10 CFR 50.73

Virginia Electric and Power Company
North Anna Power Station
P. O. Box 402
Mineral, Virginia 23117

May 17, 1994

U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

NAPS: MPW
Docket Nos. 50-338
50-339
License Nos. NPF-4
NPF-7

Dear Sirs:

Pursuant to North Anna Power Station Technical Specifications, Virginia Electric and Power Company hereby submits the following Licensee Event Report applicable to North Anna Units 1 & 2.

Report No. 50-338/94-003-00

This Report has been reviewed by the Station Nuclear Safety and Operating Committee and will be forwarded to the Management Safety Review Committee for its review.

Very truly yours,

G. E. Kane
Station Manager

Enclosure:

cc: U.S. Nuclear Regulatory Commission
101 Marietta Street, N.W.
Suite 2900
Atlanta, Georgia 30323

R. D. McWhorter
NRC Senior Resident Inspector
North Anna Power Station

IE22
1/1

NRC FORM 366 (5-92) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104
EXPIRES 5/31/95

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
North Anna Units 1 & 2	05000 338	1 OF 3

TITLE (4)
CONTAINMENT HYDROGEN ANALYZER INOPERABLE DUE TO A FAILED TUBING FITTING

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES	DOCKET NUMBER(S)
04	26	94	94	— 003 —	00	05	17	94	North Anna Unit 2	05000 339
										DOCKET NUMBER(S) 05000

OPERATING MODE (9)	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
POWER LEVEL (10)	100	20.402(b)	20.405(b)	50.73(a)(2)(iv)	73.71(b)
		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER
		20.405(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	(Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
		20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER (Include Area Code)
Greg Kane, Station Manager	(703) 894-2101

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

SUPPLEMENTAL REPORT EXPECTED (14)

	YES (If yes, complete EXPECTED SUBMISSION DATE)	X	NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On April 26, 1994, at 0815 hours, with both units in Mode 1, 100 percent power, a seven day action was entered per Technical Specification (TS) 3.6.4.1 to leak check piping associated with the containment hydrogen analyzers as required by TS 6.8.4. At approximately 1100 hours a leak was discovered on the Unit 1 containment hydrogen analyzer inlet sample fitting. The fitting was inspected and noted to be tight, and required above normal tightening force to stop the leak. System leakage testing was completed and the TS action was cleared at 1612 hours on April 26, 1994. It was postulated that this condition had existed since the last performance of an instrument calibration procedure on February 2, 1994. This condition rendered the analyzer inoperable for that time period. As such, the allowed 30 day outage time for one of the shared analyzers required by TS 3.6.4.1.a was exceeded. The condition is prohibited by TS and is reportable pursuant to 10CFR50.73 (a)(2)(i)(B).

The cause of the event is mechanical failure of the fitting resulting in an inoperable analyzer.

This event posed no significant safety implications since alternative means were available to sample containment hydrogen levels throughout the event. Therefore, the health and safety of the public were not affected at any time.

1.0 Description of the Event

On February 4, 1994 the Unit 1 containment hydrogen analyzer (EIIS System IP, Component AA) was removed from service to perform its calibration. During calibration of the analyzer the sample line (EIIS Component TBG) was disconnected to provide a flow path for the sample pump (EIIS Component P). When the calibration was completed the sample line was reconnected, verified and the analyzer was returned to operable status.

On April 26, 1994, at 0815 hours, with both units in Mode 1, 100 percent power, a seven day action was entered per Technical Specification (TS) 3.6.4.1 to leak check piping associated with the containment hydrogen analyzers as required by TS 6.8.4. At approximately 1100 hours a leak was discovered on the Unit 1 containment hydrogen analyzer inlet sample fitting (EIIS Component CPLG). The fitting was inspected and noted to be tight, and required above normal tightening force to stop the leak. System leakage testing was completed and the TS action was cleared at 1612 hours on April 26, 1994. It was postulated that this condition had existed since the last performance of an instrument calibration procedure on February 2, 1994. This condition rendered the analyzer inoperable for that time period. As such, the allowed 30 day outage time for one of the shared analyzers required by TS 3.6.4.1.a was exceeded. The condition is prohibited by TS and is reportable pursuant to 10CFR50.73 (a)(2)(i)(B).

Subsequent to identification of the leak, testing was performed to quantify the fitting leakage to assess the consequences had a design basis accident occurred. After determining the leakage and adding it to the current leakrate values for both units, the resultant total leakrate would still be within the requirements of the technical specifications. However, the leakage was sufficient to render the analyzer inoperable once the containment returned to sub-atmospheric conditions because the actual hydrogen sample would be significantly diluted. Therefore, the analyzer was inoperable for greater than the time limits specified in the TS.

2.0 Significant Safety Consequences and Implications

This event posed no significant safety implications since alternative means were available to sample containment hydrogen levels throughout the event. In addition, analyses documented in the Updated Final Safety Analysis Report show that hydrogen concentration, with no controls employed, for the first 48 hours following a Loss Of Coolant Accident remains below 4 percent. Therefore, the health and safety of the public were not affected at any time.

3.0 Cause of the Event

The cause of the event is a mechanical failure of the sample line fitting. Continued removal and recoupling of the fitting, during each quarterly calibration, resulted in a connection that ultimately would not seal properly when reinstalled by procedure.

4.0 Immediate Corrective Actions

The containment hydrogen analyzer sample fitting was tightened and the leak stopped. The leak test of the Unit 1 containment atmosphere clean-up system (EIIS System BB) was completed and the seven day TS action cleared.

5.0 Additional Corrective Actions

The Unit 2 containment hydrogen analyzer leak check w[illegible] completed satisfactorily on April 26, 1994.

A station work order has been issued to replace the fitting during the next calibration of the Unit 1 containment hydrogen analyzer.

6.0 Actions to Prevent Recurrence

The testing configuration has been modified [illegible]hat the sample line fittings will not have to be disconnected to provide a flow pati[illegible] or the sample pump. Existing vent taps in the containment atmospheric clean up system will be used for this purpose.

7.0 Similar Events

Unit 2 LER N2-93-016-00, dated May 27, 1993, was written to report an inoperable hydrogen analyzer due to a pressure switch sensing line being disconnected. This event was due to personnel error where the sensing line was not reconnected following testing and the procedure did not require second verification.

8.0 Additional Information

None