NOTICE OF VIOLATION

Commonwealth Edison Company
Dresden Nuclear Power Station

Docket Nos. 50-237; 50-249
Licenses No. DPR-19; DPR-25

As a result of the inspection conducted on November 1, 1988 through March 30, 1989, and in accordance with the "General Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1988), the following violations were identified:

A. 10 CFR Part 50, Appendix B, Criterion III, requires that measures be established to assure that applicable information which identifies the specific function to be performed by a system or component of a facility, and the specific values, or ranges of values, chosen for controlling parameters as reference bounds for design, are correctly translated into specific drawings, procedures, and instructions.

Contrary to the above, when the 250vdc battery was sized, the design assumed that five motor driven pumps would be manually shed at specific times ranging from 1/2 to 2 hours after the loss of power to the station and battery chargers; however, the licensee failed to correctly translate this assumption into station procedures to ensure that this would be carried out. As a result, Unit 3 operated from the completion of its Spring 1988 refueling outage until December 1988 without adequate assurance that the 250vdc battery was capable of performing its design function. No calculations existed to demonstrate that in the absence of this load shedding the 250vdc battery could perform its safety function for the required time of four hours after the battery chargers are lost.

This is a Severity Level IV violation (Supplement I).

B. 10 CFR Part 50, Appendix B, Criterion XI, requires that a test program be established to assure that all testing required to demonstrate that systems and components will perform satisfactorily in service is performed in accordance with written test procedures which incorporate the requirements and acceptance limits contained in applicable design documents.

In Attachment A of its letter approving Modification M12-2-85-83, involving replacement of the 250vdc batteries, dated March 21, 1988, the BWR Engineering Department (BWRED) described the testing required to demonstrate that the system would perform satisfactorily. Under construction testing for the purpose of ensuring proper cell connections (corrective action required if battery voltage < sum of individual cell voltages) it required that the terminal voltage of the battery be compared to the sum of the individual cell voltages, prior to connecting the battery to the bus. It also required that the insulation dielectric adequacy of the battery power cables be verified by performing a megger test at $\geq$ 500 volts and the measured resistance be $\geq$ 50 megohms. Contrary to the above, the following tests were performed which did not incorporate the requirements and acceptance limits contained in the applicable design documents:

1. Electrical construction test procedure for modifications, "#28 - Lead Calcium Batteries," Step 5.7, performed by the Operational Analysis Department compared the measured battery voltage to the product of the number of cells times 2.03 volts per cell. Since 2.03 volts is the minimum acceptable voltage per cell, its use would always give a satisfactory result and the purpose of the BWRED acceptance criteria was negated. BWRED was not consulted and had not modified its requirements at the time the construction test was completed on December 6, 1988. An identical test was performed on the 125v DC battery modification M12-12-88-66.

2. Electrical construction test procedure for modifications, "#24-Power Cables," established the acceptance criteria for the battery power cables insulation resistance at $\geq$ 1.6 megohms or 31 times less than the value required by the BWRED. There were no documents showing that the BWRED had been consulted and had approved the reduction in the acceptance criteria. An identical test was performed on the 125vdc battery modification M12-2-88-56.

In all four cases, the licensee approved the test results without noting these non-conservative deviations from BWRED testing requirements.

This is a Severity Level IV violation (Supplement I).

C. Technical Specifications Paragraph 6.2.A.3 requires that detailed written procedures covering actions to be taken to correct specific and foreseen potential malfunctions of systems or components shall be adhered to. DAP 13-14, Revision 1, as modified by Temporary Change #88-3-190 dated April 5, 1988, "Material Interlock Access Control," requires that the material interlock inner door shall be closed whenever the material interlock is left unattended (i.e., during breaks and lunch periods).

Contrary to the above, on November 15, 1988, the inspector observed that the Unit 3 Reactor Building material interlock inner door had been left open and was unattended. Further investigation revealed that the door had been left open and unattended on two occasions that morning for a total period of approximately 45 minutes.

This is a Severity Level IV violation (Supplement I).

With respect to Item C, the inspection showed that actions had been taken to correct the identified violation and to prevent recurrence. Consequently, no reply to the violation is required and we have no further questions regarding this matter. With respect to the remaining items, pursuant to the provisions of 10 CFR 2.201, you are required to submit to this office within thirty days of the date of this Notice a written statement or explanation in reply, including for each violation: (1) the corrective actions that have been taken and the results achieved; (2) the corrective actions that will be taken to

avoid further violations; and (3) the date when full compliance will be achieved. Consideration may be given to extending your response time for good cause shown.

ORIGINAL SIGNED BY HUBERT J. MILLER

MAY 0 8 1989

Dated

Hubert J. Miller, Director
Division of Reactor Safety