REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)
DISTRIBUTION FOR INCOMING MATERIAL 50-296

REC: OREILLY J P
NRC

ORG: FOX H S
TN VALLEY AUTH

DOCDATE: 02/06/78
DATE RCVD: 02/13/78

DOCTYPE: LETTER NOTARIZED: NO

COPIES RECEIVED
LTR 0 ENCL 1

SUBJECT:
LICENSEE EVENT REPT (RO 50-296/78-1) ON 01/01/78 CONCERNING TORUS OXYGEN SENSOR 02M-76-42 WAS FOUND TO BE ERRATIC AND DID NOT MEET REQUIREMENTS OF T.S. 4.7.H.

PLANT NAME: BROWNS FERRY - UNIT 3

REVIEWER INITIAL: XJM
DISTRIBUTOR INITIAL:

********** DISTRIBUTION OF THIS MATERIAL IS AS FOLLOWS **********

INCIDENT REPORTS
(DISTRIBUTION CODE A002)

FOR ACTION: BRANCH CHIEF SWCHENCER**W/4 ENC

INTERNAL:
REG FILE**W/ENCL
I & E**W/2 ENCL
SCHROEDER/IPPOLITO**W/ENCL
NOVAK/CHECK**W/ENCL
KNIGHT**W/ENCL
HANAUER**W/ENCL
EISENHUT**W/ENCL
SHAO**W/ENCL
KREGER/J. COLLINS**W/ENCL
L. CROCKER**W/ENCL
NRC PDR**W/ENCL
MIPC**W/3 ENCL
HOUSTON**W/ENCL
GRIMES**W/ENCL
BUTLER**W/ENCL
TEDESCO**W/ENCL
BAER**W/ENCL
VOLLMER/BUNCH**W/ENCL
ROSA**W/ENCL
K SEYFRIT/IE**W/ENCL

EXTERNAL:
LPDR'S
ATHENS, AL**W/ENCL
TIC**W/ENCL
NSIC**W/ENCL
ACRS CAT B**W/16 ENCL

COPIES NOT SUBMITTED PER REGULATORY GUIDE 10.1

DISTRIBUTION: LTR 46 ENCL 46
SIZE: 1P+1P

CONTROL NBR: 780460011

********** THE END **********

aat
hl

TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE 37401

FEB 6 1978

Mr. James P. O'Reilly, Director
U.S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
Region II
230 Peachtree Street, NW., Suite 1217
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

TENNESSEE VALLEY AUTHORITY - BROWNS FERRY NUCLEAR PLANT UNIT 3 - DOCKET NO. 50-296 - FACILITY OPERATING LICENSE DPR-68 - REPORTABLE OCCURRENCE REPORT BFRO-50-296/781

The enclosed report provides details concerning the torus oxygen sensor O_2M-76-42 which was found to be erratic and did not meet the requirements of Technical Specification 4.7.H during normal operation. This report is submitted in accordance with Browns Ferry unit 3 Technical Specifications, Section 6.7.2.b.(2).

Very truly yours,

TENNESSEE VALLEY AUTHORITY

H. S. Fox
Director of Power Production

Enclosure
cc (Enclosure):
Director (3)
Office of Management Information and Program Control
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Director (40)
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC 20555

A002/S *
0/1

June 5, 1979

Mr. Jerry P. O'Reilly, Director
U.S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
Region II
229 Peachtree Street, NW., Suite 1217
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

TENNESSEE VALLEY AUTHORITY - BROWNS FERRY NUCLEAR PLANT UNIT 3 -
DOCKET NO. 50-296 - FACILITY OPERATING LICENSE DPR-68 - PROPOSED
AMENDMENT TO PROCESS CONTROL-50-296/79

The enclosed report provides details concerning the torus oxygen sensor 79-42 which was found to be operable and did not meet the requirements of Technical Specification 4.7.A during normal operation. This report is submitted in accordance with Unit Two Surveillance Instruction 3 Technical Specifications, Section 6.7.2.b.(2).

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills
Director of Power Production

Enclosure
cc (Enclosure):
Director (3)
Office of Management Information and Program Control
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Director (40)
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC 20555

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)

0 1 | A L B R F 3 ② 0 0 - 0 0 0 0 0 - 0 0 ③ 4 1 1 1 1 ④ | | ⑤
LICENSEE CODE (9–14) · LICENSE NUMBER (15–25) · LICENSE TYPE (26–30) · CAT (57–58)

CON'T 0 1 REPORT SOURCE L ⑥ 0 5 0 0 0 2 9 6 ⑦ 0 1 0 1 7 8 ⑧ 0 2 0 6 7 8 ⑨
REPORT SOURCE (60) · DOCKET NUMBER (61–68) · EVENT DATE (69–74) · REPORT DATE (75–80)

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES ⑩

0 2 During normal operation, torus oxygen sensor O_2M-76-42 was found to be
0 3 erratic and did not meet the requirements of T.S. 4.7.H. A redundant torus
0 4 hydrogen sensor was operating properly. Previous occurrences were reported
0 5 on BFRO's 296/7618, 259/7624, 260/775, 296/777, 260/7710, 296/7716, and
0 6 296/7719. There was no effect on the public health or safety.
0 7
0 8

0 9 SYSTEM CODE S E ⑪ CAUSE CODE E ⑫ CAUSE SUBCODE G ⑬ COMPONENT CODE I N S T R U ⑭ COMP. SUBCODE E ⑮ VALVE SUBCODE Z ⑯

⑰ LER/RO REPORT NUMBER: EVENT YEAR 7 8 — SEQUENTIAL REPORT NO. 0 0 1 / OCCURRENCE CODE 0 3 REPORT TYPE L — REVISION NO. 0

ACTION TAKEN E ⑱ FUTURE ACTION C ⑲ EFFECT ON PLANT Z ⑳ SHUTDOWN METHOD Z ㉑ HOURS ㉒ 0 0 0 0 0 ATTACHMENT SUBMITTED N ㉓ NPRD-4 FORM SUB. Y ㉔ PRIME COMP. SUPPLIER N ㉕ COMPONENT MANUFACTURER G 0 8 0 ㉖

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS ㉗

1 0 Torus oxygen sensor - G.E.. PN 23991-47C226431-P1 was replaced. All wiring
1 1 and connections were inspected and found satisfactory. Calibration of
1 2 replacement sensor restored system operability. New improved monitoring
1 3 equipment is being purchased to replace the present system.
1 4

1 5 FACILITY STATUS E ㉘ % POWER 0 7 8 ㉙ OTHER STATUS ㉚ NA METHOD OF DISCOVERY B ㉛ DISCOVERY DESCRIPTION ㉜ Inservice Inspection

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

1 7 PERSONNEL EXPOSURES NUMBER 0 0 0 ㊲ TYPE Z ㊳ DESCRIPTION ㊴ NA

1 8 PERSONNEL INJURIES NUMBER 0 0 0 ㊵ DESCRIPTION ㊶ NA

1 9 LOSS OF OR DAMAGE TO FACILITY ㊸ TYPE Z ㊷ DESCRIPTION NA

2 0 PUBLICITY ISSUED N ㊹ DESCRIPTION ㊺ NA NRC USE ONLY

NAME OF PREPARER ____________________ PHONE: ____________

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 | ALBRF3 (2) | 00-000 00-00 (3) | 4 | 1111 (4) | (5)
7 8 9 LICENSEE CODE 14 15 LICENSE NUMBER 25 26 LICENSE TYPE 30 57 CAT 58

CON'T
01 | REPORT SOURCE L (6) | 05000296 (7) | 010178 (8) | 020678 (9)
7 8 60 61 DOCKET NUMBER 68 69 EVENT DATE 74 75 REPORT DATE 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 During normal operation, torus oxygen sensor O_2M-76-42 was found to be
03 erratic and did not meet the requirements of T.S. 4.7.H. A redundant torus
04 hydrogen sensor was operating properly. Previous occurrences were reported
05 on BFRO's 296/7618, 259/7624, 260/775, 296/777, 260/7710, 296/7716, and
06 296/7719. There was no effect on the public health or safety.
07
08
7 8 9 80

09 SYSTEM CODE SE (11) | CAUSE CODE E (12) | CAUSE SUBCODE G (13) | COMPONENT CODE INSTRU (14) | COMP. SUBCODE E (15) | VALVE SUBCODE Z (16)
7 8 9 10 11 12 13 18 19 20

(17) LER/RO REPORT NUMBER: EVENT YEAR 78 (21 22) | — (23) | SEQUENTIAL REPORT NO. 001 (24 26) | / (27) | OCCURRENCE CODE 03 (28 29) | REPORT TYPE L (30) | — (31) | REVISION NO. 0 (32)

ACTION TAKEN E (18) | FUTURE ACTION C (19) | EFFECT ON PLANT Z (20) | SHUTDOWN METHOD Z (21) | HOURS (22) 0000 (37 40) | ATTACHMENT SUBMITTED N (23) | NPRD-4 FORM SUB. Y (24) | PRIME COMP. SUPPLIER N (25) | COMPONENT MANUFACTURER G080 (26)
33 34 35 36 41 42 43 44 47

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 Torus oxygen sensor - G.E. PN 23991-47C226431-P1 was replaced. All wiring
11 and connections were inspected and found satisfactory. Calibration of
12 replacement sensor restored system operability. New improved monitoring
13 equipment is being purchased to replace the present system.
14
7 8 9 80

15 FACILITY STATUS E (28) | % POWER 078 (29) | OTHER STATUS (30) NA | METHOD OF DISCOVERY B (31) | DISCOVERY DESCRIPTION (32) Inservice Inspection
7 8 9 10 12 13 44 45 46 80

16 ACTIVITY RELEASED Z (33) | CONTENT OF RELEASE Z (34) | AMOUNT OF ACTIVITY (35) NA | LOCATION OF RELEASE (36) NA
7 8 9 10 11 44 45 80

17 PERSONNEL EXPOSURES NUMBER 000 (37) | TYPE Z (38) | DESCRIPTION (39) NA
7 8 9 11 12 13 80

18 PERSONNEL INJURIES NUMBER 000 (40) | DESCRIPTION (41) NA
7 8 9 11 12 80

19 LOSS OF OR DAMAGE TO FACILITY TYPE Z (42) | DESCRIPTION (43) NA
7 8 9 10 80

20 PUBLICITY ISSUED N (44) | DESCRIPTION (45) NA | NRC USE ONLY
7 8 9 10 68 69 80

NAME OF PREPARER _____ PHONE: _____

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 | ALBRF3 (2) | 00-00000-00 (3) | 41111 (4) | (5)
7 8 9 LICENSEE CODE 14 15 LICENSE NUMBER 25 26 LICENSE TYPE 30 57 CAT 58

CON'T
01 | REPORT SOURCE L (6) | 05000296 (7) | 010178 (8) | 020678 (9)
7 8 60 61 DOCKET NUMBER 68 69 EVENT DATE 74 75 REPORT DATE 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 During normal operation, torus oxygen sensor O_2M-76-42 was found to be
03 erratic and did not meet the requirements of T.S. 4.7.H. A redundant torus
04 hydrogen sensor was operating properly. Previous occurrences were reported
05 on BFRO's 296/7618, 259/7624, 260/775, 296/777, 260/7710, 296/7716, and
06 296/7719. There was no effect on the public health or safety.
07
08
7 8 9 80

09
7 8 SYSTEM CODE SE (11) | CAUSE CODE E (12) | CAUSE SUBCODE G (13) | COMPONENT CODE INSTRU (14) | COMP. SUBCODE E (15) | VALVE SUBCODE Z (16)
9 10 11 12 13 18 19 20

(17) LER/RO REPORT NUMBER EVENT YEAR 78 | — | SEQUENTIAL REPORT NO. 001 | / | OCCURRENCE CODE 03 | REPORT TYPE L | — | REVISION NO. 0
21 22 23 24 26 27 28 29 30 31 32

ACTION TAKEN E (18) | FUTURE ACTION C (19) | EFFECT ON PLANT Z (20) | SHUTDOWN METHOD Z (21) | HOURS (22) 0000 | ATTACHMENT SUBMITTED N (23) | NPRD-4 FORM SUB. Y (24) | PRIME COMP. SUPPLIER N (25) | COMPONENT MANUFACTURER G080 (26)
33 34 35 36 37 40 41 42 43 44 47

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 Torus oxygen sensor - G.E. PN 23991-47C226431-P1 was replaced. All wiring
11 and connections were inspected and found satisfactory. Calibration of
12 replacement sensor restored system operability. New improved monitoring
13 equipment is being purchased to replace the present system.
14
7 8 9 80

15
7 8 FACILITY STATUS E (28) | % POWER 078 (29) | OTHER STATUS (30) NA | METHOD OF DISCOVERY B (31) | DISCOVERY DESCRIPTION (32) Inservice Inspection
9 10 12 13 44 45 46 80

16
7 8 ACTIVITY RELEASED Z (33) | CONTENT OF RELEASE Z (34) | AMOUNT OF ACTIVITY (35) NA | LOCATION OF RELEASE (36) NA
9 10 11 44 45 80

17
7 8 PERSONNEL EXPOSURES NUMBER 000 (37) | TYPE Z (38) | DESCRIPTION (39) NA
9 11 12 13 80

18
7 8 PERSONNEL INJURIES NUMBER 000 (40) | DESCRIPTION (41) NA
9 11 12 80

19
7 8 LOSS OF OR DAMAGE TO FACILITY TYPE Z (42) | DESCRIPTION (43) NA
9 10 80

20
7 8 PUBLICITY ISSUED N (44) | DESCRIPTION (45) NA | NRC USE ONLY
9 10 68 69 80

NAME OF PREPARER _____ PHONE: _____

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 | ALBRF3 (2) | 00-00000-00 (3) | 4 1 1 1 1 (4) | (5)
LICENSEE CODE | LICENSE NUMBER | LICENSE TYPE | CAT

CON'T
01 | REPORT SOURCE L (6) | 05000296 (7) | 010178 (8) | 020678 (9)
DOCKET NUMBER | EVENT DATE | REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 During normal operation, torus oxygen sensor O_2M-76-42 was found to be
03 erratic and did not meet the requirements of T.S. 4.7.H. A redundant torus
04 hydrogen sensor was operating properly. Previous occurrences were reported
05 on BFRO's 296/7618, 259/7624, 260/775, 296/777, 260/7710, 296/7716, and
06 296/7719. There was no effect on the public health or safety.
07
08

09 SYSTEM CODE SE (11) | CAUSE CODE E (12) | CAUSE SUBCODE G (13) | COMPONENT CODE INSTRU (14) | COMP. SUBCODE E (15) | VALVE SUBCODE Z (16)

(17) LER/RO REPORT NUMBER: EVENT YEAR 78 | — | SEQUENTIAL REPORT NO. 001 | / | OCCURRENCE CODE 03 | REPORT TYPE L | — | REVISION NO. 0

ACTION TAKEN E (18) | FUTURE ACTION C (19) | EFFECT ON PLANT Z (20) | SHUTDOWN METHOD Z (21) | HOURS (22) 0000 | ATTACHMENT SUBMITTED N (23) | NPRD-4 FORM SUB. Y (24) | PRIME COMP. SUPPLIER N (25) | COMPONENT MANUFACTURER G080 (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 Torus oxygen sensor - G.E. PN 23991-47C226431-P1 was replaced. All wiring
11 and connections were inspected and found satisfactory. Calibration of
12 replacement sensor restored system operability. New improved monitoring
13 equipment is being purchased to replace the present system.
14

15 FACILITY STATUS E (28) | % POWER 078 (29) | OTHER STATUS (30) NA | METHOD OF DISCOVERY B (31) | DISCOVERY DESCRIPTION (32) Inservice Inspection

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

17 PERSONNEL EXPOSURES NUMBER 000 (37) | TYPE Z (38) | DESCRIPTION (39) NA

18 PERSONNEL INJURIES NUMBER 000 (40) | DESCRIPTION (41) NA

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

20 PUBLICITY ISSUED N (44) | DESCRIPTION (45) NA | NRC USE ONLY

NAME OF PREPARER _____ PHONE: _____