Vepco

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

10 CFR 50.73

May 7, 1991

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

Serial No. N-91-009
NAPS:MPW
Docket Nos. 50-338
License Nos. NPF-4

Dear Sirs:

The Virginia Electric and Power Company hereby submits the following Licensee Event Report applicable to North Anna Units 1 & 2.

Report No. 91-009-00

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,

G. E. Kane
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

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-630), 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)	DOCKET NUMBER (2)	PAGE (3)
NORTH ANNA POWER STATION UNITS 1 AND 2	0 5 0 0 0 3 3 8	1 OF 0 4

TITLE (4)
INSERVICE TESTING MISSED SURVEILLANCES DUE TO PERSONNEL ERROR IN PROGRAM IMPLEMENTATION

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)
										0 5 0 0 0
0 4	1 1	9 1	9 1 —	0 0 9 —	0 0	0 5	0 7	9 1	NORTH ANNA UNIT 2	0 5 0 0 0 3 3 8

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)	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)	X 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 - 2 1 0 1

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 April 11, 1991 with Unit 1 in Mode 1 (99.4 percent power) it was determined that a backseat surveillance test for three main steam check valves, located in the supply line to the steam driven auxiliary feedwater pump, was not satisfied. On April 18, 1991 with Unit 1 in Mode 1 (100 percent power) it was determined, through an Inservice Testing Program implementation assessment, that a surveillance for a safety injection trip valve, located in the vent line from the accumulator to the waste gas charcoal filters, was missed. On May 1, 1991 with Unit 1 in Mode 1 (100 percent power) and Unit 2 in Mode 1 (100 percent power) it was also determined that surveillances for the seal water supply isolation valves to the control room chillers, were missed. These incidents are a violation of Technical Specification 4.0.5 and therefore reportable pursuant to 10CFR50.73 (a)(2)(i)(B).

The cause of the event was personnel error resulting in the requirements of Generic Letter 89-04 not being adequately implemented. Upon determination that the surveillances were not met the affected valves were successfully tested.

These incidents posed no significant safety implications because the valves were capable of performing their intended safety function. Therefore, the health and safety of the public was not affected at any time during these events.

1.0 Description of the Event

On April 11, 1991 with Unit 1 in Mode 1 (99.4 percent power) it was determined that surveillances for three main steam check valves (EIIS System Identifier-SB, Component Identifier-V), located in the supply line to the steam driven auxiliary feedwater pump (EIIS System Identifier-BJ, Component Identifier-P), were not met due to personnel error. Relief Request V-52, of the Inservice Testing (IST) Program, delineates that valves will be back pressure tested every refueling outage. Back pressure testing of the Main Steam Check Valves, 1-MS-119/122/124, was unsuccessful due to the limited volume and flow of nitrogen. At this time plant personnel incorrectly determined that the disassembly and inspection, which was previously performed during the outage, could be used as an alternative method for verifying closure capability as stipulated in Generic Letter 89-04 Attachment 1 Position 2. The disassembly and inspection indicated that there were no worn or corroded internal parts, no binding of the disks when manually exercised, and a blue check revealed 100 percent seating contact. The valves were returned to service on 03/06/91 and 03/07/91. However, the use of disassembly and inspection to verify closure capability was not approved by the NRC as an alternative test method.

Generic Letter 89-04, Attachment 1 Position 2, delineates that valve disassembly and inspection can be used as a positive means of verifying closure capability as permitted by IWV-3522. However, Minutes of Public Meetings on Generic Letter 89-04 state that submission and approval of a relief request is required before disassembly and inspection can be used as a means of verifying check valve closure. Relief Request V-52 identifies alternative testing for 1-MS-119/122/124 as "Exercise to the closed position every reactor refueling (i.e. valves will be back pressure tested every refueling outage)". The specific reference to disassembly is not made in Relief Request V-52. Credit for meeting the surveillance requirement by disassembly and inspection of the check valves cannot be taken, thus, resulting in the missed surveillances.

On April 18, 1991 with Unit 1 in Mode 1 (100 percent power) it was determined, through an Inservice Testing Program implementation assessment, that a surveillance for a safety injection (SI) trip valve (EIIS System Identifier-BQ, Component Identifier-P), located in the vent line from the accumulators (EIIS System Identifier-WE, Component Identifier-ACC) to the waste gas charcoal filters (EIIS System Identifier-WE, Component Identifier-FLT) was missed due to personnel error. Revision 6 to the IST Program was developed and approved as a result of Generic Letter 89-04. The Revision 6 requirements for stroke time testing of the SI trip valve in the open position were not incorporated into the applicable test procedure. Because of the revision to the IST Program; a "One-Time-Only" change to the test procedure was made to obtain a reference stroke time (open) for the safety injection trip valve. The one time change was not performed and a reference stroke time was never obtained. As a result, no new data was entered in the IST Computer program which would have alerted the ISI Engineer of the open stroke test requirement. Additionally, since "One-Time-Only" procedure changes are not permanent, the testing procedure was not revised to reflect the open stroke time requirement.

On May 1, 1991 with Unit 1 in Mode 1 (100 percent power) it was discovered during reviews of IST Program Revision 6 and implementing test procedures that six supply valve surveillances were also missed. This review was initiated as a result of the missed surveillance on the safety injection trip valve. Six seal water supply isolation valves (EIIS System Identifier-VI, Component Identifier-ISV) to the control room chiller service water pumps (EIIS System Identifier VI, Component Identifier-CHU) were exercised tested but not stroke time tested as required by Revision 6. The implementing test procedures were not revised to incorporate the stroke time test requirements. The valves have a quarterly test frequency which went into effect on 12/14/90. These incidents are a violation of Technical Specification 4.0.5 and therefore reportable pursuant to 10CFR50.73 (a)(2)(i)(B).

2.0 Significant Safety Consequences and Implications

These incidents posed no significant safety implications because the check valves were capable of performing their intended safety function of preventing backflow; and the safety injection trip valve and supply valves were stroke time tested satisfactorily. Therefore, the health and safety of the public were not affected at any time during these incidents.

3.0 Cause of the Event

The cause of the event was personnel error. The requirements of Generic Letter 89-04 were not adequately incorporated into the implementing program/procedures.

4.0 Immediate Corrective Actions

The main steam check valves were backseat tested on 04/11/91 with satisfactory results. The safety injection trip valve and the seal water supply isolation valves were stroke time tested satisfactorily on 04/18/91 and 05/01/91 respectively.

5.0 Additional Corrective Actions

Relief Request V-52 (Unit 1) and V-53 (Unit 2) have been revised to provide specific detail in the Basis for Relief and Alternate Testing sections regarding the use of disassembly and inspection of check valves as an acceptable alternative test method. Submittal of the relief requests is pending. Revisions to the implementing test procedures for the safety injection trip valve and seal water supply isolation valves were approved to include applicable stroke time requirements.

6.0 Actions Taken to Prevent Recurrence

A review of Generic Letter 89-04, IST Program Revision 6, and implementing test procedures is being made to ensure no other deficiencies exist. IST Program requirements will be enhanced to ensure future revisions to the program and/or impacts from regulatory correspondence are compared and implementing test procedures revised as necessary.

7.0 Similar Events

Similar recent Licensee Event Reports (LER) involving missed surveillances due to personnel error were as follows:

LER N1-90-006-00 Failure to perform channel functional testing of two pressurizer power operated relief valves prior to returning to service.

LER N1-90-010-00 Failure to perform monthly and quarterly IST Surveillances of Auxiliary Feedwater Pumps and Valves as well as monthly surveillance channel checks for Auxiliary Feedwater Flow Rate Accident Monitoring Instrumentation.

LER N1-91-006-00 Failure to perform the eight hour surveillance for operability of the A.C. Off-site Power Sources.

8.0 Additional Information

None