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 FACIL: 50-281 Surry Power Station, Unit 2, Virginia Electric & Powe 05000281
 AUTH.NAME AUTHOR AFFILIATION
 KANSLER, M.R. Virginia Power (Virginia Electric & Power Co.)
 RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: LER 91-008-00: on 910814, charging pump component cooling pump
 A tagged out to replace pump discharge check valve &
 exceeded 24 h LCO. Caused by unanticipated delays during
 maint. Engineering evaluation performed. W/910913 ltr.

DISTRIBUTION CODE: IE22T COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 4
 TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc.

NOTES: 1cy NMSS/IMSB/PM.

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

September 13, 1991

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

Serial No.: 91-541
Docket No.: 50-281
License No.: DPR-37

Gentlemen:

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

REPORT NUMBER

91-008-00

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,

David A. Christian
f=2

M. R. Kansler
Station Manager

Enclosure

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

9109190269 910913
PDR ADCK 05000281
S PDR

Handwritten initials/signature

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Surry Power Station, Unit 2	DOCKET NUMBER (2) 0 5 0 0 0 2 8 1	PAGE (3) 1 OF 0 3
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TITLE (4) Unit 2 "A" Charging Pump Component Cooling Pump Exceeded Its 24-Hour Limiting Condition for Operation Due to Unexpected Events and Problems

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)																																																																															
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<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:15%;">OPERATING MODE (8)</td> <td style="width:15%;">N</td> <td colspan="10">THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)</td> </tr> <tr> <td rowspan="6">POWER LEVEL (10) 0 8 5</td> <td></td> <td>20.405(b)</td> <td></td> <td>20.405(c)</td> <td></td> <td>50.73(a)(2)(iv)</td> <td></td> <td>73.71(b)</td> <td colspan="3"></td> </tr> <tr> <td></td> <td>20.405(a)(1)(i)</td> <td></td> <td>50.38(c)(1)</td> <td></td> <td>50.73(a)(2)(v)</td> <td></td> <td>73.71(c)</td> <td colspan="3"></td> </tr> <tr> <td></td> <td>20.405(a)(1)(ii)</td> <td></td> <td>50.38(c)(2)</td> <td></td> <td>50.73(a)(2)(vii)</td> <td></td> <td>OTHER (Specify in Abstract below and in Text, NRC Form 366A)</td> <td colspan="3"></td> </tr> <tr> <td></td> <td>20.405(a)(1)(iii)</td> <td></td> <td>X 50.73(a)(2)(i)</td> <td></td> <td>50.73(a)(2)(viii)(A)</td> <td></td> <td colspan="4"></td> </tr> <tr> <td></td> <td>20.405(a)(1)(iv)</td> <td></td> <td>50.73(a)(2)(ii)</td> <td></td> <td>50.73(a)(2)(viii)(B)</td> <td></td> <td colspan="4"></td> </tr> <tr> <td></td> <td>20.405(a)(1)(v)</td> <td></td> <td>50.73(a)(2)(iii)</td> <td></td> <td>50.73(a)(2)(x)</td> <td></td> <td colspan="4"></td> </tr> </table>												OPERATING MODE (8)	N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)										POWER LEVEL (10) 0 8 5		20.405(b)		20.405(c)		50.73(a)(2)(iv)		73.71(b)					20.405(a)(1)(i)		50.38(c)(1)		50.73(a)(2)(v)		73.71(c)					20.405(a)(1)(ii)		50.38(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)					
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LICENSEE CONTACT FOR THIS LER (12)

NAME M. R. Kansler, Station Manager	TELEPHONE NUMBER
	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 NRRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRRDS

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE) NO

EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR

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

On August 14, 1991, at 0552 hours, with Unit 1 at 100% power, and Unit 2 ramping from 85% to 100% power, the Charging Pump Component Cooling (CC) pump, 2-CC-P-2A, was tagged out to replace the pump discharge check valve. A 24 hour Limiting Condition for Operation (LCO) was entered in accordance with Technical Specification (TS) 3.13.B. Return to service testing activities were delayed by a dropped rod and turbine runback transient that occurred at 1753 hours. When Post-Maintenance Testing (PMT) activities were resumed at 2235 hours, a pump flange leak resulted in unplanned maintenance. The maintenance activities affected the system response of this ASME XI system, and the PMT results required engineering evaluation. The 24-hour LCO expired at 0552 hours on August 15, and a 6-hour clock to Hot Shutdown (HSD) was then entered as per T.S. 3.0.1. At 0657 hours, with repairs and testing complete, the pump was evaluated by Engineering personnel as operable, and the 6-hour clock to HSD was exited. The redundant system remained operable throughout this event, and the health and safety of the public were not adversely affected. The event was caused by unanticipated delays in maintenance and testing activities. This event is being reported pursuant to 10CFR50.73(b)(2)(i).

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) SURRY POWER STATION	DOCKET NUMBER (2)			LER NUMBER (6)			PAGE (3)		
	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER						
	0 5 0 0 0 2 8 1	9 1 - 0 0 8 - 0 0	0 2	OF	0 3				

TEXT (If more space is required, use additional NRC Form 366A's) (17)

1.0 DESCRIPTION OF THE EVENT

On August 14, 1991, at 0552 hours, with Unit 1 at 100% power, and Unit 2 ramping from 85% to 100% power, the charging pump Component Cooling (CC) pump 2-CC-P-2A {EIIS-CC,P} was tagged out for replacement of the pump discharge check valve, 2-CC-764. A 24-hour Limiting Condition for Operation (LCO) was entered in accordance with Technical Specification (TS) 3.13.B.4.a. Technical Specifications require that one charging pump CC pump be operating, and that the spare pump be operable when a unit's reactor exceeds 350 DEGF/450 PSIG.

At 1530 hours, the valve replacement was completed and tags were released. At 1753 hours, Operations was preparing to perform the appropriate Post Maintenance Testing (PMT), when control rod assembly D-4 dropped, resulting in a turbine runback and a significant unit transient. During the ensuing five hours, operator attention was focused on addressing the dropped rod transient. Off-duty personnel were called in to assist in completion of the pump PMT. At 2235 hours, during testing activities, a leak was discovered at the discharge flange of the pump, and the flange gasket had to be replaced. Subsequent pump post-maintenance test data required engineering evaluation. Because of these unexpected events, the pump had not been returned to service and declared operable as of 0552 hours, the expiration of the 24-hour LCO. A 6-hour clock to Hot Shutdown (HSD) was then entered in accordance with T.S. 3.0.1. At 0657 hours, following engineering evaluation of the pump Periodic Test acceptance criteria, the pump was determined to be operable, and the 6-hour clock to HSD was terminated. This report is being submitted pursuant to 10 CFR 50.73(a)(2)(i)(B).

2.0 SIGNIFICANT SAFETY CONSEQUENCES AND IMPLICATIONS

During normal operation, the charging pumps are used as part of the Chemical and Volume Control System (CVCS) {EIIS-CB}. Following a Safety Injection (SI) actuation, the charging pumps are used as High Head Safety Injection pumps {EIIS-BQ,P}. The Charging Pump CC pumps provide cooling water for the charging pump's mechanical seals. This cooling water is required for the pump seals following the Design Basis LOCA, after the Safety Injection System swaps from the Injection Phase to the Recirculation Phase and draws water from the Containment Sump. The redundant subsystem remained operable throughout this event, therefore, the health and safety of the public were not affected.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) SURRY POWER STATION, UNIT 2	DOCKET NUMBER (2) 0 5 0 0 0 2 8 1 9 1	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		0	0	8	0	3	0 3 OF 0 3

TEXT (If more space is required, use additional NRC Form 388A's) (17)

3.0 CAUSE OF THE EVENT

The extension of CC pump inoperability 65 minutes beyond the 24-hour LCO was due to significant unanticipated delays during maintenance and testing activities.

4.0 IMMEDIATE CORRECTIVE ACTION(S)

Off-duty personnel were called in to assist with expediting completion of the pump PMT, and preparations were made to commence a shutdown of the unit. The pump's mechanical problems were corrected, and the PMT completed. An ISI engineering evaluation of the measured pump differential pressure was performed, reviewed, and approved, and the pump was declared operable and returned to service at 0657 hours.

5.0 ADDITIONAL CORRECTIVE ACTION(S)

None

6.0 ACTIONS TO PREVENT RECURRENCE

Station and Corporate Management policies are in effect which serve to minimize time spent in Limiting Condition Action Statements for the performance of maintenance. Because of the nature of the unexpected events that occurred during the return to service of the pump, and the short duration of the LCO, the allowed 24-hour time period expired prior to satisfactory completion of the Post Maintenance Testing. Station Management will continue to emphasize and enforce these policies relating to coordination of maintenance requiring entry into Technical Specification Limiting Conditions for Operation.

7.0 PREVIOUS EVENTS

None

8.0 ADDITIONAL INFORMATION

None