NRC FORM 366 (7-77)

U. S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

CONTROL BLOCK: | | | | | | | (1)

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

Field	Value
0 1 Licensee Code (2)	S C H B R 2
License Number (3)	0 0 - 0 0 0 0 0 - 0 0
License Type (4)	4 1 1 1 1
CAT (5)	
CON'T 0 1 Report Source (6)	L
Docket Number (7)	0 5 0 0 0 2 6 1
Event Date (8)	0 2 1 5 8 3
Report Date (9)	0 3 1 7 8 3

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 On February 15, 1983, at 1125 hours, with the unit at 80% power, "A" Safety Injection
0 3 (SI) Pump tripped after being started for routine filling of the accumulators. This
0 4 event resulted in operation in a degraded mode permitted by a limiting condition for
0 5 operation as defined by Technical Specification 3.3.1.2.b which is reportable pur-
0 6 suant to 6.9.2.b.2. The redundant SI pumps were operable so there was no threat to
0 7 the public health and safety.
0 8

0 9	System Code (11)	Cause Code (12)	Cause Subcode (13)	Component Code (14)	Comp. Subcode (15)	Valve Subcode (16)
	S F	E	A	C K T B K R	A	Z

(17) LER/RO Report Number	Event Year		Sequential Report No.		Occurrence Code	Report Type		Revision No.
	8 3	—	0 0 2	/	0 3	L	—	0

Action Taken (18)	Future Action (19)	Effect on Plant (20)	Shutdown Method (21)	Hours (22)	Attachment Submitted (23)	NPRD-4 Form Sub. (24)	Prime Comp. Supplier (25)	Component Manufacturer (26)
A	Z	Z	Z	0 0 0 0	Y	N	N	W 1 2 0

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 The redundant SI pumps were tested prior to removing "A" SI pump from service at
1 1 1830 hours on February 15, 1983. The overcurrent trip device on "A" phase for "A" SI
1 2 pump breaker was determined to be faulty and set for too short a time delay. The
1 3 overcurrent trip device was replaced, tested, and "A" SI pump was returned to service
1 4 at 0600 hours on February 16, 1983. Evaluation of this event is continuing.

1 5	Facility Status (28)	% Power (29)	Other Status (30)	Method of Discovery (31)	Discovery Description (32)
	E	0 8 0	N/A	A	Operator Observation

1 6	Activity Released (33)	Content of Release (34)	Amount of Activity (35)	Location of Release (36)
	Z	Z	N/A	N/A

1 7 Personnel Exposures	Number (37)	Type (38)	Description (39)
	0 0 0	Z	N/A

1 8 Personnel Injuries	Number (40)	Description (41)
	0 0 0	N/A

1 9 Loss of or Damage to Facility (43)	Type (42)	Description
	Z	N/A

2 0 Publicity	Issued (44)	Description (45)	NRC Use Only
	N	N/A	

8303240391 830317
PDR ADOCK 05000261
S PDR

NAME OF PREPARER Howard T. Cox PHONE: (803) 383-4524

GPO 917-926

Supplemental Information
For
LER 83-002

I. Cause Description and Analysis

At 1125 hours on February 15, 1983, with the unit at 80% power, "A" Safety Injection (SI) pump tripped while filling the accumulators. This routine operation had just been initiated, and the pump discharge header pressure was approximately 700 PSI when the trip occurred. "A" SI pump was immediately restarted, observed for proper operation, and the accumulators filled without further incident. An investigation into the cause of the pump trip was initiated.

This event now appears to be a duplication of a previous event (LER-81-23) for which no apparent cause could be determined at the trip. The investigation of this recent event, however, determined that the root cause of both events was an apparently faulty pneumatic - mechanical overcurrent trip device on "A" phase of the pump breaker. Although testing of the overcurrent trip device revealed that the device operated within the vendor's specifications, it would not adjust to the upper region of its operating band for the long time delay trip. A review of the last calibration sheets showed that the long time delay setpoint, on "A" phase only, was set near the low end (approximately 11 seconds) of its specified range (approximately 8 to 42 seconds), apparently since it would not adjust higher. However, as this setting was within the vendor's specified range, it was believed to be satisfactory. It has now been determined that this low setting, in conjunction with the motor inrush current and starting current, is sufficient to produce a breaker trip on an apparently random basis.

This event resulted in operation in a degraded mode permitted by a limiting condition for operation as defined by Technical Specification 3.3.1.2.b which is reportable pursuant to 6.9.b.2. "A" SI pump was immediately restarted satisfactorily, and the remaining SI pumps were demonstrated operable prior to removing "A" SI pump from service. Thus, there was no threat to the public health and safety.

II. Corrective Action

"A" SI pump was restarted satisfactorily, and Periodic Tests 2.7B and C (Safety Injection Component Test) were initiated at 1308 hours on February 15, 1983. The overcurrent trip device for "A" phase of "A" SI pump breaker was replaced with a new unit, adjusted for proper operation, and successfully tested. "A" SI pump was declared operable at 0600 hours on February 16, 1983. The calibration sheets for B&C pumps were reviewed, and the long time delay trip operating points were determined to be at approximately 30 to 35 seconds which precludes the failure mode described in this LER.

III. Corrective Action to Prevent Recurrence

This event is considered to be the result of a degraded component which resulted in a short long time delay trip operating setpoint. An evaluation of this event is continuing with consideration being given to replacement of the pneumatic - mechanical overcurrent trip devices on all safety-related equipment with solid state trip devices. However, as corrective action for this particular event, the breaker calibration sheets for the SI pumps will be changed to require setting of the long time delay trip at the upper end of its range.