

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) SURREY POWER STATION-UNIT NO. 2	DOCKET NUMBER (2) 0 5 0 0 0 2 8 1	PAGE (3) 1 OF 0 3
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 TITLE (4)
Excessive Cooldown

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	8 4	8 4	0 6	0 0	0 4	0 5	8 4			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) 0 0 0	20.402(b)	20.406(c)	50.73(a)(2)(iv)	73.71(b)							
	20.406(a)(1)(i)	50.38(c)(1)	50.73(a)(2)(v)	73.71(c)							
	20.406(a)(1)(ii)	50.38(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 365A)							
	20.406(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)								
	20.406(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)								
	20.406(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(ix)								

LICENSEE CONTACT FOR THIS LER (12)		TELEPHONE NUMBER	
NAME J. L. Wilson, Station Manager		AREA CODE 8 0 4	NUMBER 3 5 7 - 1 8 4

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)											
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC		

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 March 16, 1984, at approximately 1405 hours, with the primary system temperature less than 440°F, the cooldown rate exceeded 50°F/HR. Appropriate strip charts were reviewed and a cooldown rate of approximately 65°F was determined.

At the time of the event, operators were performing a primary plant cooldown with steam dumps, when the Boron Injection Tank (BIT) and associated lines were flushed to the primary system using colder RWST water instead of normal charging. The flush, performed under a pre-approved procedure, had been scheduled to be done prior to the primary plant cooldown. The BIT flush done in conjunction with the cooldown resulted in the cooldown rate exceeding the Technical Specification limit.

This event was caused by the control room operators failure to recognize an increasing cooldown rate. Personnel involved have been reinstructed and the LER will be required reading for operators.

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 PDR ADOCK 05000281
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NRC Form 368A
(9-83)

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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EXPIRES: 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
Surry Power Station, Unit 2	0 5 0 0 0 2 8 1	8 4	—	0 0 6	—	0 0	0 2 OF 0 3

TEXT (If more space is required, use additional NRC Form 368A's) (17)

1.0 Description of the Event

On March 16, 1984, at approximately 1405 hours, with the primary system temperature less than 440°F, the cooldown rate exceeded 50°F/HR. Appropriate strip charts were reviewed and a cooldown rate of approximately 65°F was determined.

At the time of the event, operators were performing a primary plant cooldown with steam dumps, when the boron injection tank (BIT) and associated lines were flushed to the primary system using colder RWST water instead of normal charging. The Boron system line flushes had been scheduled in preparation for the approved Boron Concentration reduction change. The flush, performed under a pre-approved procedure, had been scheduled to be done prior to the primary plant cooldown. The BIT flush done in conjunction with the cooldown resulted in the cooldown rate exceeding the Technical Specification limit.

2.0 Safety Consequences and Implications

All components in the reactor coolant system are designed to withstand the effects of cyclic loads due to reactor system temperature and pressure changes. Cyclic loads are introduced by normal unit load transients, reactor trips, and startup and shutdown operation. During unit startup and shutdown, the rates of temperature and pressure changes are limited. The maximum plant heatup and cooldown rate of 100°F/Hr. is consistent with the Design number of cycles and satisfies stress limits for cyclic operation. Since the cooldown rate was always less than 100°F/Hr., this event did not constitute an unreviewed safety question and the health and safety of the public were unaffected.

3.0 Cause

This event was caused by the control room operators failure to recognize an increasing cooldown rate.

4.0 Immediate Corrective Action

Appropriate strip charts were reviewed and the excessive cooldown rate was confirmed.

5.0 Additional Corrective Action

None are deemed necessary.

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6.0 Action Taken to Prevent Recurrence

Personnel involved have been reinstructed and the LER will be required reading for operators.

7.0 Generic Implications

None.