



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

October 19, 1984

MEMORANDUM FOR: R. L. Spessard, Director
Division of Reactor Safety, Region III

FROM: Darrell G. Eisenhut, Director
Division of Licensing, NRR

SUBJECT: RELIEF REQUESTS FROM LEAK TESTING REQUIREMENTS AS STATED IN
SECTION XI, SUBSECTION IWV-3420 OF THE ASME CODE
TIA 84-62

REFERENCE: R. L. Spessard memorandum to D. G. Eisenhut dated
July 19, 1984; Request for Technical Assistance - Relief
Requests from Leak Testing Requirements as Stated in Section XI,
Subsection IWV-3420 of the ASME Code (AITS F03043684)

Your July 19, 1984 memo noted that the Commission has granted relief from leak rate testing requirements of IWV-3420 for containment isolation valves and permitted 10 CFR Part 50, Appendix J, type C testing as an alternative. This practice has led to two questions:

1. Does granting such relief exempt licensees from specifying discreet or weighted leak rates for Category A valves addressed by the relief request?
2. Does granting such relief exempt licensees from leak rate analysis and corrective action requirements as stated in IWV-3426 and 3427, respectively as well as those requirements stated in IWV-3420 through IWV-3425?

As requested, we have reviewed the questions and the implications of the granting of exemptions from Section XI, IWV-3420 of the ASME Code. Section XI of the ASME Code requires individual testing for each component in the IST program, including individual acceptance criteria. Containment Isolation Valves (CIVs) are required to be individually included in the IST program because of their accident mitigation service requirements. However, since licensees are required to perform leak rate testing of CIVs in accordance with 10 CFR Part 50, Appendix J, NRR has routinely granted relief from the leak rate test requirements of the ASME Code for these components. For cases where this relief is granted the staff requires that the licensee still meet the Analysis of Leak Rates and Corrective Action requirements of the Code, paragraphs IWV-3426 and IWV-3427 of the 1980 Edition, respectively.

The staff believes that a "weighted" approach is the most appropriate method of assigning allowable leak rates. This method is based on the existence of a linear relationship between valve sizes with respect to allowable leakage (i.e., a 6" valve would be allowed twice the leakage of a 3" valve). Additionally, when the allowable leak rates are added up for all type C tested CIVs, the total should not exceed 0.6 L_A. This allows a certain amount of

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flexibility since the 0.6L_A value specified by Appendix J is the maximum allowed for the combined cumulative leak rates of type C tested CIVs and containment penetrations as determined by type B testing.

This completes NRR review pursuant to TIA 84-62.

Frank J. Muglia
for Darrell G. Eisenhut, Director
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MEMORANDUM FOR: R. C. Lewis, Acting Chief, RO&NS Branch, Region II
FROM: Samuel E. Bryan, A/D for Field Coordination, DROI, IE
SUBJECT: OPERABILITY REQUIREMENTS FOR PUMPS (AITS NO. F02-700028-407)

As we understand them, the questions in your February 1 memo are:

1. Do the Technical Specification ACTION statement time periods run consecutive or concurrently with the data evaluation time (96 hours) given in IWP-3220 of Section XI of the ASME Boiler and Pressure Vessel Code, 1974 Edition with Addenda thru the Summer 1975, and
2. When should the test results be reviewed and, if out-of-specification, the associated pump declared inoperable?

The answer to the first question is the Technical Specification ACTION statement time period starts after the determination is made that the pump is inoperable as defined in Section XI, IWP-3230(c). If the data is within the Required Action Range of Table IWP-3100-2 and it is decided to recalibrate the instruments and rerun the test, as provided for in IWP-3230(b), the Technical Specification ACTION statement time starts when the determination is made that the data is within the Required Action Range. The reasoning behind the preceding statement is that once the determination is made that the data is within the Required Action Range the pump must be declared inoperable. The provisions in IWP-3230 to recalibrate and rerun the test to show the pump is still capable of fulfilling its function are interpreted by us as an alternative to replacement or repair, not an additional action that can be taken before declaring the pump inoperable.

The answer to the second question is that as soon as the data is recognized as being within the Required Action Range the pump must be declared inoperable. Section XI, IWP-6230, "Inservice Test Plans", states that the test plan shall include "The reference values 'Table IWP-3100-1), limits of P_1 and T_b (Table IWP-3100-2), and any other values required by this Subsection." This statement

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then requires the acceptance criteria to be included in the test plan. With that information available, the shift supervisor should be able to make the determination as to whether or not the data meets the requirements. The important point is that once the data becomes available that shows the pump cannot meet the inservice inspection requirements and by definition cannot fulfill its function then the pump must be declared inoperable.

We have discussed the above interpretations with DOR personnel and the Standard Technical Specification Group and they agree. If you have any further questions, please call.

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