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PROPOSED RULE PR-20 (45 FR 18023)

Secretary of the Commission U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Attention: Docketing and Service Branch

Subject : 10CFR Part 20 Standards for

Protection Against Radiation

Advance Notice of Proposed Rulemaking



Gentlemen:

We have reviewed the subject notice published in Federal Register 45 No. 56 dated March 20, 1980, and as a result of this review we are pleased to submit the following comments for your consideration:

1. Item a: Radiological Protection Principles

Inclusion of the specific basic assumptions and principles applied in radiation protection standards, as an introduction, is appropriate if they provide clarification and understanding of the regulations; however, they should not become a part of the standards. We believe care should be exercised to include only those principles and assumptions which have a direct bearing on the standards. For example, the first principle regarding a "positive net benefit" may be inappropriate for this standard. For power reactors, the evaluation of the net positive benefit is made during the license application process per 10CFR50. Individual activities with nuclear plant operation need not be specifically evaluated since the standards set forth in 10CFR20 are applicable after the license has been issued. Hence, a positive net benefit is implicit for all associated activities.

2. Item c: Standards for Exposures of the General Public

We feel it is important that any regulations dealing with emergency dose limits to the general public be confined to those actions directed by suitable authorities to mitigate the consequences of an accident. An example of this would be established dose limits for civil defense workers. The regulation should not address uncontrollable exposures.

Acknowledged by card. 6/23/80. mdv. ..

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3. Item d: Requirements for Radiation Protection Program

Aithough a general requirement for a radiation protection program and definition of its scope is appropriate, specifying detailed requirements for the program is not. Specific elements of the program should be developed in regulatory guides or other suitable documents and these should be intended to provide a framework for licensees to develop their own programs. Requirements for transportation of radioactive materials are already covered in DOT regulations and 10CFR71. Simply referencing these regulations should be suitable for 10CFR20 for off-site transport procedures.

4. Item b (4): Areas in Part 20 that Need Improvement

Inclusion of "special provisions" to limit collective doses may not be appropriate with the present level of understanding as to the impact and effects of exposure of general population groups. We believe that the protection of individuals, both workers and the general public, should be the primary thrust of radiation protection standards with the protection of "population groups" being of secondary importance. Accordingly, the existing regulations and the discussion in the Federal Register Notice of areas where Part 20 could be improved appear to be basically consistent with this philosophy. However, Item b, (4) implies that group doses (i.e., collective dose) would be a basis for radiation protection standards. This would require that the NRC explicitly address the issue of the protection of population groups as opposed to individuals. Specifically, we believe that whereas the meaning of "protection for individuals" is clearly understandable in terms of who is being protected and from what (injury, illness, death) it is not clear that "protection for the population groups" is fully understood. The impact or effect on a population group of a death or serious illness occurring within the population needs critical examination to provide adequate definition of the unwanted occurrence for which protection is being provided. From a better understanding of the effect on the population groups appropriate levels of protection could then be determined. Clear understanding of the impact on population groups is also required for the successful application of an ALARA concept to the protection of population groups. We believe it would be necessary to study and resolve these types of issues prior to establishing definitive radiation protection limits for population groups.

We trust that these comments will be helpful in the upcoming rulemaking on these important standards.

Very truly yours,

S.A. Bernsen

Manager of Nuclear Engineering Thermal Power Organization

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