Revised Report - Previous Report Date 6/17/80

NRC FORM 366 (7 77)

U. S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

EXHIBIT A

CONTROL BLOCK: (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

01 LICENSEE CODE: A R A N O 2 (2) LICENSE NUMBER: 0 0 - 0 0 0 0 0 - 0 0 (3) LICENSE TYPE: 4 1 1 1 1 (4) CAT (5)

CON'T 01 REPORT SOURCE: L (6) DOCKET NUMBER: 0 5 0 0 0 3 6 8 (7) EVENT DATE: 0 6 0 3 8 0 (8) REPORT DATE: (9)

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 During Mode 1 operation, Safety Injection Tanks (SIT) "C" & "D" were
03 found to have boron concentrations of 1711 ppm and 1620 ppm boron con-
04 centration, which is below the 1731 ppm boron concentration as per
05 T.S. 3.5.1.c. The SIT "A" & "B" boron concentrations were verified to
06 be at acceptable levels. Prompt reportable per T.S.6.9.1.8.b due to
07 simultaneous out of spec SIT's. No similar occurrences.
08

	SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP SUBCODE	VALVE SUBCODE
09	S F (11)	X (12)	Z (13)	Z Z Z Z Z Z (14)	Z (15)	Z (16)

(17) LER/RO REPORT NUMBER: EVENT YEAR 8 0 — SEQUENTIAL REPORT NO. 0 3 7 / OCCURRENCE CODE 0 1 REPORT TYPE X — REVISION NO. 1

ACTION TAKEN	FUTURE ACTION	EFFECT ON PLANT	SHUTDOWN METHOD	HOURS (22)	ATTACHMENT SUBMITTED	NPRD-4 FORM SUB.	PRIME COMP. SUPPLIER	COMPONENT MANUFACTURER
E (18)	Z (19)	Z (20)	Z (21)	0 0 0 0	Y (23)	N (24)	Z (25)	Z 9 9 9 (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 Cause of occurrence is believed to be dilution of the SIT makeup path by
11 the reactor coolant during extended Shutdown Cooling System operation.
12 This dilution, based on local sampling, may lower SIT boron concentration
13 during makeup operation with the Refueling Water Tank as the source.
14

15 FACILITY STATUS: [illegible] (28) % POWER: 1 0 0 (29) OTHER STATUS (30): NA METHOD OF DISCOVERY: A (31) DISCOVERY DESCRIPTION (32): Monthly Sampling

16 ACTIVITY RELEASED: Z (33) CONTENT OF RELEASE: Z (34) AMOUNT OF ACTIVITY (35): NA LOCATION OF RELEASE (36): NA

PERSONNEL EXPOSURES
17 NUMBER: 0 0 0 (37) TYPE: Z (38) DESCRIPTION (39): NA

PERSONNEL INJURIES
18 NUMBER: 0 0 0 (40) DESCRIPTION (41): NA

LOSS OF OR DAMAGE TO FACILITY (43)
19 TYPE: Z (42) DESCRIPTION: NA

PUBLICITY
20 ISSUED: N (44) DESCRIPTION (45): NA

NRC USE ONLY

NAME OF PREPARER: Chris N. Shively PHONE: 501/968-2519

8009030425

1. Reportable Occurrence Report No. 50-368/80-037

2. Report Date: 3. Occurrence Date: 6/3/80

4. Facility: Arkansas Nuclear One - Unit II
Russellville, Arkansas

5. Identification of Occurrence:

Operation of the Emergency Core Cooling System with the Safety Injection Tanks (SIT) operability less conservative than the least conservative aspect of the limiting condition for operation defined in T.S. 3.5.1.c.

6. Conditions Prior to Occurrence:

Steady-State Power	X	Reactor Power	2815 MWth
Hot Standby		Net Output	≈925 MWe
Cold Shutdown		Percent of Full Power	100 %
Refueling Shutdown		Load Changes During Routine Power Operation	
Routine Startup Operation			
Routine Shutdown Operation			
Other (specify)			

7. Description of Occurrence:

Two SIT's boron concentration simultaneously out of specification for less than one hour.

During routine sampling of the SIT's, it was discovered that SIT "C" and "D" had boron concentrations less than 173[illegible] m boron specified in T.S. 3.5.1.c. SIT "A" and "B" boron concentrations were verified to be greater than 1731 ppm boron.

Reportable Occurrence Report No.

8. Designation of Apparent Cause of Occurrence:

Design	_____	Procedure	_____
Manufacture	_____	Unusual Service Condition Including Environmental	_____
Installation/ Construction	_____	Component Failure (See Failure Data)	_____
Operator	_____		

Other (specify) Boration path dilution

Based on local sampling tests, a portion of the SIT fill path may be diluted (from the RWT concentration) by reactor coolant during extend Shutdown Cooling System operation. With such dilution occurring during the small makeup operations, the SIT boron concentration is decreased.

9. Analysis of Occurrence:

The SIT's require periodic makeup to maintain T.S. required levels due to volume contraction during unit cooldowns and volume reductions during normal operation.

10. Corrective Action:

The SIT fill path and fill method is being evaluated to ensure undiluted boration. Boron stratification in the SIT is also being studied. SIT "C" and "D" were returned to the Tech Spec required boron concentrations utilizing the feed-and-bleed method.

11. Failure Data:

There have been no similar occurrences.

11. Failure Data: