Vepco VIRGINIA ELECTRIC AND POWER COMPANY
NORTH ANNA POWER STATION
P. O. BOX 402
MINERAL, VIRGINIA 23117

10 CFR 50.73

October 31, 1991

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

Serial No. N-91-029
NAPS:MPW
Docket Nos. 50-339
License Nos. NPF-7

Dear Sirs:

The Virginia Electric and Power Company hereby submits the following Licensee Event Report applicable to North Anna Unit 2.

Report No. 50-339/91-010-00

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

Very Truly Yours,

C. E. Ware
Station Manager

Enclosure:

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

Mr. M. S. Lesser
NRC Senior Resident Inspector
North Anna Power Station

IE22

NRC FORM 366 (6-89) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104
EXPIRES 4/30/92
ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON DC 20503.

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1): NORTH ANNA POWER STATION UNIT 2

DOCKET NUMBER (2): 0 5 0 0 0 3 3 9

PAGE (3): 1 OF 0 4

TITLE (4): CONDENSER AIR EJECTOR ISOLATION AND SUBSEQUENT BYPASSING OF FLOW TO THE RADIATION MONITOR

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)
1 0	0 6	9 1	9 1	— 0 1 0	— 0 0	1 0	3 1	9 1		0 5 0 0 0
										0 5 0 0 9

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)	1 0 0	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
		20.405(a)(1)(i)	50.36(c)(1)	X 50.73(a)(2)(v)	73.71(c)
		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		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 AREA CODE
G. E. Kane, Station Manager	7 0 3 8 9 4 1 - 2 1 1 0

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)

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

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

On October 6, 1991, with Unit 2 operating at 100 percent power (Mode 1) inspections were in progress for possible condenser air inleakage sources. At 2000 hours both condenser air ejectors were observed to be aligned with flow to the turbine building atmosphere, bypassing the installed radiation monitor. With the radiation monitor bypassed, the capability for automatic diversion of air ejector flow to containment upon a high-high radiation monitor alarm was defeated. The event was discovered while investigating low background radiation levels on the air ejector radiation monitor. This event is reportable pursuant to 10CFR50.73 (a)(2)(v)(C), and a four hour report was made pursuant to 10CFR50.72 (b)(2)(iii)(C).

The cause of the event was failure to provide adequate supervisory controls over a non-routine evolution. The lack of detailed procedural guidance was a contributing factor.

No significant safety consequences resulted from this event because the calculated total gaseous release activity was a small fraction of the allowable effluent limit. Therefore, the health and safety of the public was not affected at any time during this event.

1.0 Description of the Event

On October 6, 1991, with Unit 2 operating at 100 percent power (Mode 1) inspections were in progress for possible condenser air inleakage sources. At 2000 hours both condenser air ejectors were observed to be aligned with flow to the turbine building atmosphere, bypassing the installed radiation monitor. With the radiation monitor bypassed, the capability for automatic diversion of air ejector flow to containment upon a high-high radiation monitor alarm was defeated. The event was discovered while investigating low background radiation levels on the air ejector radiation monitor. This event is reportable pursuant to 10CFR50.73 (a)(2)(v)(C), and a four hour report was made pursuant to 10CFR50.72 (b)(2)(iii)(C).

Prior to 0800 hours, on 10/06/91, maintenance and contract test personnel requested operations support to perform secondary plant condenser air inleakage inspections. The test crew then proceeded to the air ejectors (EISS System Identifier SH, Component Identifier EJR) and began setting up the test equipment. At 0800 hours the operator met with the test crew to begin the inspections and noted that 2-VP-12 and 2-VP-21 (EISS System Identifier SH, Component Identifier EJR-ISV) were already closed (normally open). The test equipment was connected to the air ejector flow path and the discharge from the test equipment aligned to vent into the turbine building.

Inspections by the test crew and the operator continued and at one point the operator was assigned to another task. Upon completion of testing, the test equipment was disconnected by contract personnel. The test crew did not notify the Operations Shift Supervisor that testing was completed. At 2000 hours a Shift Technical Advisor, while investigating low background radiation levels on the air ejector radiation monitor (EISS System Identifier SH, Component Identifier MON), discovered that air ejector flow was bypassing the radiation monitor. This alignment resulted in the automatic divert feature, of the air ejector exhaust to containment on a Hi-Hi Radiation Monitor signal, being defeated. Reference the drawing on page 4 of 4 for the as found valve alignment (There are two air ejectors, only one is shown for simplicity). The resultant discharge flow was through a loop seal to the turbine building atmosphere. Precautionary sampling showed that the total radioactive effluent release, whole body, to the turbine building was calculated to be a small fraction of the allowable effluent release limit. A four hour report pursuant to 10CFR50.72 (b)(2)(iii)(C) was made to the NRC at 2204 hours on 10/06/91.

2.0 Significant Safety Consequences and Implications

No significant safety consequences resulted from this event because the calculated total gaseous release activity was a fraction of the allowable effluent limit. Therefore, the health and safety of the public was not affected at any time during this event.

3.0 Cause of the Event

The cause of the event was failure to provide adequate supervisory controls over a non-routine evolution. The lack of detailed procedural guidance was a contributing factor.

4.0 Immediate Corrective Actions

The air ejector discharge flow path was directed to the radiation monitor and the test connections were isolated. An Abnormal Procedure (AP-54) was entered due to the unplanned radioactive gaseous release as a precautionary measure. The Health Physics Department calculated the total release activity to be a small fraction of the effluent release limit.

5.0 Additional Corrective Actions

Operating Procedures 1 & 2-OP-30.6 Secondary Plant Air In-leakage Inspections have been revised to include aligning air ejector discharge to local detection equipment and subsequent return to normal alignment with flow through the radiation monitor at all times.

Meetings between the Shift Supervisors, the Assistant Shift Supervisors and the Superintendent Operations are being conducted to ensure supervision's role, responsibilities and expectations are known.

Plaques have been installed at each of the air ejectors cautioning that the air ejector flow is to be through the radiation monitor at all times.

Management administered positive discipline to the Operations Supervisor regarding the importance of supervisor guidance in non-routine evolutions.

6.0 Actions to Prevent Recurrence

Corrective actions taken and planned are sufficient to prevent recurrence.

7.0 Similar Events

None.

8.0 Additional Information

Unit 1 was operating at 100 percent power (Mode 1) throughout the event and was not affected.

AS FOUND ALIGNMENT ON 10/06/91 - 2000 HRS