(7-77) Unit 2

LICENSEE EVENT REPORT

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

0 1 | T N S N P 2 (2) | 0 0 - 0 0 0 0 0 - 0 0 (3) | 4 1 1 1 1 (4) | (5)

7 8 9 LICENSEE CODE 14 15 LICENSE NUMBER 25 26 LICENSE TYPE 30 57 CAT 58

CON'T

0 1 | REPORT SOURCE L (6) | 0 5 0 0 0 3 2 8 (7) | 0 9 1 0 8 2 (8) | 1 0 0 8 8 2 (9)

7 8 60 61 DOCKET NUMBER 68 69 EVENT DATE 74 75 REPORT DATE 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 | With unit 2 in mode 1 (98% Rx power) at 1527 CST on 09/10/82, the upper head

0 3 | injection system was declared inoperable due to failure to meet surve[illegible]e

0 4 | requirements. A similar event occurred at 0125 CST on 09/12/82. Both events

0 5 | required entry into action statement (a) of LCO 3.5.1.2. There was no effect

0 6 | upon public health and safety. Previous occurrences - none.

0 7 |

0 8 | 7 8 9 80

0 9 | SYSTEM CODE S F (11) | CAUSE CODE D (12) | CAUSE SUBCODE Z (13) | COMPONENT CODE Z Z Z Z Z Z (14) | COMP. SUBCODE Z (15) | VALVE SUBCODE Z (16)

7 8 9 10 11 12 13 18 19 20

(17) LER/RO REPORT NUMBER: EVENT YEAR 8 2 | — | SEQUENTIAL REPORT NO. 1 1 3 | / | OCCURRENCE CODE 0 3 | REPORT TYPE L | — | REVISION NO. 0

21 22 23 24 26 27 28 29 30 31 32

ACTION TAKEN X (18) | FUTURE ACTION X (19) | EFFECT ON PLANT B (20) | SHUTDOWN METHOD A (21) | HOURS (22) 0 0 0 1 | ATTACHMENT SUBMITTED Y (23) | NPRD-4 FORM SUB. N (24) | PRIME COMP. SUPPLIER Z (25) | COMPONENT MANUFACTURER Z 9 9 9

33 34 35 36 37 40 41 42 43 44 47

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 | During sampling of the UHI water accumulator, it was found that the total dissolved

1 1 | nitrogen and air in the accumulator exceeded the 80 standard cubic feet allowable

1 2 | limit. In both events, the UHL water accumulator was bled and fed to remove the

1 3 | dissolved gases and subsequent testing indicated that dissolved gases were below

1 4 | allowable limits.

7 8 9 80

1 5 | FACILITY STATUS E (28) | % POWER 0 6 5 (29) | OTHER STATUS (30) NA | METHOD OF DISCOVERY C (31) | DISCOVERY DESCRIPTION (32) Special testing

7 8 9 10 12 13 44 45 46 80

1 6 | ACTIVITY RELEASED Z (33) | CONTENT OF RELEASE Z (34) | AMOUNT OF ACTIVITY (35) NA | LOCATION OF RELEASE (36) NA

7 8 9 10 11 44 45 80

PERSONNEL EXPOSURES

1 7 | NUMBER 0 0 0 (37) | TYPE Z (38) | DESCRIPTION (39) NA

7 8 9 11 12 13 80

PERSONNEL INJURIES

1 8 | NUMBER 0 0 0 (40) | DESCRIPTION (41) NA

7 8 9 11 12 80

LOSS OF OR DAMAGE TO FACILITY

1 9 | TYPE Z (42) | DESCRIPTION NA

7 8 9 10 80

PUBLICITY

2 0 | ISSUED N (44) | DESCRIPTION (45) NA

7 8 9 10 68 69 80

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PDR ADOCK 05000328
S PDR

NRC USE ONLY

Name of Preparer: H. R. Rogers /M. R. Harding Phone: (615) 751-0349

LER SUPPLEMENTAL INFORMATION

SQRO-50-328/82113 Technical Specification Involved: 3.5.1.2

Reported Under Technical Specification: 6.9.1.13.b

Date of Occurrence: 09/10/82 Time of Occurrence: 1527 CST

Identification and Description of Occurrence:

On 09/10/82, sampling of the upper head injection (UHI) water accumulator indicated that the dissolved gas concentration was greater than the 80 standard cubic feet allowable limit. A similar event occurred at 0125 CST on 09/12/82. Each event rendered the UHI system inoperable and the unit entered action statement (a) of LCO 3.5.1.2.

Conditions Prior to Occurrence:

Unit 2 in mode 1 at 65% Rx power.

Apparent Cause of Occurrence:

During review of operating experience on the UHI system, sampling and analytical techniques to determine the amount of dissolved gases in the water accumulator were found to be inadequate. Discussions with nuclear central office personnel, vendor personnel, and personnel from another utility with the UHI system led to the conclusion that accumulated data on UHI dissolved gases were unreliable. This led to resampling and reanalysis of the UHI water accumulator which resulted in declaring the UHI system inoperable.

Analysis of Occurrence:

From approximately October of 1981, the plant has operated with the UHI water to nitrogen accumulator rupture membrane broken. Periodic sampling and analysis of the UHI water during this time period indicated no significant accumulations of dissolved gases. During a review of UHI systems, sampling methods were questioned and after discussions with similar utilities, special tests were conducted using different sampling and analysis procedural techniques. These analyses showed dissolved gas concentrations to be above technical specification limits. The presence of excessive dissolved gases is attributed to the known failure of the rupture membrane between the water and nitrogen accumulators in combination with thermal mixing of the water in the tank. The UHI system was fed and bled to remove dissolved gases and the concentration was returned to within technical specification allowable limit for both events described.

Corrective Action:

The concentration of dissolved gas in the UHI system was returned to below technical specification limits and the system returned to operation for the first event at 2138 on 09/10/82 and for the second event at 0733 CST on 09/12/82. Sampling and analytical procedures have been revised to use a more refined technique to assure accurate results.

On 09/14/82, a planned unit outage was scheduled and the UHI rupture membrane was replaced. The unit returned to power operation on 09/17/82 and water samples verified that dissolved gases are well below the technical specification allowable limits.

Failure Data:

None.