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

May 15, 1992

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

Serial No.: 92-344
Docket No.: 50-280
License No.: DPR-32

Gentlemen:

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

REPORT NUMBER

50-280/92-006-00

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

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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)
Failure to Expand Scope of Mechanical Snubber Functional Testing Due to Personnel Error

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 4	2 4	9 2	9 2	- 0 0 6	- 0 0	0 5	1 5	9 2		0 5 0 0 0
										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)	0 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	MANUFAC-TURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	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 24, 1992, with Unit 1 at cold shutdown, it was determined during Engineering review of mechanical snubber functional test results that three snubbers did not satisfy one of the acceptance criteria of Technical Specification (TS) 4.17.E.1.a. Specifically, the drag force for the three snubbers had exceeded the drag force measured in the previous functional test by greater than 50%. TS 4.17.C.6 requires that, for each snubber which fails to meet the functional test acceptance criteria, an additional 10% of that type of snubber be functionally tested. Because a maximum 50% increase in drag force was not an appropriate acceptance criterion for the presently installed mechanical snubbers, a temporary waiver of compliance from the additional testing requirement of TS 4.17.C.6 was requested and approved. A review of previous functional test results revealed twelve instances where Unit 1 snubbers had exceeded a 50% increase in drag force since the previous test with no increase in functional testing scope. In all cases, the relevant acceptance criteria were met and the snubbers were fully capable of performing their safety function; therefore, there were no consequences to public health and safety. The event was caused by failure to apply the acceptance criterion of a maximum 50% increase in drag force after the original mechanical snubbers were replaced. The involved personnel have been re-instructed and a proposed TS change will be developed and submitted to specify appropriate functional testing criteria. This report is required by 10 CFR 50.73(a)(2)(i)(B) since failure to expand the functional testing scope for the twelve previous cases was not allowed by TS 4.17.C.6.

1.0 - DESCRIPTION OF THE EVENT

On April 24, 1992, with Unit 1 at cold shutdown for the end of Cycle 11 refueling outage, it was determined during Engineering review of mechanical snubber functional test results that three Unit 1 snubbers [EIIS-SNB] did not satisfy one of the acceptance criteria of Technical Specification (TS) 4.17.E.1.a. Specifically, the drag force for the three snubbers had exceeded the drag force measured in the previous functional test by greater than 50%. TS 4.17.C.6 requires that, for each snubber which does not meet the functional test acceptance criteria, an additional 10% of that type of snubber be functionally tested. Because a 50% increase in drag force is not a meaningful acceptance criterion for the currently installed mechanical snubbers, and because the relevant acceptance criteria had been met, a temporary waiver of compliance from the additional testing requirement of TS 4.17.C.6 was requested and approved in an April 24, 1992 conference call.

A review of previous functional test results revealed twelve instances where the drag force of Unit 1 mechanical snubbers had increased by greater than 50% since the previous test and the scope of functional testing had not been increased. Eight of these occurred in the Cycle 9 refueling outage (June 1988) while four occurred in the Cycle 10 refueling outage (December 1990).

This report is required by 10 CFR 50.73(a)(2)(i)(B) since failure to increase the scope of mechanical snubber functional testing in the twelve previous cases was a condition not allowed by TS 4.17.C.6.

2.0 - SIGNIFICANT SAFETY CONSEQUENCES AND IMPLICATIONS

Snubbers are designed to prevent unrestrained pipe motion under dynamic loads such as might occur during an earthquake or severe transient while allowing normal thermal motion during routine operation. The consequence of a snubber failing to provide dynamic restraint is an increase in the probability of structural damage to piping as a result of a seismic or other event initiating dynamic loads. The consequence of a snubber resisting normal thermal motion (unacceptable drag force) would be an increase in the potential for damage to the piping during routine operation.

The maximum 50% increase in drag force since the last functional test was a valid acceptance criterion for the Pacific Scientific mechanical snubbers originally installed at Surry Power Station; however, these snubbers have been replaced with snubbers of a different design. The manufacturer of the presently installed mechanical snubbers, Anchor Darling, has provided their technical position that a 50% increase in drag force is not indicative of incipient failure. The drag test results for Anchor Darling mechanical snubbers are highly variable; therefore, comparison of successive test results can not be used to indicate a trend in snubber performance.

2.0 - SIGNIFICANT SAFETY CONSEQUENCES AND IMPLICATIONS (CONT'D)

The functional test acceptance criteria recommended by Anchor Darling are (1) the displacement velocity under rated load is less than the specified maximum, and (2) the running drag force is less than the specified maximum. The maximum drag force is specified as 3% of the rated load of the snubber. These acceptance criteria were met by the fifteen mechanical snubbers which had exhibited greater than a 50% increase in drag force. These snubbers were, therefore, fully capable of performing their intended safety function and there were no consequences to public health and safety.

3.0 - CAUSE OF THE EVENT

The event was caused by cognitive error by the Virginia Power personnel responsible for implementing the snubber surveillance testing program. After the original Pacific Scientific mechanical snubbers were replaced with Anchor Darling mechanical snubbers, the maximum 50% increase in drag force was no longer applied although it was still an acceptance criterion in TS 4.17.E.1.a. A proposed TS change was initiated following snubber replacement to revise the TS acceptance criteria; however, this change had not yet been processed for submittal to NRC.

4.0 - IMMEDIATE CORRECTIVE ACTIONS

Unit 1 was in cold shutdown when it was determined by Engineering that twelve mechanical snubbers had exceeded a 50% increase in drag force in previous outages; therefore, no immediate action was necessary.

5.0 - ADDITIONAL CORRECTIVE ACTIONS

An engineering evaluation of the functional test results for the discrepant snubbers was performed and confirmed that these snubbers were capable of performing their safety function. No discrepancies were found for Unit 2 snubbers.

6.0 - ACTIONS TO PREVENT RECURRENCE

Personnel responsible for implementing the snubber surveillance testing program have been instructed on the need for strict compliance with TS requirements until such time as an approved amendment is received.

6.0 - ACTIONS TO PREVENT RECURRENCE (CONT'D)

A proposed Technical Specification change will be developed and submitted to incorporate appropriate functional testing criteria prior to the next scheduled functional testing.

7.0 - PREVIOUS EVENTS

None

8.0 - ADDITIONAL INFORMATION

None