

ANI AMERICAN NUCLEAR INSURERS

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LIABILITY ENGINEERING DEPARTMENT
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PROPOSED RULE PR - Misc. Notice
Reg. Guide

Mr. Samuel J. Chilk
Secretary of the Commission
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555



Dear Mr. Chilk:

Regulatory Guide 8.8, Information Relevant to Ensuring that Occupational Radiation Exposures at Nuclear Power Stations will be As Low as Reasonably Achievable (ALARA), Proposed Revision 4 was issued in draft form in March for comment. My comments on the draft revision in the enclosure are presented for your consideration.

Very truly yours,

LACross
L. A. Cross, P.E.

LAC:mc

Enc.

Acknowledged by card... *6/13/79*

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Regulatory Guide 8.8, Proposed Revision 3, Draft

Comments

1. In Section B the nonthreshold linear dose-effect relationship assumption by the NCRP ad hoc committee in 1959, reference 1, is described as a cautious assumption. Current research indicates that this may not be the case. The estimates of biological effect by the ICRP, FRC and NAS/NRC using this assumption are described as conservative. Scientific evidence more recent than 1959 should be referenced if the nonthreshold linear dose-effect relationship assumption is described as conservative.
2. The BEIR Committee statement that the nonthreshold linear dose-effect should be used for radiation protection purposes is based on Reference 2. This statement and reference should be deleted and replaced by the more current BEIR Committee findings, 1979.
3. If the nonthreshold linear dose-effect relationship is found to understate the effects of low level exposure, the entire Regulatory Guide should be revised accordingly. For example, in that case, spreading a given exposure over more people results in a lower dose to each but a greater total effect.
4. Typical industry exposure doses indicate references 4 and 5 as sources. Reference 4 is based on a small number of plants operating prior to 1974. Reference 5 is similarly dated. More current references and exposure dose values should be used including NUREG 0482, an update of Reference 5. (Cf: IAEA Symposium on Occupational Radiation Exposure in Nuclear Fuel Cycle Facilities, June, 1979)
5. The general observations of NUREG 0482 should be considered in the revision.
6. In the matter of certification of health physics staff, certification in the nuclear power specialty has been adopted. The footnote on page 13 and related text should be revised accordingly. Also, the revision should reflect the results of the proposed amendment to 10CFR20.600 (Cf: Federal Register, Vol. 44, No. 41)
7. In the last sentence, third paragraph, p. 3, the reference to "such practices" is not clear and avoiding costs and non-productive shutdown time does not logically follow. Specifically, does the reference to "such practices" refer to engineering actions to reduce exposure? Since the content of this paragraph is crucial to the ALARA concept it should be more clearly worded.

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