NRC FORM 366
(7-77)

# LICENSEE EVENT REPORT

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

0 1 | M A Y K R 1 (2) | 0 0 - 0 0 0 0 0 - 0 0 (3) | 4 1 1 1 1 (4) | (5)

7 8 9 LICENSEE CODE 14 15 LICENSE NUMBER 25 26 LICENSE TYPE J0 57 CAT 58

CON'T

0 1 | REPORT SOURCE I (6) | 0 5 0 0 0 0 2 9 (7) | 1 1 0 1 7 8 (8) | 1 1 1 5 7 8 (9)

7 8 60 61 DOCKET NUMBER 68 69 EVENT DATE 74 75 REPORT DATE 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 | During refueling while removing guide tubes an auxiliary set of latches

0 3 | closed on the no. 23 control rod (C.R.) drive shaft, thus withdrawing

0 4 | the C.R. The withdrawal of a C.R. constitutes an unplanned reactivity

0 5 | insertion of >0.5% delta K/K (T.S. 6.9.4.a.[4]). There were no adverse

0 6 | effects upon public health or safety or plant personnel. Source counts

0 7 | remained stable, M.C.S. was borated to >7.0% shutdown and no other rods

0 8 | were withdrawn during this event.

7 8 9 80

0 9 | SYSTEM CODE R B (11) | CAUSE CODE D (12) | CAUSE SUBCODE Z (13) | COMPONENT CODE X X X X X X (14) | COMP. SUBCODE Z (15) | VALVE SUBCODE Z (16)

7 8 9 10 11 12 13 18 19 20

(17) LER/RO REPORT NUMBER: EVENT YEAR 7 8 (21 22) | — (23) | SEQUENTIAL REPORT NO. 0 2 9 (24 26) | / (27) | OCCURRENCE CODE 0 1 (28 29) | REPORT TYPE T (30) | — (31) | REVISION NO. 0 (32)

ACTION TAKEN G (18) | FUTURE ACTION Z (19) | EFFECT ON PLANT Z (20) | SHUTDOWN METHOD Z (21) | HOURS (22) 0 0 0 0 (33 34 35 36 37 40) | ATTACHMENT SUBMITTED Y (23) | NPRD-4 FORM SUB. N (24) | PRIME COMP. SUPPLIER Z (25) | COMPONENT MANUFACTURER Z 9 9 9 (26)

41 42 43 44 47

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 | The cause of this event was an improper setting of the manipulator

1 1 | handling tool load cell controller. The controller was immediately

1 2 | readjusted, plant procedures were revised, and Refueling Supervisors

1 3 | and Shift Supervisors were reminded of their responsibilities for

1 4 | adherence to procedures and Technical Specifications.

7 8 9 80

1 5 | FACILITY STATUS H (28) | % POWER 0 0 0 (29) | OTHER STATUS (30) NA | METHOD OF DISCOVERY D (31) | DISCOVERY DESCRIPTION (32) Operator/Inspector Observation

7 8 9 10 12 13 44 45 46 80

1 6 | 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

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

7 8 9 11 12 13 80

1 8 | PERSONNEL INJURIES NUMBER 0 0 0 (40) | DESCRIPTION (41) NA

7 8 9 11 12 80

LOSS OF OR DAMAGE TO FACILITY (43)

1 9 | TYPE Z (42) | DESCRIPTION NA

7 8 9 10 80

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PUBLICITY

2 0 | ISSUED N (44) | DESCRIPTION (45) NA | NRC USE ONLY

7 8 9 10 68 69 80

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LER 50-29/78-29/01T-0
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## EVENT DESCRIPTION AND PROBABLE CONSEQUENCES

During refueling operations in Mode 6 the V.C. manipulator crane operator was in the process of removing core internals in preparation for the fuel handling operations. A guide tube was latched on the manipulator handling tool. Upon withdrawing the guide tube, two auxiliary sets of latches closed on the No. 23 control rod drive shaft withdrawing the control rod. The withdrawal of the control rod constitutes an unplanned reactivity insertion of greater than 0.5% $\Delta K/K$ (T.S. 6.9.4.a[4]). Main coolant parameters during this event: boron 2094 ppm; temperature 80°F. Based on stuck rod calculations for Core XIII, it is estimated that at 68°F rod 23 is worth between 2.23% $\Delta\rho$ and 2.13% $\Delta\rho$.

During this event the source count rate channels were stable, the main coolant system was borated to > 7% shutdown margin and no other rods were withdrawn. During and after refueling operation the process of withdrawing a control rod is a normal surveillance activity for verifying shutdown margin and rod operability tests. There were no adverse effects upon the health and safety of the public or plant personnel as a result of this event.

## CAUSE DESCRIPTION AND CORRECTIVE ACTIONS

The cause of this event was an improper setting of the manipulator handling tool load cell controller. The controller was set to trip all latches at 50 pounds greater than base load. The guide tube weighs approximately 100 pounds; therefore the latches on all the fingers closed causing the tool to withdraw the control rod train along with the guide tube. The weight of the control rod train is approximately equivalent to the interference weight normally seen during guide tube removal; therefore, the operator was unaware he had the rod drive train until it was visible.

The I & C Department was notified and adjusted the controller for handling guide tubes, weight tubes and drive shafts.

Plant procedures were updated to include the set points on the controller for various core components, and precautions were inserted pertaining to control rod withdrawal. The Shift Supervisors and Refueling Supervisors were issued a memo to exercise extreme caution during the movements of core components.