



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

SEP 17 1982

MEMORANDUM FOR: Lawrence C. Shao, Deputy Director  
Division of Engineering Technology  
Office of Nuclear Regulatory Research

FROM: Stephen H. Hanauer, Director  
Division of Safety Technology  
Office of Nuclear Reactor Regulation

SUBJECT: REVIEW OF ANSI/ANS 56.8-1981 "CONTAINMENT SYSTEM  
LEAKAGE TESTING REQUIREMENTS"

Your memorandum of June 21, 1982 requested NRR's review of the subject standard. This memorandum also enclosed a draft Regulatory Guide for implementation of the standard and work statement for an ORNL contract to develop additional information pertaining to leakage testing. Comments on this material from participating NRR branches are enclosed.

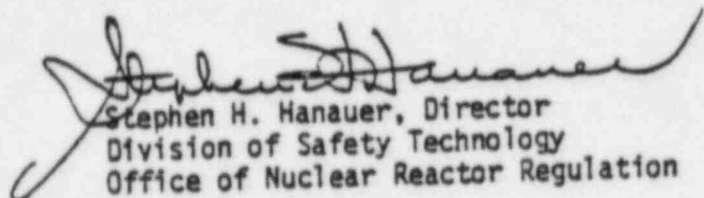
The Licensing Guidance Branch identified necessary changes in the standard with respect to consistency with the Standard Technical Specifications and proposed changes in the draft Regulatory Guide to improve the quality of implementation. The Containment Systems Branch is performing a detailed review of testing requirements and implementation, in consultation with Gunter Arndt of your staff. This review will be available by December 15, 1982. The Safety Program Evaluation Branch reviewed the material from the standpoint of risk reduction and cost effectiveness. On the basis of a simplified value-impact analysis, SPEB judged that in terms of risk reduction "... licensee resources which would be used to improve leakage testing methods and requirements, might be better expended in the performance of periodic or continuous cross checks of containment integrity (TMI Action Plan Item II.E.4.3)". The Reliability and Risk Assessment Branch also noted that the implementation of the ANSI/ANS standard by the NRC may not be warranted on a cost-benefit analysis. In addition a marked up copy of the standard by RRAB was returned directly to G. Arndt. The AEB had no comments.

To recall my memorandum to G. A. Ariotto of August 12, 1982, regarding initiation of a Regulatory Guide pertaining to the Appendix J rule change and the ANSI/ANS standard, we stated NRR was reevaluating the priority of TMI-2 Action Item II.E.4.3, "Containment Integrity Check". The results of this study might lead to a need to change the Appendix J revision to include provisions for continuous or periodic checks of containment availability. If this study significantly increases the priority of Item II.E.4.3, we will transmit to RES a formal user need by about mid

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October in this regard. For the present, we believe that revision of Appendix J and the development of supporting documentation should continue but with the awareness of value-impact problems of the industry standard and that a user need to include Item II.E.4.3 may be forthcoming. RES should also be aware that it is our belief that while forthcoming changes in the accident source term may affect the magnitude and nature of allowable containment leakage levels, source term changes are not expected to have an affect on containment integrity testing requirements.

Our staff will be available to work closely with your staff to closeout this long outstanding topic in a manner consistent with a value-impact assessment and our forthcoming reevaluation of Item II.E.4.3.

  
Stephen H. Hanauer, Director  
Division of Safety Technology  
Office of Nuclear Reactor Regulation

cc: H. R. Denton

Enclosures

1. Review of ANSI/ANS 56.8-1981, Containment System Leakage Testing Requirements, Fm S. Brinkman to P. Williams, dtd 7/2/82.
2. Standard Review Request: Containment Leak Testing Requirements Fm W. Butler to M. Farr, dtd. 8/18/82
3. Standard Review Request, Fm W. Minners to G. Knighton, dtd. 7/15/82
4. Comments on ANSI/ANS 56.8-1981, FM D. Yue, to P. Williams, dtd. 7/20/82
5. Review of Standard-ANSI/ANS 56.8-1981, Containment System Leakage Testing, Fm L. Hulman to G. Knighton, dtd. 7/13/82