

LICENSEE EVENT REPORT

CONTROL BLOCK: 1 2 3 4 5 6 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 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

(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 0 3 4 1 1 1 1 4 5
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 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

CONT

0 1 REPORT SOURCE L 6 0 5 0 0 0 2 9 6 7 1 2 1 4 8 3 8 1 2 2 7 8 3 9
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 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES 10

0 2 During the unit 3 cycle 5 refueling outage, 9 of 13 2-stage
0 3 relief valves tested for as-found set pressure initially failed to
0 4 lift within the allowable 1% tolerance (T.S. 2.2.A). The total
0 5 average deviation is 3.72%. There was no effect on the health or
0 6 safety of the public. Per previous calculations performed by the
0 7 General Electric Company, a 5% deviation would have no significant
0 8 effect on nuclear safety.

0 9 SYSTEM CODE CAUSE CODE CAUSE SUBCODE COMPONENT CODE COMP. SUBCODE VALVE SUBCODE
C C 11 E 12 X 13 V A L V E X 14 X 15 B 16
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 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

17 LER/RO REPORT NUMBER EVENT YEAR 8 3 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 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

ACTION TAKEN FUTURE ACTION EFFECT ON PLANT SHUTDOWN METHOD HOURS ATTACHMENT SUBMITTED NPD-4 FORM SUB. PRIME COMP. SUPPLIER COMPONENT MANUFACTURER
X 18 X 19 Z 20 Z 21 0 0 0 0 Y 23 N 24 L 25 T 0 2 0
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS 27

1 0 As stated in previous similar LERs, the cause is being evaluated by
1 1 the manufacturer. When the cause is determined by the manufacturer,
1 2 a followup report will be issued. The nine Target Rock Model
1 3 7567F-100 safety relief valves that failed will be reset and
1 4 retested prior to installation.

1 5 FACILITY STATUS % POWER OTHER STATUS METHOD OF DISCOVERY DISCOVERY DESCRIPTION
H 28 0 0 0 29 NA B 31 Routing testing
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 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

1 6 RELEASED OF RELEASE AMOUNT OF ACTIVITY LOCATION OF RELEASE
Z 33 Z 34 NA NA
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 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

1 7 PERSONNEL EXPOSURES NUMBER TYPE DESCRIPTION
0 0 0 37 Z 38 NA
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 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

1 8 PERSONNEL INJURIES NUMBER DESCRIPTION
0 0 0 40 NA
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 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

1 9 LOSS OF OR DAMAGE TO FACILITY TYPE DESCRIPTION
Z 42 NA
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 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

2 0 PUBLICITY ISSUED DESCRIPTION
N 44 NA
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 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

B401040237 831227
PDR ADGCK 05000296
S PDR

NRC USE ONLY

E. T. Holder

(205) 729-0885

LER SUPPLEMENTAL INFORMATION

BFRO-50-296 / 83060 Technical Specification Involved 2.2.A

Reported Under Technical Specification 6.7.2.a.1 * Date Due NRC 12/28/83

Event Narrative:

Units 1 and 3 were in refueling outages and unit 2 was operating normally at 95% power. Unit 3 was the only unit affected by this event. While performing bench tests at Wyle Laboratories on the main steam relief valves per Technical Specification 4.6.D.1, nine of the 13 valves' as-found set pressure initially failed to lift within the allowable 1% or ± 11 psig tolerance (T.S. 2.2.A). These valves will be reset and retested prior to installation. The cause is being evaluated with the manufacturers for the Target Rock Model 7567F-100 valves. When the cause is determined by the manufacturer, a followup report will be submitted. The total average deviation for these nine valves is 3.75%. Previous calculations by General Electric Company indicated that a total average deviation in relief valve setpoint of 5.0% could have existed with no significant effect on nuclear safety. The evaluations performed in LER BFRO-50-296/81074 remain valid in that this problem does not result in an overpressurized condition of reactor vessel piping nor does it result in any appreciable increase in MCPR operating limit. There was no effect on the public health and safety. Tabulated on the attachment are the valve serial numbers, set pressures, as-found set pressures, and percent deviation for the first lift of these nine MSRVs.

* Previous Similar Events:

BFRO 50-260/8227
296/8174
259/8125
296/8054
260/8040
259/8336

Retention: Period - Lifetime; Responsibility - Document Control Supervisor

*Revision: *JRP*

ATTACHMENT TO LER 296/83060

<u>Serial Number</u>	<u>Set Pressure</u>	<u>As-Found Set Pressure</u>	<u>Percentage Deviation</u>
1018	1115 \pm 11 psig	1130 psig	1.3
1019	1125 \pm 11 psig	1161 psig	3.2
1023	1105 \pm 11 psig	1121 psig	1.4
1024	1125 \pm 11 psig	1179 psig	4.8
1029	1125 \pm 11 psig	1176 psig	4.5
1030	1115 \pm 11 psig	1158 psig	3.9
1063	1105 \pm 11 psig	1197 psig	8.3
1078	1125 \pm 11 psig	1149 psig	2.1
1085	1125 \pm 11 psig	1170 psig	4.0

The total average deviation for these nine valves was 3.72%.

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

1750 Chestnut Street Tower II

December 27, 1983

23 DEC 29 A 8:58

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

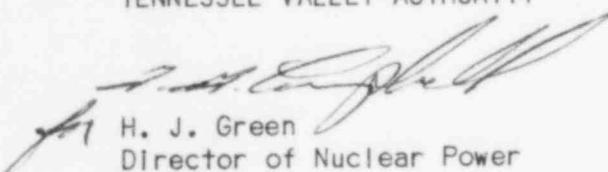
Dear Mr. O'Reilly:

TENNESSEE VALLEY AUTHORITY - BROWNS FERRY NUCLEAR PLANT UNIT 3 - DOCKET
NO. 50-296 - FACILITY OPERATING LICENSE DPR-68 - REPORTABLE OCCURRENCE
REPORT BFRO-50-296/83060

The enclosed report provides details concerning failure of nine of
thirteen 2-stage relief valves to lift within the allowable 1-percent
tolerance when tested for as-found test pressure. This report is
submitted in accordance with Browns Ferry unit 3 Technical Specification
6.7.2.a(1).

Very truly yours,

TENNESSEE VALLEY AUTHORITY



H. J. Green
Director of Nuclear Power

Enclosure

cc (Enclosure):

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

Records Center
Institute of Nuclear Power Operations
Suite 1500
1100 Circle 75 Parkway
Atlanta, Georgia 30339

NRC Inspector, Browns Ferry

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