Commonwealth Edison
1400 Opus Place
Downers Grove, Illinois 60515

DCS

May 17, 1991

Mr. J. Lieberman, Director
Office of Enforcement
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attn: Document Control Desk

Subject: Dresden Nuclear Power Station Unit 2
Notice of Violation and Proposed Imposition
of Civil Penalty
NRC Docket Number 50-237

References: (a) A.B. Davis (NRC) letter to Cordell Reed (CECo) dated April 17, 1991.

(b) T.O. Martin (NRC) letter to Cordell Reed (CECo) dated February 7, 1991.

(c) D. Galle (CECo) letter to A.B. Davis (NRC) dated February 21, 1991.

(d) T.O. Martin (NRC) letter to Cordell Reed (CECo) dated March 15, 1991.

(e) T.J. Kovach (CECo) letter to A.B. Davis (NRC) dated March 28, 1991.

Mr. Lieberman:

This letter provides Commonwealth Edison Company's (CECo) response to the Notice of Violation and Proposed Imposition of Civil Penalty as transmitted in Reference (a). An Enforcement Conference was held on February 14, 1991 to discuss the results of the NRC's inspection (Reference (b)) of the events surrounding the December 17, 1990 failure of the containment integrated leak rate test (CILRT) due to excessive leakage through the inboard flange of a containment isolation valve. CECo provided the NRC in Reference (c) additional information requested during the February 14, 1991 Enforcement Conference. Region III provided their review of the Enforcement Conference and supplemental materials in Reference (d). Following discussions with NRR, additional information regarding Standby Gas Treatment System efficiency and secondary containment holdup was provided in Reference (e).

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Commonwealth Edison acknowledges the violation of Technical Specification requirements as stated in the Notice of Violation contained in Reference (a). The attachment to this letter contains the immediate corrective actions taken as well as additional corrective actions which should be effective in precluding recurrence of the violation.

In accordance with 10 CFR 2.205, enclosed is the payment of $100,000 in response to the imposed civil penalty.

If there are any questions or comments regarding this response, please contact the undersigned at 708/515-7330

Very truly yours,

T.J. Kovach
Nuclear Licensing Manager

Attachment: Civil Penalty Check #HG-002 00001139
$100,000.00

cc: A.B. Davis, Regional Administrator, Region III
B.L. Siegel, Project Manager, NRR
D.E. Hills, Dresden

ZNLD937

NOTICE OF VIOLATION

AND

PROPOSED IMPOSITION OF CIVIL PENALTY

Commonwealth Edison Company
Dresden Station, Unit 2

Docket No. 50-237
License No. DPR-19
EA 91-014

During an NRC inspection conducted on January 23-28, 1991, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1990), the Nuclear Regulatory Commission proposes to impose a civil penalty pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205. The particular violation and associated civil penalty are set forth below:

Dresden Technical Specification Limiting Condition for Operation 3.7.A.2 requires, in part, that primary containment integrity be maintained whenever the reactor is critical.

Technical Specification Limiting Condition for Operation 3.7.A.2.b states, in part, that when primary containment integrity is required, primary leakage rates will be limited to an overall leakage rate of less than or equal to 75 percent of L_a.

Technical Specification Limiting Condition for Operation 3.7.A.2.a(3) defines the maximum allowable leakage (L_a) as being equal to 1.6 percent by weight of the containment air per 24 hours at 48 psig.

Technical Specification 3.0.A states, in part, in the event a Limiting Condition for Operation cannot be satisfied because of circumstances in excess of those addressed in the specification, the unit shall be placed in at least hot shutdown within 12 hours and in cold shutdown within the following 24 hours unless corrective measures are completed that satisfy the Limiting Conditions for Operation.

Contrary to above, during the periods of reactor criticality between February 19, 1989, and September 23, 1990, primary containment integrity was not maintained in that the inboard flange on containment isolation valve 2-1601-20A was found to have a leakage rate greater than L_a. Additionally, the unit was not placed in at least hot shutdown within 12 hours and in cold shutdown within the following 24 hours, nor were corrective measures completed that satisfy the Limiting Conditions for Operation.

This is a Severity Level III violation (Supplement I).
Civil Penalty - $100,000.

DISCUSSION

Commonwealth Edison agrees that the violation occurred as stated in the Notice of Violation. A detailed discussion on the circumstances of the violation was conducted during the Enforcement Conference which was held on February 14, 1991 at the NRC Region III office.

Eight containment butterfly valves (eighteen and twenty inch) were replaced by Pratt 1200 series valves in February, 1989 during a refueling outage (D2R11) for Unit 2. These valves, which are flanged into their system lines, were replaced using a work package which relied on a new procedure, Dresden Maintenance Procedure (DMP) 1601-2, "Drywell and Torus Air Operated Butterfly Valve Maintenance". This procedure gave inadequate instructions for tightening the flange bolts. In addition, the work package gave inadequate Post Maintenance Test (PMT) instructions. Although the normal Local Leak Rate Test (LLRT) was specified, the appropriate boundaries were not evaluated for inclusion into the LLRT. Seven of the eight butterfly valves were correctly installed. The remaining valve's (AO 2-1601-20A) inboard flange had two bolts (out of a total of twenty) which were inadequately tightened. The normal periodic LLRT, which challenges the valve seat and outboard flange, but not the inboard flange, was used to conduct the PMT LLRT. Therefore, the inboard flange was not subjected to a PMT LLRT. A containment Integrated Leak Rate Test (CILRT) was not conducted during that refueling outage (D2R11) as it was not required. A CILRT was conducted in December, 1990 during the subsequent refueling outage (D2R12). At that time the inboard flange was discovered to be leaking.

CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED:

1. The bolts of the inboard flange for AO 2-1601-20A were retightened; only two bolts were able to be turned approximately 1/4 turn. This stopped the leak as verified by a snoop test. The unit subsequently passed the CILRT.

2. All of the flange bolts on the eight butterfly valves on both units were checked and found to be adequately tightened.

CORRECTIVE STEPS TAKEN TO AVOID FURTHER VIOLATIONS:

1. A Procedure Change to DMP 1601-2 will be made prior to its next use to include requirements for adequate tightening of the flange bolts. Additionally, procedure DMP 1601-2 will be changed to specify an appropriate PMT whenever the integrity of these flanges is distrubed, (See 4. Below).

2. The Station Work Analysts' pre-job checklist was revised to ensure adequate guidance is provided in work packages concerning bolting requirements. Existing maintenance procedures will be reviewed for adequacy of bolting instructions as they are incorporated into work packages.

3. A Nuclear Operations Directive (NOD) on bolting practices will be issued by June 30, 1991. This NOD is based on the Electric Power Research Institute (EPRI) manual, "Good Bolting Practices." The information in the EPRI manual has been provided to the maintenance work analysts to use as guidance in work package preparation pending issuance of the final NOD.

4. Modifications and testing methods are being evaluated which will allow localized PMT LLRT of the inboard flanges for the butterfly valves. Following any further maintenance on these buttefly valves which could affect the integrity of the inboard flanges, one of the following PMTs will be performed to verify the integrity of the inboard flanges:

   - an appropriate LLRT
   - a CILRT
   - the drywell will be pressurized to 48 psi and snoop tested to verify no leakage.

5. A comprehensive review of primary containment pathways has been completed and will be used by the Maintenance Department work analysts to initiate appropriate leak rate testing review into the work package. The program will be in place by June 30, 1991, and will be provided to maintenance work analysts who will be trained in its use.

6. Dresden Administrative Procedure (DAP) 14-5, "Leak Rate Testing Program," will be revised by August 30, 1991 to caution against inappropriate application of standard periodic LLRT lineups for PMTs.

7. A review of Inspection and Enforcement Notice (IEN) 86-16, "Failures to Identify Containment Leakage due to Inadequate Local Testing of BWR Vacuum Relief System Valves," will be performed by July 1, 1991 to determine if additional actions are needed.

8. CECo is planning to meet with NRR to discuss the BWROG position on the periodic testing of the vaccum breaker containment isolation valves, their inboard flanges, and certain other containment barriers with respect to Appendix J requirements. If resolution of this issue is not reached before the Fall, 1991 Unit 3 outage (D3R12), a CILRT will be performed to assure the adequacy of the Unit 3 primary containment during cycle 13 operation.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:

Full Compliance was achieved on December 17, 1990, when the bolts for the inboard flange of the valve (AO 2-1601-20A) were properly tightened and the flange was challenged by a CILRT and snoop tested to verify that it was capable of withstanding an internal pressure of 48 psi without leaking.