POW 28-06-01-01

NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
SURRY POWER STATION, UNIT 2	0 5 0 0 0 2 8 1	1 OF 0 3

TITLE (4)

INTERMEDIATE SEAL COOLERS ISOLATED

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 2	1 5	8 5	8 5	0 0 2	0 0	0 3	1 4	8 5		0 5 0 0 0
										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)	✓ 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
R. F. SAUNDERS, STATION MANAGER	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)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	✓ NO				

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

On 2/15/85, with the unit at 100% power, operations personnel performing a system walkdown discovered that the charging pump intermediate seal coolers were improperly aligned. The cause of this event was personnel error. It is believed that the misalignment occurred when operators attempted to shift the coolers without using the approved operating procedure.

Upon discovery of this event, operators placed the proper intermediate seal cooler in service. Personnel were reinstructed; the importance of using approved procedures was emphasized.

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NRC Form 366A
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
SURRY POWER STATION, UNIT 2	0 5 0 0 0 2 8 1	8 5	— 0 0 2	— 0 0	0 2 OF 0 3

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

1. Description of the Event

At 2130 hrs., on February 15, 1985, with the unit at 100% power, operations personnel performing a system walkdown discovered that service water was isolated to the charging pump intermediate seal cooler 2-SW-E-1A and that component cooling water was isolated to 2-SW-E-1B. This alignment rendered both coolers inoperable and is contrary to technical specification 3.13.B.3.

2. Safety Consequences and Implications

During this event, charging pump component cooling water was being circulated through the charging pump seal coolers and the "A" intermediate seal cooler. Charging pump service water flow was maintained to the charging pump lube oil coolers. This resulted in the charging pumps having proper lube oil cooling, but provided minimum heat removal from the seal coolers via the intermediate seal cooler.

Virginia Power's Architect Engineer conducted an evaluation of the consequences of this abnormal system lineup. They considered the most limiting material in the charging pump seals, suction fluid temperatures, and cubicle ambient temperature under normal, safety injection and recirculation modes of operation.

The AE's review of the pump design concluded that the charging pumps would continue to operate satisfactorily in all operating modes for at least one week with no service water supplied to the intermediate seal coolers. The valve misalignment would have been detected during the weekly ESF valve lineup check which was last performed two days before this event. Therefore, an unreviewed safety question was not created, and the health and safety of the public was not affected.

3. Cause

On the day of this event, charging pump service water pump 2-SW-P-10B was removed from service for maintenance. Maintenance was completed at 1045, and subsequently operators performed Periodic Test 18.8 to prove operability of this pump. It is believed that the valve mispositioning occurred when operations personnel attempted to shift the charging pump intermediate seal coolers in support of the Periodic Test.

The misalignment was caused by operator error. An approved operating procedure (OP-51.5.4) for shifting the coolers was available, but apparently it was not utilized.

4. Immediate Corrective Action

Service water was restored and component cooling water flow verified to 2-SW-E-1A. Correct valve positions were verified for other safety related systems.

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

5. Subsequent Corrective Actions

Personnel were reinstructed in the proper use of procedures. Emphasis was placed on the importance of using approved procedures when manipulating safety related equipment.

6. Action Taken to Prevent Recurrence

The charging pump service water system will be reviewed and the need for shifting the intermediate seal coolers to support maintenance and testing activities will be evaluated.

7. Generic Implications

For similar events, see LER's 83-052/03L-0 and 84-001. Following those events, specific maintenance operating procedures were written, the operating procedure for shifting the coolers was strengthened, correct valve alignment was verified weekly, and personnel were reinstructed. These steps provide adequate measures to prevent misalignments, but they cannot preclude an individual from acting outside the bounds of administrative controls.

March 14, 1985

VIRGINIA POWER

Surry Power Station
P. O. Box 315
Surry, Virginia 23883

Serial No: 85-005

Docket No: 50-281

License No: DPR-37

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

Gentelmen:

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

REPORT NUMBER

85-002-00

This report has been reviewed by the Station Nuclear Safety and Operating Committee and will be reviewed by Safety Evaluation and Control.

Very truly yours,

R F Saund

R. F. Saunders
Station Manager

Enclosure

cc: Dr. J. Nelson Grace
Regional Administrator
Suite 2900
101 Marietta Street, NW
Atlanta, Georgia 30323

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