont RTD in April of 1982.



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May 23, 1985
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Beaver Valley Power Station, Unit 1
Docket No. 50-334, License No. DPR-66
LER 85-009

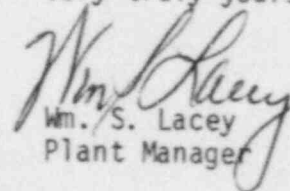
Dr. Thomas E. Murley
Regional Administrator
United States Nuclear Regulatory Commission
Region I
Park Avenue
King of Prussia, PA 19046

Gentlemen:

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

LER 85-009, 10 CFR 50.73.a.2.i, "Discrepancies in Reactor Trip Response Time Testing".

Very truly yours,


Wm. S. Lacey
Plant Manager

md

Attachment

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IE 22

T. E. Murley
May 23, 1985
ND1SS1:2445
Page three

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