10 CFR 50.73

Virginia Electric and Power Company
Surry Power Station
P. O. Box 315
Surry, Virginia 23883

April 14, 1993

U. S. Nuclear Regulatory Commission
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Washington, D. C. 20555

Serial No.: 93-226
Docket Nos.: 50-280
50-281
License Nos.: DPR-32
DPR-37

Gentlemen:

Pursuant to Surry Power Station Technical Specifications, Virginia Electric and Power Company hereby submits the following Licensee Event Report for Units 1 and 2.

REPORT NUMBER

50-280, 281/93-004-00

This report has been reviewed by the Station Nuclear Safety and Operating Committee and will be reviewed by the Corporate Management Safety Review Committee.

Very truly yours,

M. R. Kansler
Station Manager

Enclosure

cc: Regional Administrator
Suite 2900
101 Marietta Street, NW
Atlanta, Georgia 30323

Mr. M. W. Branch
NRC Senior Resident Inspector
Surry Power Station

JE22 1/1

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)	DOCKET NUMBER (2)	PAGE (3)
Surry Power Station Unit 1	0 5 0 0 0 2 8 0	1 OF 0 4

TITLE (4)
Condition Prohibited by Technical Specifications During Reactor Protection System Logic Testing

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 3	1 6	9 3	9 3	0 0 4	0 0	0 4	1 4	9 3	Surry Unit 2	0 5 0 0 0 2 8 1
										DOCKET NUMBER(S) 0 5 0 0 0

OPERATING MODE (9)	N	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
M. R. Kansler, Station Manager	AREA CODE 8 0 4 3 5 7 - 3 1 8 4

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 fifteen single-space typewritten lines) (16)

On March 16, 1993, with Unit 1 operating at 100% power and Unit 2 in cold shutdown, it was noted that the monthly functional test of the reactor protection system logic requires blocking both trains of steam generator blowdown (SGBD) trip valves from automatic closure by an auxiliary feedwater start signal. This action resulted in a failure to satisfy previous technical specification (TS) requirements for operability of containment isolation valves. No safety consequences were created by the event. SGBD isolation would have been automatically initiated by the ATWS Mitigation Systems Actuation Circuitry (AMSAC) system or manually initiated as directed by emergency operating procedures if it had been required. The event was caused by cognitive personnel error involving a failure to adequately assess the effects of the surveillance test on TS compliance. An ongoing review of technical specification surveillance requirement implementation includes evaluating the effects of testing on operability. This report is required by 10 CFR 50.73(a)(2)(i)(B).

1.0 - DESCRIPTION OF THE EVENT

On March 16, 1993 Unit 1 was operating at 100% power and Unit 2 was in cold shutdown for a scheduled refueling outage. It was noted during review of the monthly functional test procedure for reactor protection system logic [EIIS-JC], 1/2-PT-8.1, "Reactor Protection System Logic (For Normal Operations)", that a portion of the test requires both trains of steam generator blowdown (SGBD) trip valves [EIIS-WI, ISV] to be simultaneously blocked from automatic closure by an auxiliary feedwater (AFW) [EIIS-BA] start signal.

Blocking of the SGBD trip valves from automatic closure by an AFW start signal is accomplished by placing the SGBD key switches in the "permissive" position. One key switch is provided for each steam generator. Each key switch prevents both the inside and the outside containment SGBD trip valves for the respective steam generator from automatically closing on a start signal to the motor-driven or turbine-driven AFW pumps. The key switches are placed in the permissive position to prevent automatic closure of the valves during makeup of the low-low steam generator water level reactor trip logic. The motor-driven AFW pump associated with the logic train being tested is prevented from automatically starting during this portion of the test by placing its control switch in pull-to-lock. This renders the pump inoperable and the applicable technical specification (TS) action statement is entered. The other motor-driven AFW pump and the turbine-driven AFW pump are available to automatically start during this period.

The SGBD trip valves were previously listed as Phase I containment isolation valves in TS Tables 3.8-1 and 3.8-2. (Tables 3.8-1 and 3.8-2 were removed from the TSs by Amendments 172 and 171, which were implemented on February 21, 1993.) Blocking both trains of SGBD trip valves from automatic closure on an AFW start signal constituted non-compliance with the requirements of TS 3.8.A.1. This TS required that containment integrity be maintained unless the reactor was in cold shutdown. The definition of containment integrity required, in part, that automatic containment isolation valves be operable or deactivated and secured in their closed position under administrative control.

This report is required by 10 CFR 50.73 (a)(2)(i)(B) since a condition prohibited by the TSs existed during testing.

2.0 - SIGNIFICANT SAFETY CONSEQUENCES AND IMPLICATIONS

The SGBD trip valves are closed automatically upon automatic initiation of the AFW system or the ATWS Mitigation Systems Actuation Circuitry (AMSAC) system in order to maximize the effectiveness of the AFW flow. Automatic isolation of SGBD by the AMSAC system is not blocked when the key switches are in permissive. If SGBD isolation had been required during testing and was not initiated by AMSAC, operators would have been directed by emergency operating procedures to manually initiate SGBD isolation. The SGBD trip valves were previously listed in the TS as Phase I containment isolation valves; however, subsequent evaluation resulted in the determination that automatic closure of these valves on an AFW start signal is not required to satisfy containment integrity requirements.

It is concluded that no adverse consequences to public health and safety were created by the event.

3.0 - CAUSE OF THE EVENT

Procedure 1/2-PT-8.1 requires blocking the automatic closure of the SGBD trip valves on an AFW start signal to prevent unnecessary closure of the valves during surveillance testing performed pursuant to TS 4.1. The event was caused by cognitive personnel error involving a failure of licensee personnel to adequately assess TS compliance for performance of 1/2-PT-8.1 under the provisions of TS 3.8 in effect prior to February 21, 1993.

4.0 - IMMEDIATE CORRECTIVE ACTIONS

Performance of 1/2-PT-8.1 was not in progress at the time of the event; therefore, no immediate corrective action was necessary.

5.0 - ADDITIONAL CORRECTIVE ACTIONS

An engineering evaluation of the SGBD trip valves concluded that the valves close automatically to enhance the performance of the AFW system and that automatic closure capability is not required to assure adequate AFW flow. The valves are correctly listed in the UFSAR as providing a containment isolation function. However, the evaluation concluded that automatic closure capability is not required for valves which provide isolation for closed systems inside containment and that these valves are not containment integrity valves. Therefore, licensing documents will be revised to clearly reflect the actual containment isolation function of the SGBD trip valves and other closed system isolation valves.

6.0 - ACTIONS TO PREVENT RECURRENCE

An organized review of the TS surveillance program has been initiated to ensure full compliance with the TSs at Surry. The review involves a line-by-line examination to verify that TS surveillance requirements are completely addressed by station procedures. As part of this review, the effects of the surveillance tests on component and system operability are being evaluated. The review of the TS surveillance program is scheduled to be completed by October 1993.

7.0 - SIMILAR EVENTS

None

8.0 - ADDITIONAL INFORMATION

None