

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)

Inadequate Surveillance Testing Requirements

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)		
06	18	84	84	006	000	07	20	84	N/A	0 5 0 0 0 0		
									N/A	0 5 0 0 0 0		

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)

OPERATING MODE (9)	20.402(b)	20.405(a)(1)(i)	20.405(a)(1)(ii)	20.405(a)(1)(iii)	20.405(a)(1)(iv)	20.405(a)(1)(v)	20.406(c)	50.36(e)(1)	50.36(e)(2)	50.73(a)(2)(i)	50.73(a)(2)(ii)	50.73(a)(2)(iii)	50.73(a)(2)(iv)	50.73(a)(2)(v)	50.73(a)(2)(vi)	50.73(a)(2)(vii)	50.73(a)(2)(viii)(A)	50.73(a)(2)(viii)(B)	50.73(a)(2)(ix)	73.71(b)	73.71(c)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)	
POWER LEVEL (10)																							

LICENSEE CONTACT FOR THIS LER (12)

NAME
Robert J. Druga, Chief Engineer

TELEPHONE NUMBER

AREA CODE

4 1 2 6 4 3 - 1 2 6 4

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUF- TURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUF- TURER	REPORTABLE TO NPRDS
D	E I J	X I X I X I X I X I X I X		X					

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 6/21/84, during a review of the eighteen (18) month surveillance testing methods used on the 120V DC station batteries, it was determined that the test methods were inadequate. This is non-conservative with respect to Technical Specification 4.8.2.3.2.d and reportable per 10 CFR 50.73.a.2.i. The surveillance requirement stated that the batteries be tested for two (2) hours at a load equivalent to their design duty cycles; however, it was determined that the tests did not test at actual or simulated emergency loads for the design duty cycles. The Onsite Safety Committee (OSC) and the Offsite Review Committee (ORC) then conferred to determine the current operability status of the station batteries. The batteries were determined to be operable based on the results of previous capacity tests and the added safety factor included in the original design of the batteries. A proposed Technical Specification Change to permit delaying the 18 month testing requirements and the appropriate battery service test to be conducted during the fourth refueling outage was approved by the OSC/ORC. This delay was necessary to develop new battery duty curves, and new test procedures and to procure the required battery testing equipment. The Nuclear Regulatory Commission has granted tentative approval of this proposed Technical Specification Change pending further review.

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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	0500033484	—	006	—	00	02	OF 02

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

On 6/21/84, during a review of the eighteen (18) month surveillance methods used to verify operability of the 125V DC station batteries, it was determined that the test methods were inadequate in that the test method does not agree with Technical Specification 4.8.2.3.2.d which is based on IEEE 450-1980 per the Technical Specification Bases. IEEE Standard 450-1980 Section 6.6(2) requires the discharge rate during performance of the test to follow the Design Duty Cycle for the battery.

The 60 month capacity tests for Batteries 3 and 4 were performed 6/83 and 7/83 respectively; the tests were verified to be satisfactory and showed no indication of abnormal battery degradation. Batteries 1 and 2 were last capacity checked 6/81 and 6/82, respectively, and were verified to be satisfactory. Initial battery testing was performed at the factory per IEEE 450-1972.

The Onsite Safety Committee (OSC) and the Offsite Review Committee (ORC) then conferred to determine the current operability status of the station batteries. The batteries were judged operable based on the previous 60 month capacity tests. If conservatively projected out, the trend curves for the previous tests would fall well within the 80% of manufacturer's rated capacity as required by Technical Specification 4.8.2.3.2.e. Based on the satisfactory performance of the quarterly battery voltage checks, the batteries have not indicated any abnormal battery degradation. Additionally, the batteries are protected by a 50% margin of safety. The committee felt that this safety factor combined with the margin of rated battery capacity well above the required 80% (after the expected normal battery degradation) provides sufficient basis to justify the decision to consider the batteries as being operable.

The OSC recommended that an Engineering Memorandum be generated to develop Battery Duty Cycle Curves based on loading under worse case conditions and that a new surveillance test procedure be developed utilizing the new curves. Also, the OSC recommended that the 60 month capacity checks for batteries 1 and 2, or if available the revised 18 month service tests, be performed upon the next entry into Cold Shutdown to verify the above evaluation.

The OSC along with the ORC then recommended approval of a proposed Technical Specification Change which would permit the test performance to be deferred until the Fourth Refueling Outage and then performed at 18 month intervals thereafter. A Safety Evaluation was also performed as a result of this proposed change. It was determined that no unreviewed safety questions existed.

The Nuclear Regulatory Commission has tentatively approved this proposed Technical Specification Change pending further review. A formal response from the Nuclear Regulatory Commission regarding this proposed change is expected by 9/1/84.

There were no safety implications to the public as a result of these inadequate procedure. The station batteries were determined to be operable at all times and no abnormal battery degradation was found to occur.



Duquesne Light

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July 20, 1984
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Beaver Valley Power Station, Unit No. 1
Docket No. 50-334, License No. DPR-66
LER 84-006

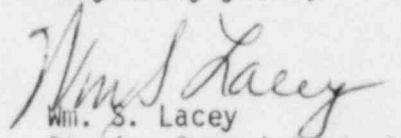
Dr. Thomas E. Murley
Regional Administrator
United States Nuclear Regulatory Commission
Region 1
Park Avenue
King of Prussia, PA 19406

Gentlemen:

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

LER 84-006, 10CFR 50.73.a.2, "Operation (Testing) prohibited by Technical Specifications".

Very truly yours,


Wm. S. Lacey
Station Superintendent

Attachment

T. E. Murley
July 20, 1984
NDISS1:2111
Page two

cc: Director of Management & Program Analysis
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