

JUL 6 1984

- Mr. Guy A. Arlotto, Director  
 Division of Engineering Technology  
 U.S. NRC  
 Washington, DC 20555

Subject: Proposed Revision to 10CFR50, Appendix J

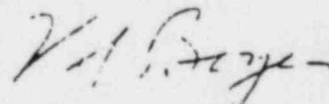
Dear Mr. Arlotto:

We have reviewed those materials made available for ACRS review of the proposed revision to 10CFR50, Appendix J via your letter to R. F. Fraley (ACRS) dated May 18, 1984. In general, we are supportive of your efforts "... to update the regulation and make it more efficient." However, the proposed revision appears to go substantially beyond this type of an effort in several key areas.

The attachment to this letter summarizes our major comments on the proposed Appendix J revision. These and other specific comments will be submitted during the formal public comment period. Our major comments are being submitted at this time to facilitate your timely consideration.

Please do not hesitate to contact us for further discussion of this topic.

Very truly yours,



21X 6/25/84  
 DRJ/cmv/CO  
 Attachment

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Comments on Proposed Revision  
to 10CFR50, Appendix J

1. The implementation of the existing Appendix J requirements at units which began operation prior to Appendix J promulgation has been a long drawn-out process. This effort has just recently been completed for our Peach Bottom units after seven years of deliberation. The following is a chronology of significant milestones in this process:

8/13/76	PECo submits App. J exemption requests
11/18/76	PECo submits App. J license amendment request
1/22/81	NRC requests additional information
5/15/81	PECo updates 1976 submittals
9/12/83	NRC notification of Contractor SER results by telephone
4/19/84	PECo submits revised amendment request

It appears that our Appendix J compliance review will have to be repeated when the proposed revision is adopted. Such reevaluation can not be considered as "... updating the regulation and making it more efficient".

A somewhat similar "double jeopardy" situation exists for recently licensed units or those in the current licensing pipeline such as our Limerick station. We have just completed a very thorough programmatic review of Appendix J compliance and would seemingly have to reopen this whole subject. Appropriate words should be added to the proposed regulation and/or Regulatory Guide to reflect the status of completed Appendix J reviews.

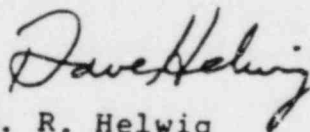
The draft Federal Register notice indicates that one of the major changes to Appendix J is to provide "... greater flexibility ... for dealing with plants already built ...". However, provisions for such flexibility do not appear to be included in the actually proposed Appendix J revision. The proposed change would seemingly invalidate exemptions and/or interpretations previously accepted by the staff by defining valves subject to test as "any valve defined in GDC 55, 56, or 57." In fact, the draft Regulatory Analysis notes that modifications may be required for a number of plants.

2. One of the most significant proposed changes to Appendix J involves the accounting for "as found" containment leakage. The approach required by the proposed revision has not been generally employed throughout the industry based on a 1983 survey of BWR's. The fact that this was a major issue under consideration in the Appendix J revision process did not, however, prevent the staff from imposing the new requirements on individual licensees (see BWR Owners' Group letter to D. G. Eisenhutt (NRC) dated 3/4/83).

We can appreciate the staff's concern that current methods of test result reporting do not enable them to accurately determine the "as found" leakage rate of containments. However, this data reporting problem does not appear to warrant the major program and acceptance criteria revisions being proposed. It seems logical to improve data reporting, as required by the proposed revision, and evaluate the results for some reasonable period of time before imposing revised acceptance criteria. This seems to be a more prudent course of action given the staff's own assessment that there is "... a low potential for reducing risk..." through the Appendix J revision process (see NUREG-0933 and W. Minners (NRC/SPEB) memo for G. W. Knighton (NRC/RSCB) dated 7/15/82).

3. The proposed revision to Appendix J incorporates requirements for reassessment of leak rates every time a repair is made or a supplemental leak test performed in order to approximate "continuous monitoring" of containment integrity. While this might appear to be an attractive proposal from a regulatory point of view, it may actually have a negative impact on plant safety by providing a disincentive for normal monitoring and repairs between refueling outages. If the proposed change was adopted, plants would be encouraged to live with certain levels of leakage which could be reduced rather than open up the issue of compliance with Appendix J acceptance criteria.
4. The draft Federal Register notice solicits comments on the concepts of "continuous containment leakage monitoring" and "relatively frequent gross containment integrity checks". It should be noted that for BWR's with inerted containments monitoring of containment oxygen concentration, nitrogen makeup, and/or venting frequency provides a fairly good indicator of containment integrity although precise quantification of leakage rate is difficult. On at least one occasion such monitoring enabled us to detect a maintenance error which had violated containment integrity at Peach Bottom.

5. The proposed revision recognizes that the acceptance criteria for Type A tests is .75 La for "as left" conditions and La for "as found" conditions. This logic has not been extended to the acceptance criteria for Type B and C tests. The proposed revision states that the acceptance criteria for Type B & C tests is .60 La for both "as found" and "as left" conditions. If the proposed two-tiered acceptance criteria are to be retained, the criteria for "as found" Type B & C leakage should be relaxed to La.
- 6.- Proposed Regulatory Provision C.2. states that "Following structural changes and repairs, a structural integrity test may be required prior to the Type A test" without describing the mechanism for making this determination. More specific guidance should be provided to prevent confusion.



Prepared by: D. R. Helwig  
June 25, 1984

DRH/cmv/31-rev. to 10CFR50



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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON D C 20555

MAY 18 1984

MEMORANDUM FOR: Raymond F. Fraley, Executive Director  
Advisory Committee on Reactor Safeguards

FROM: Guy A. Arlotto, Director  
Division of Engineering Technology  
Office of Nuclear Regulatory Research

SUBJECT: ACRS SUBMITAL OF GENERAL REVISION TO 10 CFR PART 50,  
APPENDIX J, "LEAK TESTS FOR PRIMARY AND SECONDARY  
CONTAINMENTS OF LIGHT-WATER-COOLED NUCLEAR POWER PLANTS"

Reference: NRC/ACRS Memorandum of Understanding, June 15, 1983

In accordance with the above reference, enclosed for review and approval by the ACRS is a proposed general revision to 10 CFR Part 50, Appendix J.

Background information - history, need and reason for the revision - are in the Proposed Rule and the draft FEDERAL REGISTER Notice (Enclosure A).

A regulatory analysis is presented in a summary format (Enclosure B), also including: a paragraph-by-paragraph description of the proposed changes (Attachment 1 to Enclosure B), a tabulation of the changes and whether they are "ratchets" or de-ratchets (Attachment 2 to Enclosure B), and draft responses to the CRGR Charter Section IV.B.(iii) through (viii), as applicable (Attachment 3 to Enclosure B).

The proposed revision is to be applied to all nuclear power plants that are, or will be, operating. It does, however, provide greater flexibility than does the current regulation for the NRC staff to accept reasonable alternatives to its requirements, where justified.

Revision of Appendix J is being justified as a licensing improvement, rather than on a risk reduction/cost benefit basis. That is because the NRC staff, and also licensees, feel a strong need exists to update the regulation and make it more efficient, even though a significant improvement in safety can not be demonstrated. This revision, as a whole, has wide support and will help the regulatory process.

Due to variables involved, it would be difficult to fairly quantify the costs of implementing this revision. However, it is expected that a major cost differential is not involved. Therefore, the value of such a quantification would be minimal for this revision, and does not justify the NRC resources that would be needed. In addition, explicit solicitation of costs and benefits is planned as part of the FEDERAL REGISTER publication for public comment.

~~SECRET~~


Raymond F. Fraley

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MAY 18 1984

For further information, contact Gunter Arndt, Task Leader,  
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