



**Commonwealth Edison**  
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Chicago, Illinois 60690

June 10, 1985

Mr. Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Subject: Dresden Station Units 2 and 3  
Update on Activities Related to  
IE Bulletin 81-03, Flow Blockage of  
Cooling Water to Safety System Components  
by Corbicula and Mytilus  
NRC Docket Nos. 50-237/249

- Reference (a): Closeout of IE Bulletin 81-03  
(b): Supplemental Response to IE Bulletin 81-03,  
dated July 30, 1982, B. J. Christel to  
T. J. Rausch  
(c): Supplemental Response to IE Bulletin 81-03,  
dated March 11, 1983, L. J. Turnquest to  
E. D. Swartz

Dear Mr. Denton:

Reference (a) closed out Bulletin 81-03 for 85 facilities  
and recommended followup for the remaining facilities. Dresden  
Units 2 and 3 fall under the second category requiring followup.  
Attached is a current summary of activities associated with the  
Bulletin.

One original and fifteen copies are being provided for your  
use.

Sincerely,

Greg Alexander  
Nuclear Licensing Administrator

bs:

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PDR ADOCK 05000237  
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cc: J. G. Keppler  
Resident Inspectors

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The clam control methods at Dresden Station are as follows:

The Service Water Heat Exchanger program as described in the supplemental response to NRC I.E. Bulletin 81-03, dated July 30, 1982 has been implemented. Pressure gauges have been installed on those heat exchangers to be monitored by differential pressure. Data is collected weekly using the Plant System Checklist, DTP-10, Appendix A. When the differential pressure across a heat exchanger exceeds a pre-determined value, the heat exchanger is taken out of service and cleaned. Flow reversal capability has been installed on both the HPCI Emergency Room Coolers and the X-Area Room Coolers. Temperature recorders are located in the Control Room with associated annunciators that alarm on high area temperature. When this occurs, flow is reversed through the coolers to remove clam blockage.

The Diesel generator Cooling Water Heat Exchangers are also equipped with flow reversal capability and this is performed twice a year during the clam spawning season in accordance with DOS 6600-2, "Flow Reversal of Diesel Generator Cooling Water Heat Exchangers, or more often as differential pressures indicate.  $\Delta$  P reading across these heat exchangers are obtained by DOS 6600-1, "Diesel Generator Surveillance Tests". The Diesel Generator Cooling Water Heat Exchangers are also cleaned annually as part of the Diesel Generator Annual Surveillance.

The LPCI/CCSW Heat Exchangers have not been monitored by any means, only cleaned once per refueling outage. It was originally thought that due to the short periods of time that these heat exchangers are in service, they would not experience significant clam infestation and that periodic cleanings would suffice. However, a recent inspection of the 3B LPCI/CCSW Heat Exchangers revealed significant clam blockage only less than a year after it had been cleaned. To rectify this situation, pressure gauges will be installed on the LPCI/CCSW Heat Exchangers and differential pressures will be monitored by Operations during normal LPCI surveillances when the heat exchangers are in service. Cleanings will be scheduled as needed.

In addition to the LPCI/CCSW Heat Exchangers, the Station has decided that the CCSW Vault Room Coolers and the LPCI/Core Spray Room Coolers need better monitoring to ensure proper operation. Therefore, pressure gauges and flow reversing capability have been installed on Unit 2 CCSW Vault Room Coolers and will be installed on Unit 3 during the 1985 refueling outage. Differential pressures will be obtained by DOS 1500-3, "Containment Cooling Service Water Pump Test", and flow reversal will be performed when needed in accordance with DOP 1500-4, "Reversing Service Water Flow Through CCSW Room Coolers". When pressure gauges have been installed on the LPCI/Core Spray Coolers, data will be obtained by the Operating Department during one of the monthly surveillances. Cleanings will be scheduled as needed. It should be noted that all commitments in

the IE Bulletin response regarding heat exchangers have been satisfied. As an extra precaution, the LPCI/CCSW Heat Exchangers, CCSW Vault Room Coolers and LPCI/Core Spray Room Coolers are being equipped with pressure gauges and/or flow reversal capability as their utilization of service water may result in significant clam problems.

Lastly, vacuum dredging of the intake bays will be carried out following the 1984 refueling outage. Peterson Diving Service will be contracted to vacuum dredge each circulating water bay, before and after the traveling screens. As vacuum dredging every year is probably not necessary, Dresden will redredge only when it becomes evident that the intake bays are becoming significantly re-infested with clams.

All commitments in Dresden's response to I.E. Bulletin 81-03 have been satisfied with the exception of vacuum dredging which is in the planning stage and should be completed by July 1, 1985. We feel that all of the above preventive measures will help us to control our clam problem effectively, since at present there exists no way to completely remove clams permanently from our source waters.

A. Heat Exchangers Monitored by Differential Pressure, DTP-10 Appendix A

- 1) Offgas Glycol Chillers
- 2) Control Room Air Conditioning
- 3) Auxiliary Electric Room Air Conditioning
- 4) Turbine Oil Coolers
- 5) Turbine Building Closed Cooling Water
- 6) Reactor Building Closed Cooling Water
- 7) Main Generator Hydrogen Coolers
- 8) Main Generator Stator Coolers
- 9) Recirculation MG Set Oil Coolers
- 10) CCSW Heat Exchangers\*
- 11) LPCI/Core Spray Room Coolers\*

B. Heat Exchangers Equipped with Flow Reversal

- 1) HPCI Emergency Coolers
- 2) X-Area Room Coolers

C. Heat Exchangers Equipped with  $\Delta$  P Gauges and Flow Reversal

- 1) Diesel Generator Cooling Water Heat Exchangers
- 2) CCSW Vault Room Coolers\*

\*Installations not yet completed.