NRC FORM 366 (7-77)

U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

APPROVED BY OMB 3150-0011 EXPIRES 4-30-82

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

0 1	LICENSEE CODE	S C V C S 1 (2)
	LICENSE NUMBER	0 0 - 0 0 0 0 0 - 0 0 (3)
	LICENSE TYPE	4 1 0 0 0 (4)
	CAT	(5)

CON'T 0 1	REPORT SOURCE	L (6)
	DOCKET NUMBER	0 5 0 0 0 3 9 5 (7)
	EVENT DATE	1 1 2 3 8 3 (8)
	REPORT DATE	1 2 2 2 8 3 (9)

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 At 2115 hours, November 23, 1983 with the Plant in Mode 1, the Boron Injection Tank

0 3 (BIT) was inadvertently diluted to 19,700 parts per million (ppm) while performing

0 4 surveillance testing. There were no adverse consequences due to this event

0 5 because compliance was maintained with the Technical Specification 3.5.4.1, "Boron

0 6 Injection Tank," Action Statement.

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0 8

0 9	
SYSTEM CODE	R B (11)
CAUSE CODE	D (12)
CAUSE SUBCODE	A (13)
COMPONENT CODE	Z Z Z Z Z Z (14)
COMP. SUBCODE	Z (15)
VALVE SUBCODE	Z (16)

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

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

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 The cause of this event was due to lifting of relief valve XVR-8925 during

1 1 surveillance testing. Immediate corrective action was taken to restore the BIT

1 2 boron concentration. This action was completed at 2337 hours, November 23, 1983.

1 3 To prevent recurrence, the valves will be tested during cold shutdown.

1 4

1 5	
FACILITY STATUS	E (28)
% POWER	1 0 0 (29)
OTHER STATUS (30)	N/A
METHOD OF DISCOVERY	B (31)
DISCOVERY DESCRIPTION (32)	Chemistry Analysis

1 6	
ACTIVITY RELEASED OF RELEASE	Z (33)
CONTENT	Z (34)
AMOUNT OF ACTIVITY (35)	N/A
LOCATION OF RELEASE (36)	N/A

1 7 PERSONNEL EXPOSURES	
NUMBER	0 0 0 (37)
TYPE	Z (38)
DESCRIPTION (39)	N/A

1 8 PERSONNEL INJURIES	
NUMBER	0 0 0 (40)
DESCRIPTION (41)	N/A

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PDR ADOCK 05000395
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1 9 LOSS OF OR DAMAGE TO FACILITY (43)	
TYPE	Z (42)
DESCRIPTION	N/A

2 0 PUBLICITY	
ISSUED	N (44)
DESCRIPTION (45)	N/A

NRC USE ONLY

NAME OF PREPARER R. J. Bouknight /ev
R. J. Bouknight

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O. W. DIXON, JR.
VICE PRESIDENT
NUCLEAR OPERATIONS

December 22, 1983

Mr. James P. O'Reilly
Regional Administrator
U.S. Nuclear Regulatory Commission
Region II, Suite 2900
101 Marietta Street, N.W.
Atlanta, Georgia 30303

SUBJECT: Virgil C. Summer Nuclear Station
Docket No. 50/395
Operating License No. NPF-12
Thirty Day Written Report
LER 83-133

Dear Mr. O'Reilly:

Please find attached Licensee Event Report #83-133 for the Virgil C. Summer Nuclear Station. This Thirty Day Report is required by Technical Specification 6.9.1.13.(b) as a result of entry into the Action Statement of Technical Specification 3.5.4.1, "Boron Injection Tank," on November 23, 1983.

Should there be any questions, please call us at your convenience.

Very truly yours,

O. W. Dixon, Jr.

RJB:OWD/dwf/fjc
Attachment

cc: V. C. Summer	C. L. Ligon (NSRC)
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EVENT DESCRIPTION AND PROBABLE CONSEQUENCES

At 2115 hours, November 23, 1983, with the Plant in Mode 1, the Boron Injection Tank (BIT) was inadvertently diluted to 19,700 parts per million (ppm) while performing surveillance testing. Technical Specification 3.5.4.1 requires that the boron concentration be between 20,000 and 22,500 ppm in Modes 1, 2, and 3. There were no adverse consequences due to this event because compliance was maintained with the Technical Specification Action Statement.

CAUSE AND CORRECTIVE ACTIONS

The cause of this event is presently believed to be the result of the lifting of relief valve XVR-8925 during the performance of Surveillance Test Procedure (STP) 105.015, "Train B Slave Relay Go Circuit Testing." LER 83-060 identified a similar event on June 9, 1983. In this report we addressed General Test Procedure (GTP) 002, "General Procedure for Inservice Testing of Valves," which documents valve test relief request for valves MVG-8803 A and B, BIT Inlet Isolation valves. The basis for the relief is that exercising these valves during normal operation could dilute the boron injection tank below the minimum concentration required by Technical Specifications. Based on the aforementioned relief request, we stated that STP-105.014, "Train A Slave Relay Go Circuit Testing," and STP-105.015 would be revised deleting the testing of valves 8803 A and B during normal plant operations. The subject valves will be tested during cold shutdown.

Further investigation by the Licensee into this event disclosed that Charging Pump B discharge pressure was higher than Charging Pump A and C. Charging Pump B was the unit on line when the BIT was diluted as reported in LER 83-060.

The decision was made to make a temporary change, in accordance with approved Station Administrative Procedure, to the revised STP-105.014 and STP-105.015 and conduct another Slave Relay Go Circuit Test of valves 8803 A and B using Charging Pumps A and C.

The result of the test was again the dilution of the BIT. Boron concentration was restored at 2337 hours, November 23, 1983.

Based on the results of the retest, the temporary change is being removed from the surveillance test procedure, and the valves will only be tested during cold shutdown. An engineering analysis is continuing to fully evaluate this event.