

THE PENNSYLVANIA STATE UNIVERSITY

228 ACADEMIC PROJECTS BUILDING
UNIVERSITY PARK, PENNSYLVANIA 16802

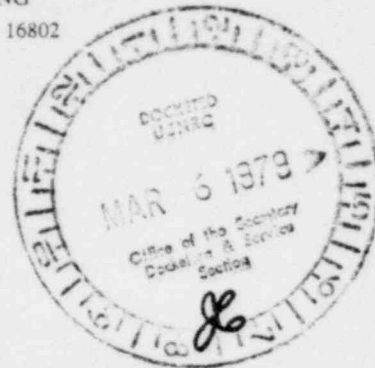
27 February 1979

Health Physics Office

DOCKET NUMBER

PROPOSED RULE

② -19,20(44FR10388)

Area Code 814
865-3459Secretary of the Commission
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Att: Docketing and Service Branch Re: 7590-01-M

Dear Sir:

The following comments are in reference to the proposed changes in 10CFR19.13 and sections 3, 101, 102, 104 and 202 of 10CFR20 as published in the Federal Register 20 Feb 1979. I am in agreement with the proposed change to a 3 rem/quarter, 5 rem/year dose equivalent limit and strongly support the adoption of this rule. The concept of "banked dose" or the 5 (N-18) rule has never been a defensible policy, in my opinion. I do not feel that a quarterly limit is necessary, but if it is adopted, it should not be less than the proposed 3 rem value.

The wording in the proposed section 20.102 states that each licensee shall require an individual to furnish a written, signed statement of the prior radiation exposure "... prior to the first entry of the individual into the licensee's restricted area during each employment or work assignment...". The term work assignment is inappropriate in that it could be interpreted as requiring a written report every several days or even more than once a day. Further explanation of what is intended or removal of the words "or work assignment" is suggested for this section. Likewise the words "specifically identified" in the next to the last sentence of 20.102 are confusing and unnecessary, that is in what respect are the quarters specifically identified? The intention appears to be to obtain the prior dose history for the current year. Thus, all calendar quarters to date must be included.

The requirement for supplying written evidence of prior radiation history or providing personnel monitoring depend heavily upon the interpretation of the word "likely" in the phrase "likely to receive". The dictionary indicates that likely is synonymous with probable. In nuclear measurements it is generally assumed that something with a 95% probability has a high probability, whereas a 5% probability is low or unlikely. I would therefore interpret a 5% probability of exceeding a given dose limit as unlikely and therefore would not require personnel monitoring or a previous dose history. This assumes that there is enough prior experience within a given restricted area to make such a prediction. However, my interpretation may not necessarily be the same as that of the NRC. Some discussion of this matter in the proposed rule making would be helpful to licensees and to NRC inspectors and licensing personnel.

Thank you for the opportunity to comment on these proposed regulations. My remarks reflect only my own opinion and do not constitute an official University position in this matter.

Sincerely,

Rodger W. Granlund
University Health Physicist

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