NRC FORM 366
(7-77)

U. S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

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

0 1 — 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: L ⑥ — DOCKET NUMBER: 0 5 0 0 0 3 3 4 ⑦ — EVENT DATE: 0 9 0 8 8 2 ⑧ — REPORT DATE: 1 0 0 7 8 2 ⑨

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES ⑩

0 2 On 9/8/82 at 1230 hours fire hose protection for a portion of
0 3 the intake structure was lost when a fire main rupture in a
0 4 redundant underground 12 inch supply header required isolation to prevent
0 5 the loss of the entire fire system. Public health and
0 6 safety was not adversely affected since Tech. Spec. 3.7.14.4
0 7 action statement requirements were satisfied by providing temporary
0 8 fire protection for the affected area through an adjacent hose station.

0 9 — SYSTEM CODE: A B ⑪ — CAUSE CODE: B ⑫ — CAUSE SUBCODE: C ⑬ — COMPONENT CODE: P I P E X X ⑭ — COMP. SUBCODE: D ⑮ — VALVE SUBCODE: Z ⑯

⑰ LER/RO REPORT NUMBER — EVENT YEAR: 8 2 — — SEQUENTIAL REPORT NO.: 0 3 2 — / — OCCURRENCE CODE: 0 3 — REPORT TYPE: L — — — REVISION NO.: 0

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

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS ㉗

1 0 The break occurred at a pipe retainer flange connection along
1 1 its setscrew contact points. Crack initiation resulted from over
1 2 torquing of the flange setscrews upon initial installation. Crack
1 3 growth continued due to bedding erosion, accelerated during the
1 4 excavation process begun after observations of underground leakage at the excavation site.

1 5 — FACILITY STATUS: G ㉘ — % POWER: 0 0 0 ㉙ — OTHER STATUS ㉚: N/A — METHOD OF DISCOVERY: A ㉛ — DISCOVERY DESCRIPTION ㉜: Operator observation

1 6 — ACTIVITY RELEASED: Z ㉝ — CONTENT OF RELEASE: Z ㉞ — AMOUNT OF ACTIVITY ㉟: N/A — LOCATION OF RELEASE ㊱: N/A

1 7 — PERSONNEL EXPOSURES — NUMBER: 0 0 0 ㊲ — TYPE: Z ㊳ — DESCRIPTION ㊴: N/A

1 8 — PERSONNEL INJURIES — NUMBER: 0 0 0 ㊵ — DESCRIPTION ㊶: N/A

1 9 — LOSS OF OR DAMAGE TO FACILITY ㊸ — TYPE: Z ㊷ — DESCRIPTION: N/A

8210210010 821007
PDR ADOCK 05000334
S PDR

2 0 — PUBLICITY — ISSUED: N ㊹ — DESCRIPTION ㊺

NRC USE ONLY

Attachment To LER 82-032/03L
Beaver Valley Power Station
Duquesne Light Company
Docket No. 50-334

On 9/8/82, at 1230 hours, fire hose protection for a portion of the intake structure was lost when a fire main rupture in a redundant underground 12 inch supply header required isolation to prevent the loss of the entire fire suppression water system. The break occurred during the excavation process begun after observations of underground leakage originating at the excavation site. Two specimens of the fractured 12 inch cast iron, ANSI 21.6 or 21.8 bituminous coated, cement lined pipe were sent to Industrial Testing Laboratory Services Corporation for examination. Physical, chemical and metallographic testing of the pipe specimens revealed the material to be sound. ITL's conclusion to the mode of failure parallels initial observation findings in that crack initiation resulted from over torquing of the retainer flange setscrews upon initial installation. Crack growth continued due to bedding erosion caused by leakage from the crack and that this bedding erosion coupled with an already induced crack resulted in complete failure. External finger corrosion which had greatly reduced the pipe wall thickness causing the incident of October 29, 1981 was not evident in this failure. Because no connection exists between the most recent pipe failures, the station does not feel that a total piping replacement of the cast iron portion of the line is warranted at this time.