POOR ORIGINAL

NRC FORM 366 (7-77)

U. S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

CONTROL BLOCK: [| | | | |] (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

	01
LICENSEE CODE	P A B V S 1 (2)
LICENSE NUMBER	0 0 - 0 0 0 0 0 - 0 0 (3)
LICENSE TYPE	4 1 1 1 1 (4)
CAT	(5)

CON'T 0 1

REPORT SOURCE	DOCKET NUMBER	EVENT DATE	REPORT DATE
L (6)	0 5 0 0 0 3 3 4 (7)	0 1 0 6 8 1 (8)	0 1 2 0 8 1 (9)

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 On 1/6/81, the Duquesne Light Company Engineering Department reported that 32"
0 3 SHP-1,2,3-601-Q2 supports H-162, H-164 and H-166 had not been modified as originally
0 4 reported in the 8/14/80 IE Bulletin 79-14 letter. This is a violation of Technical
0 5 Specification 6.9.1.8.i, Analysis of Structures. The consequences of support
0 6 failure due to pipe whip is postulated to be failure of the main steam valve house
0 7 wall, resulting in failure of the other two steam lines due to falling debris.
0 8

0 9

SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP SUBCODE	VALVE SUBCODE
C C (11)	B (12)	A (13)	S U P O R T (14)	B (15)	Z (16)

(17) LER/RO REPORT NUMBER

EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
8 1	—	0 0 1	/	0 1	T	—	0

ACTION TAKEN	FUTURE ACTION	EFFECT ON PLANT	SHUTDOWN METHOD	HOURS (22)	ATTACHMENT SUBMITTED	NPRD-4 FORM SUB.	PRIME COMP. SUPPLIER	COMPONENT MANUFACTURER
F (18)	Z (19)	Z (20)	Z (21)	0 0 0 0	Y (23)	N (24)	A (25)	Z 9 9 9 (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 The cause of the problem is that illegible drawings were transmitted to the
1 1 Construction department for use. When the drawings were sent back for better
1 2 copies, the drawing pertaining to supports H-162, H-164 and H-166 was lost. The
1 3 work on H-162, 164 and 166 was completed on 1/7/81 and a letter from the Quality
1 4 Assurance Department was received, verifying that all other items are completed.

1 5

FACILITY STATUS	% POWER	OTHER STATUS (30)	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION (32)
H (28)	0 0 0 (29)	N/A	C (31)	Special Inspection

1 6

ACTIVITY RELEASED	CONTENT OF RELEASE	AMOUNT OF ACTIVITY (35)	LOCATION OF RELEASE (36)
Z (33)	Z (34)	N/A	N/A

1 7 PERSONNEL EXPOSURES

NUMBER	TYPE	DESCRIPTION (39)
0 0 0 (37)	Z (38)	N/A

1 8 PERSONNEL INJURIES

NUMBER	DESCRIPTION (41)
0 0 0 (40)	N/A

1 9 LOSS OF OR DAMAGE TO FACILITY (43)

TYPE	DESCRIPTION
Z (42)	N/A

2 0 PUBLICITY

ISSUED	DESCRIPTION (45)	NRC USE ONLY
N (44)	N/A	

NAME OF PREPARER W. S. Lacey PHONE 412-643-8525

8101260634

Attachment To LER 81-001/01T
Beaver Valley Power Station
Duquesne Light Company
Docket No. 50-334

On January 6, 1981, the Duquesne Light Company Engineering Department reported that 32" SHP-1,2,3-601-Q2 supports H-162, H-164 and H-166 had not been modified as reported to the NRC in the August 14, 1980 IE Bulletin 79-14 letter.

The design safety function of hangers H-162, H-164 and H-166 is to protect other equipment if one pipe should break and result in a large pipe whip. The deficiency was in the number of shim stacks that limit pipe movement. The shim stacks help distribute the pipe break loads uniformly over the honeycomb collapse collar. This collapse collar dissipates energy due to pipe breaks, thus minimizing the loads imposed upon the valve house wall. This wall acts as the last safety-related support for all three main steam lines.

It was determined in the IE Bulletin 79-14 effort that the shim stack installed was not according to the design drawings and would not adequately distribute the load properly. Because of this, there was an increased possibility that the design loads of the valve house wall would be exceeded if one of the main steam lines ruptured. This wall failure would cascade into the two remaining steam lines which are supported off this wall.

The problem with this nonconformance being missed appears to be in the transmittal of records between the concerned departments. A drawing package transmitted to the contractor was illegible and so it was sent back to the construction department. New drawings were made, excluding the ones of the supports in question, and were then re-transmitted. When the new drawings were compared to the transmittal list, they matched and were accepted.

All design change packages for modifications of Beaver Valley Power Station are reviewed during turnover activities to assure that as-built conditions are in accordance with required engineering as part of the turnover program. This check is made concurrently by the Construction Department, Start-up Group, and the Station Engineering Group. In addition, a review is made to assure that all applicable Technical Specifications can be met utilizing the as-modified station equipment. A final safety review is performed to assure that the "as built" configuration does not constitute an unreviewed safety question as defined by 10 CFR 50.59.

As allowed by the turnover program, the Station Engineering Group conducted a 25% review on three design change packages (those associated with pipe supports, as-built corrections, and seismic reanalyses) because of their peculiar nature and magnitude. The above described discrepancy was discovered by the Construction Department during a final follow-up check.

Upon receiving the discrepancy report from the Mechanical Engineering Department, the Station Superintendent ordered the plant startup to discontinue until the discrepancy was corrected and the Quality Assurance Manager assured him that no other discrepancies had occurred.

The Quality Assurance Manager requested a final review of the three design change packages of concern and conducted an investigation of the problem to determine if the program contained weaknesses allowing this to occur. During this review, one other discrepancy was discovered on hanger H-4A on the river water system which was determined not to be a significant safety concern; however, the discrepancy was corrected immediately.

On January 9, 1981, the Quality Assurance Manager assured the Superintendent that all reviews were complete and that there was a high degree of assurance that no other discrepancies existed. On that basis, the Superintendent released the station to continue startup activities. The Quality Assurance Manager has subsequently issued a report of his investigation with recommended action to prevent this type of oversight from recurring. Corrections are being made in an expeditious manner.