

LICENSEE EVENT REPORT

CONTROL BLOCK: (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

01 0 H D B S 1 2 0 0 - 0 0 N P F - 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
LICENSEE CODE LICENSE NUMBER LICENSE TYPE CAT 58

01 0 1 L 6 0 5 0 - 0 3 4 6 7 0 3 2 6 7 8 8 0 4 2 1 7 8 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
REPORT SOURCE DOCKET NUMBER EVENT DATE REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 The Absolute Position Indication (API) for Control Rod 12 of Group 5 was declared in-
03 operable on 3/26/78 at 0040 hours and on 3/31/78 at 0900 hours. The API for Control
04 Rod 11 of Group 5 was declared inoperable on 4/3/78 at 1549 hours. These occurrences
05 placed the unit in Action Statement (a) of Technical Specification 3.1.3.3. There
06 was no danger to the health and safety of the public or unit personnel. The Relative
07 Position Indication (RPI) as well as zone reference indication for each rod were opera-
08 ble during the period that each API was inoperable. (NP-33-78-38)
09

09 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
SYSTEM CODE CAUSE CODE CAUSE SUBCODE COMPONENT CODE COMP. SUBCODE VALVE SUBCODE
R B E A E L E C O N Z Z
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
LER RO REPORT NUMBER EVENT YEAR SEQUENTIAL REPORT NO. OCCURRENCE CODE REPORT TYPE REVISION NO. COMPONENT MANUFACTURER
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
ACTION TAKEN FUTURE ACTION EFFECT ON PLANT SHUTDOWN METHOD HOURS ATTACHMENT SUBMITTED NPD-4 FORM SUB. PRIME COMP. SUPPLIER
B Z Z Z 0 0 0 0 Y Y A B 3 6 5
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

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 The cause of the occurrence is attributed to component failure in the penetration area.
11 During the May/June/July 1978 outage, the conductors which carry the Group 5, Rod 12
12 API signals from containment to the control rod drive cabinets were connected to spare
13 connectors of the penetration. Post-outage operation has revealed no further problems.
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
FACILITY STATUS POWER OTHER STATUS METHOD OF DISCOVERY DISCOVERY DESCRIPTION
E 0 8 4 NA A NA
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
ACTIVITY CONTENT RELEASED OF RELEASE AMOUNT OF ACTIVITY LOCATION OF RELEASE
Z Z NA NA
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 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
PERSONNEL EXPOSURES NUMBER TYPE DESCRIPTION
0 0 0 Z NA
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
PERSONNEL INJURIES NUMBER DESCRIPTION
0 0 0 NA
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

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
LOSS OF OR DAMAGE TO FACILITY TYPE DESCRIPTION
Z NA
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
PUBICITY ISSUED DESCRIPTION
N NA
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

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
DVR 78-049, NAME OF PREPARER Susan Kovach PHONE: 419-259-5000, Ext. 230
NRC USE ONLY

TOLEDO EDISON COMPANY
DAVIS-BESSE UNIT ONE NUCLEAR POWER STATION
SUPPLEMENTAL INFORMATION FOR LER NP-33-78-38

DATE OF EVENT: March 26, 1978 - April 3, 1978

FACILITY: Davis-Besse Unit 1

IDENTIFICATION OF OCCURRENCE: Absolute Position Indication (API) for Group 5, Rods 11 and 12 was inoperable.

Conditions Prior to Occurrence: The unit was in Modes 1, 2 or 3 with Power (MWT) ranging from 0-2336, and Load (MWE) ranging from 0-394.

Description of Occurrence: On March 26, 1978, the API for Rod 12 of Group 5 was observed to have had sporadic indication. At 0040 hours, this Absolute Position Indication was declared inoperable by the Shift Foreman. On March 31, 1978, at 0900 hours, the same API was declared inoperable. On April 3, 1978 at 1549 hours, the API for Group 5, Rod 11 (displayed on Group 5, Rod 12's position indicating meter) was declared inoperable.

These occurrences placed the unit in Action Statement (a) of Technical Specification 3.1.3.3. This Technical Specification requires the operability of all APIs in Modes 1 and 2. Action Statement (a) of Technical Specification 3.1.3.3 specifies that operation may continue provided that the position reference indicator (zone reference) of the control rod is verified within eight hours of the occurrence, and at least once per twelve hours thereafter.

In each case, Group 5 was placed in the asymmetric bypass condition.

Designation of Apparent Cause of Occurrence: The cause of the occurrence is attributed to component failure in the penetration area. The exact cause of the occurrence was not determined until entry into containment was permitted during the May/June/July, 1978 outage.

Analysis of Occurrence: There was no danger to the health and safety of the public or to unit personnel. The Relative Position Indication (RPI) as well as zone reference indication for each rod was operable during the period that each API was inoperable.

Corrective Action: Surveillance requirements 4.1.3.3 as well as the requirements of Action Statement (a) was followed.

As reported in Licensee Event Report NP-33-78-26, Maintenance personnel performed an inspection of connectors and cable at the bulkhead, control rod drive mechanism, and position indicator tube for Control Rod Drive Group 5 Rod 12 under Maintenance Work Order (MWO) 78-319. Since Licensee Event Report NP-33-78-26 was written,

Maintenance has replaced the cable from the API tube to the bulkhead (MWO 78-512).

MWO 718-78 was issued (after approval of Facility Change Request 78-169) to change wires at the penetration from Rod 12 to a spare and to switch the position indication cables for Rods 11 and 12 at the position indication tubes. The position indication patch for Rods 11 and 12 were exchanged under MWO IC 277-78. On March 30, 1978, the patch and position cables were returned to their original configuration.

On March 31, 1978, under Facility Change Request (FCR) 78-173, the position indication cable for Group 5 Rod 12 was switched with the position indication cable for Group 5 Rod 11. In addition, the cable for Group 5 Rod 12 from the penetration to the bulkhead was replaced with a new one. All work was performed under MWO 78-512. This change was recommended by Diamond Power Specialty Corporation as an aid in troubleshooting the Group 5 Rod 12 problem. As a result of this change, the API signal for Group 5, Rod 12 was on Group 5 Rod 11s API meter and vice versa. Relative Position Indication for each rod remained unaffected. The zone reference lights for Group 5 Rod 12 were displayed on Group 5 Rod 11s zone reference lights, and vice versa.

On April 7, 1978 under FCR 78-180 and MWO IC 285-78, the API signal leads for Group 5 Rod 11 were exchanged with the API signal leads for Group 5 Rod 12 at the penetration. The APIs for both Rod 11 and 12 of Group 5 were inoperable for the few minutes required to switch cables. RPIs and zone reference lights for each rod were operable during this time. The API signals for Group 5 Rods 11 and 12 were returned to their respective meters. The zone reference lights for Rod 12 of Group 5 were still displayed on Rod 11 Group 5 zone reference lights. As a result of this change, it was determined that the problem with the API on Rod 12 of Group 5 originated in the penetration area.

The unit was removed from Action Statement (a) of Technical Specification 3.1.3.3 on March 30, 1978 at 1750 hours, on March 31, 1978 at 1845 hours and on April 6, 1978 at 0950 hours, after performance of Surveillance Test ST 5013.03, "Containment Pressure to SFAS Channel Calibration".

During the May/June/July outage, position indication cables for Group 5, Rods 11 and 12 were returned to their original rods. Also during this time under Maintenance Work Order 78-512, the conductors which carry the Group 5, Rod 12 API signals from containment to the Control Rod Drive Cabinets were connected to spare connectors of the penetration. Post-outage operation to date has revealed no further problems. A recurrence is not expected since it is felt that the difficulties in the problem area (penetration) have been resolved.

Failure Data: This is a repetitive occurrence. The API for Rod 12, Group 5 was inoperable in three previously reported occurrences, Licensee Event Reports NP-33-78-02, NP-33-78-19 and NP-33-78-26.