

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

[01] [A][L][B][R][F][1] [2] [0][0] - [0][0][0][0][0] - [0][0] [3] [4][1][1][1][1] [4] [] [5]

CONT
[01] REPORT SOURCE [L] [6] [0][5][0][0][0][2][5][9] [7] [1][2][1][0][8][3] [8] [0][5][2][5][8][4] [9]

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

[02] On 12/10/83, with unit 1 in a refueling outage, an operator observed RHR
[03] pump 1C motor was sparking and smoking. The motor was shut down and subsequently
[04] restarted. After restarting, the motor tripped on overcurrent. With RHR Loop II
[05] out-of-service, only RHR pump 1A, Loop I, was operable. This exceeded limit
[06] of LCO, Tech Spec 3.5.B.9. Limits were exceeded for two hours. There was no
[07] effect on public health and safety. Reactor vessel temperature remained within
[08] limits required by Tech Specs 3.6.A.3 and .5.

[09] SYSTEM CODE [C][F] [11] CAUSE CODE [X] [12] CAUSE SUBCODE [Z] [13] COMPONENT CODE [M][O][T][O][R][X] [14] COMP. SUBCODE [Z] [15] VALVE SUBCODE [Z] [16]
[17] LER/RO REPORT NUMBER [8][3] [] [] [0][5][8] [] [] [X] [] [] [2]
ACTION TAKEN [C] [18] FUTURE ACTION [X] [19] EFFECT IN PLANT [Z] [20] SHUTDOWN METHOD [Z] [21] HOURS [0][0][0][0] [22] ATTACHMENT SUBMITTED [Y] [23] NPRO-4 FORM SUB. [N] [24] PRIME COMP. SUPPLIER [N] [25] COMPONENT MANUFACTURER [C][0][8][0] [26]

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

[10] GE model No. 5K6348XC23A, 2000 HP, 3 phase motor tripped due to bearing and
[11] subsequent winding failure. RHR Loop II was returned to service and pump 1C
[12] motor replaced. This is considered a random failure since operating time does
[13] not indicate end of life nor is this a generic type failure. Recurrence control
[14] consists of periodic oil analyses to detect potential bearing failure.

[15] FACILITY STATUS [H] [28] % POWER [0][0][0] [29] OTHER STATUS [NA] [30] METHOD OF DISCOVERY [A] [31] DISCOVERY DESCRIPTION [Operator observation] [32]

[16] ACTIVITY CONTENT RELEASED OF RELEASE [Z] [33] [Z] [34] AMOUNT OF ACTIVITY [NA] [35] LOCATION OF RELEASE [NA] [36]

[17] PERSONNEL EXPOSURES NUMBER [0][0][0] [37] TYPE [Z] [38] DESCRIPTION [NA] [39]

[18] PERSONNEL INJURIES NUMBER [0][0][0] [40] DESCRIPTION [NA] [41]

[19] LOSS OF OR DAMAGE TO FACILITY TYPE [Z] [42] DESCRIPTION [NA] [43]

[20] PUBLICITY ISSUED [N] [44] DESCRIPTION [NA] [45]

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S PDR

NAME OF PREPARER Walter T. Christopher PHONE 205-729-0800

LER SUPPLEMENTAL INFORMATION

BRFO-50- 259/83068R2 Technical Specification Involved 3.5.B.9

Reported Under Technical Specification 5.7.2.a(2) Date Due NRC 7/16/84

Unit 1 was in a refueling outage with irradiated fuel in the vessel and the vessel at atmospheric pressure; unit 2 was operating normally at 100 percent power; unit 3 was in a refueling outage. Unit 1 was the only unit affected by this event. On December 10, 1983, an operator observed that RHR pump 1C motor was sparking and smoking. The motor was shut down and subsequently restarted. After being restarted and running for a few minutes the motor tripped on overcurrent at 2045 hours. A and C phase and ground instantaneous overcurrent relays actuated. RHR Loop II was out-of-service. Therefore, RHR pump 1A, Loop I, was the only RHR pump operable. This exceeded the limiting condition of operation as defined by Technical Specification (T.S.) 3.5.B.9. All unit 1 and 2 diesel generators were operable. RHR Loop II was returned to service at 2243 hours. T.S. limits 3.5.B.9 were therefore exceeded for 2 hours. RHR pump 1C motor replacement was completed on 12/16/83. The GE model number 5K6348XC23A, 2000 HP, 3 phase motor tripped due to lower guide bearing and subsequent winding failure. There was no effect on public health and safety. Reactor vessel temperature was maintained within limits as required by T.S. 3.6.A.3 and .5 during this event. Evidence indicates that the lower guide bearing (GE model No. 2892334P26) failed due to excessive or continuous upward thrust being applied to the bearing. The estimated accumulated operating time does not approach the rated end-of-life for these bearings, nor is this believed to be a generic type failure. Therefore, this is considered a random failure. Recurrence control will consist of taking periodic oil samples for analysis to provide early notification of potential bearing failure.

Previous Similar Events

BRFO-50-296/81034

TENNESSEE VALLEY AUTHORITY

Browns Ferry Nuclear Plant
P. O. Box 2000
Decatur, Alabama 35602

JUL 24 1984

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

Dear Sir:

TENNESSEE VALLEY AUTHORITY - BROWNS FERRY NUCLEAR PLANT UNIT 1 - DOCKET
NO. 50-259 - FACILITY OPERATING LICENSE DPR-33 - REPORTABLE OCCURRENCE
REPORT BFRO-50-259/83068 R2

Reference: H. J. Green's memorandum to you dated December 20, 1983.

The enclosed report provides followup information concerning failure of
residual heat removal system pump motor. This report is submitted in
accordance with Browns Ferry Unit 1 Technical Specification 6.7.2.a.(2).

Very truly yours,

TENNESSEE VALLEY AUTHORITY



G. T. Jones
Plant Manager
Browns Ferry Nuclear Plant

Enclosure

cc (Enclosure):
Regional Administrator
U. S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
Region II
101 Marietta Street, Suite 2900
Atlanta, GA 30303

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NRC Resident Inspector, BFN

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