

CONTROL BLOCK

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

01 ALBRF 3200-000000-0034111145
7 8 9 14 15 25 26 30 37 CAT 58

CONT

01 REPORT SOURCE L 605000296704198380503839
7 8 60 61 66 69 74 75 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 With unit 3 operating at 99.8-percent power, plant personnel were notified by
03 TVA Div. of Fuels that MCHGR for the rod withdrawal error scenario exceeds
04 the 1-percent plastic strain LHGR limit for the 8 LTA bundles (T.S. 2.1). For
05 this scenario, the worst case rod pattern is incompatible with rod patterns
06 developed for unit 3's control cell core fuel loading pattern and was never
07 used. Also, the bundle power requirement was not reached thus, the health and
08 safety of the public were not affected.

09 SYSTEM CODE I A 11 CAUSE CODE X 12 CAUSE SUBCODE Z 13 COMPONENT CODE Z Z Z Z Z Z 14 COMP. SUBCODE Z 15 VALVE SUBCODE Z 16
7 8 9 10 11 12 13 14 15 16 17 18 19 20
17 LER/RO REPORT NUMBER 83 EVENT YEAR 83 SEQUENTIAL REPORT NO. 024 OCCURRENCE CODE 01 REPORT TYPE T REVISION NO. 0
21 22 23 24 25 26 27 28 29 30 31 32
ACTION TAKEN FUTURE ACTION EFFECT ON PLANT SHUTDOWN METHOD HOURS ATTACHMENT SUBMITTED NFRD-4 FORM SUB PRIME COMP. SUPPLIER COMPONENT MANUFACTURER
G 18 X 19 Z 20 Z 21 0000 Y 23 N 24 Z 25 Z 9 9 9
33 34 35 36 37 38 39 40 41 42 43 44 45

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 The NEDC 24376 LHGR (LTA) limit is 17.8 KW/Ft. The cycle 5 reload analysis
11 lists MLHGR of 18.8 KW/Ft. for the rod withdrawal error. GE was contacted
12 to resolve the conflict. TVA is revising procedures for reviewing the work of
13 outside fuel consultants. Pending GE's evaluation results, TVA has
14 administratively limited the MLHGR of LTA's to 12.00 KW/Ft.

15 FACILITY STATUS E 28 % POWER 098 29 OTHER STATUS NA 30 METHOD OF DISCOVERY A 31 DISCOVERY DESCRIPTION Offsite Analysis 32
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
16 ACTIVITY CONTENT RELEASED OF RELEASE Z 33 Z 34 AMOUNT OF ACTIVITY NA 35 LOCATION OF RELEASE NA 36
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
17 PERSONNEL EXPOSURES NUMBER 000 37 Z 38 DESCRIPTION NA 39
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
18 PERSONNEL INJURIES NUMBER 000 40 DESCRIPTION NA 41
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
19 LOSS OF OR DAMAGE TO FACILITY TYPE Z 42 DESCRIPTION NA 43
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
20 PUBLICITY ISSUED N 44 DESCRIPTION NA 45
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

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LER SUPPLEMENTAL INFORMATION

BFRO-50- 296 / 83024 Technical Specification Involved 2.1

Reported Under Technical Specification 6.7.2.a(8)* Date Due NRC 5/4/83

Event Narrative:

On April 19, 1983 at 1500, unit 1 was in cold shutdown for end-of-cycle 5 refueling and unit 2 was at 94.1-percent; both units were unaffected by this event. Unit 3 was operating at 99.8-percent power when Browns Ferry's nuclear engineers were notified by TVA's Division of Fuels that the rod withdrawal error scenarios expected value for MLHGR exceeds the 1-percent plastic strain LHGR limit for the 8 LTA bundles loaded in cycle 5. The worst case rod pattern for this scenario is incompatible with rod patterns developed for unit 3's control cell core fuel loading pattern and has never actually been used. Also, the bundle power requirement for this scenario was not reached. Thus, there were no significant consequences and the health and safety of the public were not affected.

NEDC 24376 indicates the LTA's 1-percent plastic strain LHGR limit is 17.8 KW/Ft. The supplemental reload licensing submittal (Y100 3Y01A30) lists 18.8 KW/Ft. as the expected MLHGR for the rod withdrawal error scenario for the 106 rod block setpoint. Since both documents are supplied by GE, they have been contacted to reanalyze and eliminate the conflict. TVA's procedures for reviewing the work of outside fuel consultants are under revision as a result of this problem. Pending final outcome of GE's evaluation, Browns Ferry has administratively limited the MLHGR of the LTA to 12.00 KW/Ft. to prevent the possibility of reaching the 1-percent plastic strain limit in the event of a rod withdrawal error. A follow-up report will be submitted upon receipt of GE's evaluation.

* Previous Similar Events:

None

Retention: Period - Lifetime; Responsibility - Document Control Supervisor

*Revision: *JRP*