Commonwealth Edison
1400 Opus Place
Downers Grove, Illinois 60515

July 1, 1993

U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Document Control Desk

Subject: Dresden Nuclear Power Station Units 2 and 3 Response to Notice of Violation and Inspector Followup Items
Inspection Report 50-237/93008; 50-249/93008
NRC Docket Numbers 50-237 and 50-249

Reference: Tom Martin letter to L.O. DelGeorge, dated June 3, 1993, transmitting Inspection Report 50-237/93008; 50-249/93008.

Attached is Commonwealth Edison Company's (CECo) response to the Notice of Violation and two Inspector Followup Items as requested in the referenced letter.

Additional clarification is also provided for the Section 4.0, "System Description", discussion regarding the Containment Cooling Service Water (CCSW) system. Dresden Station disagrees with the inspection report assertion that "two [CCSW] pumps are needed to provide the required cooling capacity" to the LPCI/CCSW heat exchangers. As discussed at length during the February 22, 1993, NRC Enforcement Conference, CECo continues to believe that the proper design basis configuration for the CCSW system is one CCSW pump and one LPCI pump.

If your staff has any questions concerning this letter, please refer them to Denise Saccomando, Regulatory Performance Administrator at (708) 663-7285.

Sincerely,

D. Farrar
Nuclear Regulatory Services Manager

Attachments

cc: J. B. Martin, Regional Administrator Region III
J. Stang, Project Manager, NRR
M. N. Leach, Senior Resident Inspector, Dresden

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ATTACHMENT 1
RESPONSE TO NOTICE OF VIOLATION
NRC INSPECTION REPORT
50-237/93008, 50-249/93008

VIOLATION: (237/93008-02ab; 249/93008-02ab)

10 CFR 50.55a(f)(4) states components that are classified as ASME Code, Class 3 must meet the inservice test (IST) requirements set forth in Section XI of the ASME Boiler and Pressure Vessel Code. ASME Section XI, IWV-3415 requires valves with a fail safe function be tested on a quarterly basis. ASME Section XI, IWV-3522 requires check valves be exercised on a quarterly basis to a position required to fulfill their safety function.

Contrary to the above, the following ASME Code, Class 3 valves were included in the IST Plan, but not tested in accordance with the Code requirements:

a. Control Room HVAC valve 2/3-5741-062, which fails open on a loss of instrument air, has not been fail safe tested on a quarterly basis.

b. Control Room HVAC check valve 2/3-1599-103 has not been exercised to its required open position on a quarterly basis.

REASON FOR VIOLATION

Control Room HVAC valves 2/3-5741-62 and 2/3-1599-103 were not tested due to an oversight. This oversight was identified by the IST Coordinator in the fall of 1992 during a review of the current IST plan and its implementation procedures. These valves were subsequently tested in November and December, 1992. A permanent procedure was developed during the inspection period and prior to the next required test dates.

CORRECTIVE ACTION TAKEN AND RESULTS ACHIEVED

In November, 1992, valve 2/3-1599-103 was exercised open under Special Procedure 92-11-133 and Temporary Procedure Change 92-373. In December of 1992, a Fail Safe Test for valve 2/3-5741-62 was performed under Temporary Procedure Change 92-392 to DOS 1500-03, "Containment Cooling Service Water Pump Test." To meet the quarterly requirements for these valves, another test would have been required in February, 1993, but the D2R13 Refuel Outage began in January, 1993, and all four Containment Cooling Service Water (CCSW) Pumps were taken out-of-service. Due to this condition, the safety related supply to Control Room HVAC was unavailable and valves 2/3-5741-62 and 2/3-1599-103 could not be tested. The quarterly frequency is not required while the system is out-of-service. In May, 1993, the Unit 2 CCSW Pumps were returned to service and valve 2/3-5741-62 satisfactorily passed a fail safe test and valve 2/3-1599-103 satisfactorily exercised open. Both of these tests were performed under DOS 1600-04, which has been revised to include these tests.

Based on the above actions, valves 2/3-5741-62 and 2/3-1599-103 have received the required testing since December, 1992. In addition, during the course of the IST Plan review, it was determined that valve 2/3-1599-103 was inaccurately listed in the IST Plan as 2/3-3899-200. The IST Plan is scheduled for the third ten-year-interval revision by July 1, 1993, and will include the correct valve reference.

CORRECTIVE ACTION TAKEN TO PREVENT FURTHER OCCURRENCE

The subject valves have been properly tested under the IST Program since December, 1992. Permanent procedure DOS 1600-04, "Unit 2/3 Quarterly Valve Timing," was revised and includes the required IST tests.

A review will be performed on all valves in the IST Plan to determine if any other testing specified in the IST Plan is not being performed. Any missing IST requirements not performed will be corrected. The review will be completed by October 6, 1993.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

Full compliance was achieved when valves 2/3-5741-62 and 2/3-1599-103 were successfully tested in December 1992.

ATTACHMENT 2
RESPONSE TO INSPECTOR FOLLOWUP ITEMS
NRC INSPECTION REPORT
50-237/93008, 50-249/93008

INSPECTOR FOLLOWUP ITEM: (237/93008-01; 249/93008-01)

The licensee evaluated two methods for verifying the heat transfer capability of LPCI/CCSW heat exchangers. These two methods were the temperature effectiveness test and the clean/inspect method.

Dresden elected the clean/inspect method over the temperature effectiveness test citing that steady state temperatures and flows could not be obtained; and heat loads would not be available, due to plant conditions, without reducing safety margins.

The team considered the licensee's current posture of verifying the LPCI/CCSW heat exchanger heat transfer capability by the clean/inspect method as weak. The intent of GL 89-13 is to conduct a baseline test to verify the safety related heat exchanger's heat transfer capability, with subsequent scheduled cleaning and maintenance for performance restoration.

The licensee committed to re-examine the possibility of conducting a temperature effectiveness test. Pending completion of this evaluation, this is considered an inspection followup item.

DRESDEN STATION'S RESPONSE:

Dresden has re-examined the possibility of conducting a temperature effectiveness test on the LPCI/CCSW heat exchangers. The goal of such a test would be to obtain baseline information and site specific fouling factors. In order to achieve this goal, the test would have to be performed on a newly cleaned heat exchanger, under conditions which provide large changes between inlet and outlet water temperatures, while maintaining steady state temperatures.

Dresden Station's evaluation concluded that the original decision to clean/inspect the LPCI/CCSW heat exchanger in order to verify heat transfer capability is appropriate. The original basis for the decision is valid. For the temperature effectiveness test, we are not able to input the amount of heat removed by the heat exchanger to achieve steady state temperatures without reducing the plant's level of safety. During certain times of the year, meaningful results may not be achievable because high cooling water temperatures may not provide a large differential temperature. Also, if the cleaning were deferred in lieu of testing, the heat exchanger may need cleaning mid cycle. This would require the removal from service of one of two subsystems of containment cooling.

Nevertheless, Dresden Station recognizes the benefit from performing a heat exchanger performance test and therefore intends to perform a test on each Containment Cooling heat exchanger. The test is to be performed once on each heat exchanger in order to demonstrate heat transfer capability. The tests will be performed when conditions provide adequate heat exchanger differential temperatures. Unit Two testing should be completed prior to the D2R14 refueling outage and Unit Three testing should be completed prior to the D3R14 refueling outage.

INSPECTOR FOLLOWUP ITEM: (237/93008-03; 249/93008-03)

IST procedure DOS 6600-08, "Quarterly Diesel Generator Cooling Water Pump Test for the In-Service Test (IST) Program," Revision 10, contained acceptance limits for flow that were expanded beyond those allowed by the Code without adequate justification. ASME Code Table IWP-3100-2 stated the high values for flow were 1.02 and 1.03 times the reference value for the alert and required action range, respectively. The licensee's test acceptance limits were 1.05 and 1.07 times the reference value.

The licensee's justification for the expanded ranges was the fluctuation exhibited in the flow meters did not allow consistent readability. This justification did not appear to be adequate based on test data that indicated the measured flow rates were within the ASME Code allowable limits since the expanded ranges were used. In addition, the team witnessed a Unit 3 DGCW pump operability test in which the flow rate did not fluctuate substantially.

The licensee committed to review this issue during a subsequent DGCW pump inservice test to determine if the expanded acceptance limits were needed or if other means could reduce the flow fluctuations. Based on the previous test results that were within the ASME Code allowable, this was not a technical concern. This will be considered an inspection follow-up item pending subsequent inservice test results for the DGCW pumps.

DRESDEN STATION'S RESPONSE:

ASME Section XI, Subsection IWP allows the Owner to use establish range limits to allow the pump to fulfill its function. The allowable ranges for flow as established by Table IWP-3100-2 are as follows:

Acceptable Range	Alert Low Range	High Range	Required Action Range
$0.94\text{-}1.02Q_r$	$0.90\text{-}0.94Q_r$	$1.02\text{-}1.03Q_r$	$<0.90Q_r$ $>1.03Q_r$

RESPONSE TO INSPECTOR FOLLOWUP ITEMS
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(continued)

A DAP 11-21B Technical Review, completed April 3, 1992, evaluated the acceptance ranges for the Diesel Generator Cooling Water Pump flow. This Technical Review determined that due to the swing of the flow gauge needle the acceptance ranges should be expanded beyond the limits of Table IWP-3100-2 as follows:

Acceptable Range	Alert Low Range	High Range	Required Action Range
$0.94\text{-}1.05Q_r$	$0.90\text{-}0.94Q_r$	$1.05\text{-}1.07Q_r$	$<0.90Q_r$ $>1.07Q_r$

Although recent IST surveillances on the Diesel Generator Cooling Water Pumps show that the flow has met the acceptable limits of Table IWP-3100-2, Dresden Station does not want to place any of the pumps into the Alert or Required Action Ranges needlessly due to needle fluctuations. To resolve this concern, the Dresden Station Technical Staff will observe the flow gauge needle fluctuations during the next IST surveillance on the Diesel Generator Cooling Water Pumps to determine if the needle swing still warrants the expanded ranges that are currently in use. If it is determined that the swing of the needle would not needlessly place a pump into the Alert or Required Action Range, Dresden Station will revise DOS 6600-08, "Quarterly Diesel Generator Cooling Water Pump Test for the In-Service Test (IST) Program," to incorporate the range limits of Table IWP-3100-2.