

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

DECEMBER 12, 1986

MEMORANDUM FOR: Thomas M. Novak, Acting Director Division of PWR Licensing-A

FROM:

Frank J. Miraglia, Director Division of PWR Licensing-B

SUBJECT: GENERIC LETTER CONTAINMENT INTEGRATED LEAK RATE TESTS

Reference: Memorandum from Thomas Novak to Multiple Addressees dated November 26, 1986

We have reviewed the referenced memorandum and we cannot concur with the generic letter in its present form. Our reasons for this decision are enumerated below:

- The letter does not clarify the present conflict between the regulatory requirements and the widespread practice in industry of using the mass-point method of calculating leak rates of containment endorsed in the ANSI/ANS-56.8-1981.
- 2. We find that allowing the industry to use the mass-point method in calculating the 95% confidence limit while restricting calculation of leakage rates to the two methods presently referenced in the regulations adds more confusion to the already complicated matter.
- 3. The letter does not consider the recommendation of the proposed Regulatory Guide (Task MS 021-5) which has been published for comments. This document has been referenced in the Proposed Rule 10 CFR 50 "Leakage Rate Testing of Containments of Light-Water-Cooled Nuclear Power Flants" (Federal Register Vol. 51, No. 209) which if approved will conflict with the proposed generic letter, thus adding another level of confusion.
- 4. The letter does not address the lack of uniformity of duration of the test between the present regulatory requirements, ANSI 56.8, the proposed Regulatory Guide, and the recommendations of the Topical Report BN-TOP-1 which has been approved by the staff.

In view of the above, we believe that the most effective way of satisfying both regulatory requirements and the needs of the industry is to proceed as expeditiously as possible with the approval of the revision to Appendix J already published for comment. During the interim period the licensees may apply for exemptions from the present Appendix J on a case-by-case basis.

CONTACT: R. Lipinski, EB/NRR 49-29433

86(2160122) 2 PP.XA

Thomas Novak

The comment period for the proposed revision expires in January. If, at that time it appears that resolution of comments on the whole revision will be protracted but the concerns are not related to this issue, then we recommend that a limited scope rule change including only the part of the revision dealing with methods for leak rate tests be proposed to the Commission for immediate issuance. We recognize that this approach does not resolve all the inconsistencies and confusion regarding Appendix J testing, but the limited scope rule change would remedy the legal issue of the licensees using a technically superior method currently not allowed by the regulations.

If your decision on this issue is to proceed with a generic letter, we will work with PAEB in revising the proposed generic letter to resolve, to the maximum extent possible, the issues addressed above.

Frank Miraglia

Frank J. Miraglia, Director Division of PWR Licensing-B

cc: R. Vollmer

R. Bernero

W. Shields

W. Minners

C. E. Rossi

R. L. Ballard J. Pulsipher - 2 -

MEMORANDUM FOR: James H. Sniezek, Deputy Executive Director for Regional Operations and Generic Requirements

FROM: Harold R. Denton, Director Office of Nuclear Reactor Regulation

SUBJECT: CONTAINMENT INTEGRATED LEAKAGE RATE TESTS

A recent OGC review of containment integrated leakage rate test (CILPT) methodology found that use of the "mass point" method, a widely used method for calculating the leakage rate from measured data, is not in compliance with the requirements of Appendix 3 to 10 CFR 50. As a result, we propose issuance of the attached generic letter to all light water reactor applicants and licensees.

As discussed in the attached generic letter, the staff believes that the mass point method has technical merit. However, Appendix J requires that a specific national standard, ANSI N45.4-1972, be followed when performing CILRTs; the standard further requires that one of two methods, "total time" and "point-topoint", be used to calculate leakage rate. Absent a rule change or a specific exemption from the rule, the mass point method cannot be used.

The purpose of this generic letter, then, is to inform the recipients of, and clarify, the regulatory requirements. This is advisable because staff practice had been, before the OGC review, to accept the mass point method. Although this represents a change in staff position, it is a change which returns us to the regulatory requirements of Appendix J to 10 CFR 50, which have been in effect since Appendix J was issued in 1973. Therefore, we do not believe that CRGR review is necessary. We plan to issue the generic letter within 10 working days of the date of this memorandum, unless we hear to the contrary.

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MEMORANDUM FOR: Rohert M. Rennero, Director, Division of BWR Licensino Frank J. Miraplia, Director, Division of PWR Licensing-P William M. Shields, Office of the General Counsel Warren Minners, Chief, Reactor Safety Issues Branch, DSPG

FROM: Thomas M. Novak, Acting Director Division of PWP Licensing-A

SUBJECT: GENERIC LETTER, CONTAINMENT IN LEGEATED LEAY PATE TESTS

The attached memorandum to J. Sniezek, transmitting a generic letter un containment integrated leak rate tests (CLLRT), is provided for your concurrence. Parallel concurrence is being recuested in accordance with instructions from R. Vollmer, in order to expedite issuance.

Please return the backage with your concurrence or address any ouestions, to R. Pallard (extension 27433, Room 316) by December 3, 1985)

mont Thomas M. Novak, Acting Director Division of PWR Licensino-A

Division of PWR Licensino-A

Attachment: As stated

cc: R. Vollmer

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FROM: Harold R. Denton, Director Office of Nuclear Reactor Regulation

SUBJECT: CONTAINMENT INTEGRATED LEAKAGE RATE TESTS

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As discussed in the attached generic letter, the staff believes that the mass point method has technical merit. However, Appendix 7 requires that a specific national standard, ANSI N45.4-1972, be followed when performing CILRTs; the standard further requires that one of two methods, "total time" and "point-topoint", be used to calculate leakage rate. Absent a rule change or a specific exemption from the rule, the mass point method cannot be used.

The purpose of this generic letter, then, is to inform the recipients of, and clarify, the regulatory requirements. This is advisable because staff practice had been, before the OGC review, to accept the mass point method. Although this represents a change in staff position, it is a change which returns us to the regulatory requirements of Appendix J to 10 CFR 50, which have been in effect since Appendix J was issued in 1973. Therefore, we do not believe that CRGR review is necessary. We plan to issue the generic letter within 10 working days of the date of this memorandum, unless we hear to the contrary.

	Harold R. Denton, Direct Office of Nuclear Reacto	
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