

LICENSEE EVENT REPORT

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

0 1 M I D C C 2 0 0 - 0 0 0 0 0 - 0 0 3 4 1 1 1 1 4 5
7 8 9 14 15 25 26 30 57 CAT 58
LICENSEE CODE LICENSE NUMBER LICENSE TYPE

CON'T
0 1 L 0 5 0 0 0 3 1 6 7 0 8 2 7 8 1 8 C 9 1 6 8 1 9
7 8 60 61 68 69 74 75 80
REPORT SOURCE DOCKET NUMBER EVENT DATE REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)
0 2 THE ATTACHMENT IDENTIFIES TWO PROBLEMS WHICH INVOLVE POTENTIAL PIPING OVERSTRESS

0 3 CONDITIONS DURING A SEISMIC EVENT. THESE PROBLEMS WERE REVIEWED BY MR. I. T. YIN

0 4 DURING HIS AUDIT OF AEPSC ACTIVITIES WITH REGARD TO I.E.BULLETIN 79-14.

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0 8

0 9 Z Z B A Z Z Z Z Z Z Z Z Z Z Z Z
9 10 11 12 13 14 15 16 17 18 19 20
SYSTEM CODE CAUSE CODE CAUSE SUBCODE COMPONENT CODE COMP. SUBCODE VALVE SUBCODE

17 LER/RO REPORT NUMBER 8 1
21 22
EVENT YEAR
23
SHUTDOWN METHOD
24 26
SEQUENTIAL REPORT NO. 0 4 4
27
HOURS
25 29
OCCURRENCE CODE 0 3
30 31
REPORT TYPE L
32
REVISION NO. 0

ACTION TAKEN FUTURE ACTION EFFECT ON PLANT SHUTDOWN METHOD HOURS ATTACHMENT SUBMITTED NPRD-4 FORM SUB. PRIME COMP. SUPPLIER COMPONENT MANUFACTURER
F Z Z Z 0 0 0 0 Y N Z Z 9 9 9
33 34 35 36 37 40 41 42 43 44 47
18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)
1 0 SEE ATTACHMENT

1 1

1 2

1 3

1 4

1 5 E 1 0 0 N.A. D IE BULLETIN 79-14 ACTION
7 8 9 10 12 13 44 45 46
FACILITY STATUS % POWER OTHER STATUS METHOD OF DISCOVERY DISCOVERY DESCRIPTION

1 6 Z Z N.A. N.A.
7 8 9 10 11 44 45
ACTIVITY CONTENT RELEASED OF RELEASE AMOUNT OF ACTIVITY LOCATION OF RELEASE

1 7 0 0 0 Z N.A.
7 8 9 11 12 13
PERSONNEL EXPOSURES NUMBER TYPE DESCRIPTION

1 8 0 0 0 N.A.
7 8 9 11 12
PERSONNEL INJURIES NUMBER DESCRIPTION

1 9 Z N.A.
7 8 9 10
LOSS OF OR DAMAGE TO FACILITY TYPE DESCRIPTION

2 0 N N.A.
7 8 9 10
ISSUED DESCRIPTION

8109230475 810916
PDR ADOCK 05000316
S PDR

NRC USE ONLY

NAME OF PREPARER D. V. Shaller

PHONE: 616/ 465-5901

EVENT/CAUSE DESCRIPTIONRCP Seal Water Return Piping Inside Containment

During verification of Seismic Class I safety related piping systems, performed to comply with the requirements of NRC IE Bulletin 79-14, two significant discrepancies were noted in the as built condition of a 4" and 3" Chemical Volume and Control line (CS), Unit 2 of D. C. Cook Plant, from the reactor coolant pump seal water circuit to the volume control tank. The discrepancies indicated a pipe support which was relocated from its design dimension and a difference in the schedule of piping between the math model and the fabricator's spool piece detail drawings.

The analysis of the as-built condition by EDS Nuclear, indicated stresses above the FSAR allowable during both the OBE and DBE seismic events; more specifically, the stress was below yield during an Operations Basis Earthquake and above yield during a Design Basis Earthquake.

The piping system was reanalyzed by EDS Nuclear and included the addition of one support. The modified stress levels are 28% below the FSAR allowable for OBE conditions and .2% below the FSAR allowable for the DBE condition.

The package associated with the problem was closed by July 27, 1981. Physical modifications in the system had been performed prior to that date.

Failure of the seal water return line in a seismic event would result in a small break LOCA well within the Cook Plant design bases. The seal water return line is automatically isolated on a safety injection signal and serves no safety functions during design basis LOCAs. Due to the conservative nature of the seismic analyses and the low probability of a seismic event at the Cook Plant site NS&L has concluded that the subject discrepancy did not constitute a substantial degradation of plant safety and had no significant impact on the ability of the Cook Plant to safely mitigate a design basis accident.

Essential Service Water to Control Room Air Conditioning Condenser 2W

During field verification four significant discrepancies were noted in the as-built condition of a 3" Essential Service Water (ESW) line in Unit 2 of D. C. Cook Plant, from the 12" ESW supply header to control room air conditioning condenser 2W. The discrepancies noted dimensional differences in pipe geometry, pipe support location and pipe size and schedule, used as computer input data from that on the math model and design drawings.

An analysis of the as-built condition was made by Teledyne Engineering Services. This analysis indicated stresses above the FSAR allowable during both OBE and DBE seismic events, more specifically, the stress was below yield during the OBE and above yield during a Design Basis Earthquake.

EVENT/CAUSE DESCRIPTION (continued)

The piping system was reanalyzed by Teledyne and included the addition of one support and the addition of a horizontal restraint. The modified stress levels are 65% below the FSAR allowable for OBE conditions and 61% below the FSAR allowable for DBE conditions.

The additional support along with modifications to three existing supports were installed by February 21, 1980.

Failure of the subject ESW piping in a seismic event would have no adverse effect on the ability of the Cook Plant to achieve a safe shutdown condition following a design basis seismic event.