

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 | S | C | N | E | E | 2 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 3 | 4 | 1 | 1 | 1 | 1 | 4 | 5

7 8 9 14 15 25 26 30 37 CAT 56

COMT  
01 | L | 6 | 0 | 5 | 0 | 0 | 0 | 2 | 7 | 0 | 7 | 1 | 1 | 2 | 3 | 8 | 1 | 8 | 0 | 2 | 1 | 9 | 8 | 2 | 9

7 8 50 61 68 69 74 75 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 | On November 23, 1981, the CCW discharge valve to the Keowee tailrace was

03 | inadvertently open and then failed to close, resulting in loss of prime for

04 | the CCW Emergency Cooling Discharge line. Since normal cooling was available

05 | to all units through the condenser, the health and safety of the public were

06 | not compromised by this incident.

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SYSTEM CODE W E (11) CAUSE CODE A (12) CAUSE SUBCODE A (13) COMPONENT CODE V A L V E X (14) COMP. SUBCODE B (15) VALVE SUBCODE D (16)

17 | LER/RO REPORT NUMBER 8 1 (21) SEQUENTIAL REPORT NO. 0 1 8 (24) OCCURRENCE CODE 0 1 (28) REPORT TYPE T (30) REVISION NO. 1 (32)

ACTION TAKEN X (18) FUTURE ACTION X (19) EFFECT ON PLANT B (20) SHUTDOWN METHOD Z (21) HOURS 0 0 0 2 (22) ATTACHMENT SUBMITTED Y (23) NRC-4 FORM USE. N (24) PRIME COMP. SUPPLIER L (25) COMPONENT MANUFACTURER A 1 8 0 (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 | This incident was the result of training and procedural deficiencies in that

11 | the operating procedure challenged the emergency system, and no training was

12 | given on returning the system to normal after actuation. Units 2 and 3 began

13 | the shutdown sequence and the emergency discharge line was reprimed. The

14 | operating procedure and operator training will be changed to correct the

15 | deficiencies described above.

FACILITY STATUS E (28) % POWER 0 7 5 (29) OTHER STATUS NA (30) METHOD OF DISCOVERY A (31) DISCOVERY DESCRIPTION Operator Observation (32)

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

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

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

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

PUBLICITY ISSUED N (44) DESCRIPTION NA (45)

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DUKE POWER COMPANY  
OCONEE UNIT 2 AND 3

Report Number: RO-270/81-18

Report Date: December 21, 1981

Occurrence Date: November 23, 1981

Facility: Oconee Units 2 and 3, Seneca, South Carolina

Identification of Occurrence: Loss of Prime to the Emergency Condenser  
Circulating Water System

Conditions Prior to Occurrence: Oconee 2 - 75% FP  
Oconee 3 - 100% FP

Description of Occurrence:

At approximately 1011 hours on November 23, 1981, while attempting to vent the Condenser Circulating Water (CCW) lines by use of the CCW emergency discharge valves, CCW-1 through CCW-6, the CCW discharge valve to the Keowee tailrace, valve CCW-8, was inadvertently opened and then failed to close, thus resulting in a loss of prime for the CCW Emergency Cooling Discharge line.

Apparent Cause of Occurrence:

The primary cause of the incident was a training deficiency. The training given only gives direction on Emergency System actuation, and does not give direction on how to return the system to normal. The loss of prime occurred after the system had actuated. It should also be noted that CCW-8 will not close with open indication on CCW-1 through CCW-6. If training had been given on "Return to Normal after Actuation", the loss of prime would not have taken place.

The secondary cause of the incident was procedural deficiency. Operating procedures should be written such that when performed, emergency systems would not be challenged. The procedure used a note to indicate possible Emergency System actuation. The note gives no direction on how to Return to Normal and also implies that all valves must be open to give open indication on CCW-1 through CCW-6.

Analysis of Occurrence:

Unit 1 was at cold shutdown at the time of the incident. Units 2 and 3 began shutdown sequence, as required by the Technical Specification, immediately after discovery of the incident. Since normal cooling was available to all units through the condenser, the health and safety of the public were not compromised by this incident.

Corrective Action:

Units 2 and 3 began shutdown sequence after discovery of the incident. Valve CCW-8 was manually closed and the Emergency Discharge line was reprimed. Subsequent testing of valve operation could find no problems and all functions were normal. The valve was returned to service.

A training package on "Return to Normal after Actuation" of CCW-8 will be generated and given to all operations personnel which shows correct action to prevent loss of prime when returning the system to normal. A letter will be drafted to Operator Training Department to include "Return to Normal after Actuation" of CCW-8 in ISS System Training and Operator License Training. The procedure for priming the Emergency Discharge Line will be changed so that it does not challenge the Emergency System operation while priming the Emergency Discharge Line.