NRC FORM 366
(12-81)

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 N E E 3 (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

0 1 | REPORT SOURCE: L (6) | DOCKET NUMBER: 0 5 0 0 0 2 8 7 (7) | EVENT DATE: 0 7 0 7 8 3 (8) | REPORT DATE: 0 7 2 9 8 3 (9)

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 On July 7, 1983 at 1450, while performing an Emergency Safeguards (ES) on-line test,
0 3 valve 3LPSW-565 failed to operate. This made the 3B RB Cooling Unit (RBCU) tech-
0 4 nically inoperable. With one RBCU inoperable, the RB Spray System independently or
0 5 with the other RBCUs would provide cooling capacity in excess of that required.
0 6 Also, during the worst case LOCA, the peak pressure would be 53.8 psig compared to
0 7 the RB design pressure of 59.0 psig. Thus, the health and safety of the public
0 8 were not affected by this incident.

	SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP. SUBCODE	VALVE SUBCODE
0 9	W A (11)	E (12)	A (13)	V A L V O P (14)	A (15)	Z (16)

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

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

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 The cause of the occurrence was component failure/malfunction. The mechanical
1 1 interlock and the coil of the motor starter binded. The motor starter was repaired
1 2 and the valve and the 3B RBCU were declared operable. Several preventive main-
1 3 tenance programs concerning this type valve and their operators are planned.
1 4

	FACILITY STATUS	% POWER	OTHER STATUS (30)	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION (32)
1 5	E (28)	1 0 0 (29)	NA	B (31)	Operator observation during testing

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

PERSONNEL EXPOSURES

	NUMBER	TYPE	DESCRIPTION (39)
1 7	0 0 0 (37)	Z (38)	NA

PERSONNEL INJURIES

	NUMBER	DESCRIPTION (41)
1 8	0 0 0 (40)	NA

LOSS OF OR DAMAGE TO FACILITY (43)

	TYPE	DESCRIPTION
1 9	Z (42)	NA

IE22

PUBLICITY

	ISSUED	DESCRIPTION (45)	NRC USE ONLY
2 0	N (44)	NA	

NAME OF PREPARER Jocelyn C. Petty PHONE: (704) 373-8270

Duke Power Company
Oconee Nuclear Station

Report Number: RO-287/83-08

Report Date: July 29, 1983

Occurrence Date: July 7, 1983

Facility: Oconee Unit 3, Seneca, South Carolina

Identification of Occurrence: Valve 3LPSW-565 failed to operate during an ES on-line test -- RBCU inoperable.

Conditions Prior to Occurrence: 100% FP

Description of Occurrence: On July 7, 1983 at 1450, while performing an Emergency Safeguards (ES) on-line test, the Reactor Building Auxiliary Ventilation Fans' Low Pressure Service Water Isolation Valve, 3LPSW-565, failed to operate (remained open). Because of this failure, Reactor Building Cooling Unit (RBCU) 3B could not be lined up in ES mode; therefore, RBCU 3B was declared inoperable. Operation with one RBCU inoperable is a degraded mode permitted by Technical Specification 3.3.5.c.(2).

Apparent Cause of Occurrence: The cause of this occurrence was component failure/ malfunction. After examination, the root of the problem was concluded to be an unidentified particle binding the coil preventing the motor starter from working. The mechanical interlock in the starter may have aggravated the problem.

Analysis of Occurrence: Valve 3LPSW-565 is installed to prevent cooling water from bypassing RBCU 3B following a Loss of Coolant Accident (LOCA), and to isolate the auxiliary cooler header which is non-seismic. A failure of this valve does not cause or increase the probability of any transient or accident which could endanger plant personnel, equipment, or the public. If 3LPSW-565 failed to close following a LOCA, some flow would be diverted from RBCU 3B reducing its effectiveness. If an associated seismic event failed the auxiliary cooler header with 3LPSW-565 open or partially closed, the leak would be detected by comparing inlet and outlet flows and the cooler would be isolated, thus removing RBCU 3B from service.

In the event of a failure in one of the three RBCUs, the Reactor Building Spray (RBS) system independently or half of the RBS System capacity combined with the remaining two cooling units will provide cooling capacity in excess of that required. For the worst case LOCA with only two RBCUs operable, the peak pressure is 53.8 psig. Since the Reactor Building design pressure is 59.0 psig, it has been demonstrated that the design pressure will not be exceeded for all design basis LOCAs.

The health and safety of the public were not affected by this incident.

Corrective Action: The malfunction in the motor starter was repaired. The valve was tested and declared operable. RBCU 3B was then declared operable. Instrumentation and Electrical (I&E) personnel plan to include appropriate ES Rotork operated valves (such as valve 3LPSW-565) in a preventive maintenance program. It is also planned to complete and approve an electrical preventive maintenance procedure for Rotork Operators.

DUKE POWER COMPANY
P.O. BOX 33189
CHARLOTTE, N.C. 28242

HAL B. TUCKER
VICE PRESIDENT
NUCLEAR PRODUCTION

TELEPHONE
(704) 373-4531

July 29, 1983

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

Re: Oconee Nuclear Station
Docket No. 50-287

Dear Mr. O'Reilly:

Please find attached Reportable Occurrence Report RO-287/83-08. This report is submitted pursuant to Oconee Nuclear Station Technical Specification 6.6.2.1.b(2) which concerns operation in a degraded mode permitted by a limiting condition for operation, and describes an incident which is considered to be of no significance with respect to its effect on the health and safety of the public.

Very truly yours,

H.B. Tucker /JSH

Hal B. Tucker

JCP/php

Attachment

cc: Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

INPO Records Center
Suite 1500
1100 Circle 75 Parkway
Atlanta, Georgia 30339

Mr. J. C. Bryant
NRC Resident Inspector
Oconee Nuclear Station

Mr. John F. Suermann
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

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