

Update Report - Previous Report Date 2/13/81 U.S. NUCLEAR REGULATORY COMMISSION
LICENSEE EVENT REPORT

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

0 1 | S | C | H | B | R | 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 58
LICENSEE CODE LICENSE NUMBER LICENSE TYPE CAT 58

CON'T
0 1 | R | E | P | O | R | T | S | O | U | R | C | E | L | 6 | 0 | 5 | 0 | 0 | 0 | 2 | 6 | 1 | 7 | 0 | 1 | 1 | 1 | 6 | 8 | 1 | 1 | 8 | 0 | 7 | 3 | 0 | 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 | At 1228 hours during normal operation on 1-16-81, indication of leakage to the CCW
0 3 | System prompted a RCS leak rate test which verified a 2.37 gpm leak rate. Investiga-
0 4 | tion revealed that the leak path was from the pressurizer through the pressurizer
0 5 | liquid space sample cooler to the CCW System via a leaking tube bundle in the sample
0 6 | cooler. The leakage experienced is contrary to the requirements of T.S. 3.1.5.2 and
0 7 | is reportable per T.S. 6.9.2.b(2). All leakage was contained within a closed plant
0 8 | radioactive system and there was no threat to plant or public health or safety. _____ | 80

0 9 | P | B | 11 | E | 12 | F | 13 | H | T | E | X | C | H | 14 | C | 15 | Z | 16
7 8 9 10 11 12 13 18 19 20
SYSTEM CODE CAUSE CODE CAUSE SUBCODE COMPONENT CODE COMP. SUBCODE VALVE SUBCODE
17 | L | E | R | / | R | O | R | E | P | O | R | T | N | U | M | B | E | R | 8 | 1 | 21 | 22
18 | A | 18 | Z | 19 | Z | 20 | Z | 21 | 0 | 0 | C | 0 | 22 | Y | 23 | Y | 24 | A | 25 | S | 1 | 3 | 5 | 26
33 34 35 36 37 40 41 42 43 44 47
ACTION TAKEN FUTURE ACTION EFFECT ON PLANT SHUTDOWN METHOD HOURS ATTACHMENT SUBMITTED NPRD-4 FORM SUB. PRIME COMP. SUPPLIER COMPONENT MANUFACTURER

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 | The sample line isolation valves were closed as immediate corrective action. The root
1 1 | cause of the event was the failure of the sample cooler tube bundle. The tube bundle
1 2 | was replaced to prevent recurrence. Failure was attributed to normal operational
1 3 | wear. Review of maintenance records revealed no generic implications with the reported
1 4 | failure. Therefore, no further action is necessary. _____ | 80

1 5 | E | 28 | I | 0 | 0 | 29 | NA | A | 31 | Operator Observation
7 8 9 10 12 13 44 45 46
FACILITY STATUS % POWER OTHER STATUS (30) METHOD OF DISCOVERY DISCOVERY DESCRIPTION (32)

1 6 | Z | 33 | Z | 34 | NA | NA | 36
7 8 9 10 11 44 45
ACTIVITY CONTENT RELEASED OF RELEASE AMOUNT OF ACTIVITY (35) LOCATION OF RELEASE (36)

1 7 | 0 | 0 | 0 | 37 | Z | 38 | NA | 39
7 8 9 11 12 13 80
PERSONNEL EXPOSURES NUMBER TYPE DESCRIPTION (39)

1 8 | 0 | 0 | 0 | 40 | NA | 41
7 8 9 11 12 80
PERSONNEL INJURIES NUMBER DESCRIPTION (41)

1 9 | Z | 42 | NA | 43
7 8 9 10 80
LOSS OF OR DAMAGE TO FACILITY TYPE DESCRIPTION (43)

2 0 | N | 44 | NA | 45
7 8 9 10 80
ISSUED DESCRIPTION (45)

810810000E 810730
PDR ADOCK 05000261
S PDR

NRC USE ONLY

0800 917-826

SUPPLEMENTAL INFORMATION
FOR
LICENSEE EVENT REPORT 81-004, R-1

1. Cause Description and Analysis

On 1-16-81 at 1228 hours, the combination of a volume control tank makeup signal, an increasing component cooling water (CCW) surge tank level and an increasing radiation reading from the CCW System radiation monitor alerted the operators to the possibility of a Primary Coolant System leak. A RCS leak test was initiated and, at 1244 hours, RCS leakage was verified and determined to be 2.37 gpm. At 1245 hours the pressurizer liquid sample line isolation valves, which are normally opened during day shift operations for sampling, were promptly closed. A second RCS leak test was performed and, at 1300 hours, the RCS leak rate was determined to be essentially zero. No further increase in CCW surge tank level or CCW radiation monitor readings occurred following the closure of the sample line isolation valves. The leak path was subsequently identified as being from the pressurizer liquid space through the sample line into the sample cooler and into the CCW System via a leaking tube bundle in the cooler. The leakage experienced was in excess of the limits allowed by Technical Specification Section 3.1.5.2 and is reportable in accordance with Technical Specification 6.9.2.b(2).

The cause of the event was the sample cooler tube bundle leakage. The tube bundle leakage is attributed to normal wear.

Since the RCS leakage was totally contained within the CCW System, which is a closed radioactive system, there was no threat to either the plant or to the public health or safety.

2. Corrective Action

The sample line isolation valves were closed to eliminate further leakage as immediate corrective action.

3. Corrective Action to Prevent Further Occurrence

The sample cooler tube bundle was removed and replaced. A review of maintenance records on this and other similar sample coolers was performed to determine if any generic problems could be identified which would indicate a need for further corrective action. This review revealed that all sample coolers have operated in a reliable manner and no generic problems were identified. Specifically, since the beginning of operation, only three cooler tube bundle failures have occurred for six sample coolers (i.e., three separate failures in approximately 60 tube bundle years of operation) and no cooler tube bundles have failed more than once.

Therefore, the sample cooler operation is considered to be sufficiently reliable and no further corrective action is deemed necessary.