

D860219

Mr. Victor Stello
Acting Executive Director for
Operations
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Mr. Stello:

SUBJECT: ACRS COMMENTS ON PROPOSED REVISION OF 10 CFR PART 20,
"STANDARDS FOR PROTECTION AGAINST RADIATION"

During its 310th meeting, February 13-15, 1986, the Advisory Committee on Reactor Safeguards heard a report from its Subcommittees on Waste Management and Reactor Radiological Effects regarding the Proposed Revision of 10 CFR Part 20, "Standards for Protection Against Radiation." The Subcommittees held a joint meeting on January 15-17, 1986 during which they heard presentations by the NRC Staff and the Atomic Industrial Forum. The ACRS discussed and approved the Subcommittees' comments which are transmitted herewith for your consideration.

Additional comments by ACRS Member Max W. Carbon are presented below.

Sincerely,

David A. Ward
Chairman

Additional Comments by ACRS Member Max W. Carbon:

I believe the proposed revisions to Part 20 are not needed and are not cost effective. I do not support the Committee's view.

Attachment:
ACRS Comments on Proposed Revision
of 10 CFR Part 20, "Standards for
Protection Against Radiation"

Reference:
Federal Register, Part II, Nuclear Regulatory Commission, 10 CFR Parts 19, 20, et al., Standards for Protection Against Radiation; Proposed Rule; Extension of Comment Period and Republication, Vol. 51, No. 6, dated January 9, 1986

cc: Chairman Palladino
Commissioner Roberts
Commissioner Asselstine
Commissioner Bernthal
Commissioner Zech
K. Goller, D/DRPES, RES

R. Alexander, DRPES, RES
D. Harward, Atomic Industrial
Forum

ACRS COMMENTS ON PROPOSED REVISION
OF 10 CFR PART 20, "STANDARDS FOR PROTECTION
AGAINST RADIATION"

General Comments:

1. The costs of implementing the program will have widely variable impacts on the using institutions; in a utility it will be lost in the "noise" of operational costs. On the other hand, small "users" could find the changes a significant burden. In these cases, the inevitable economic impact of broad general regulations applicable to everybody should be recognized and allowances made to make the transition reasonable. We concur in the proposed five-year target date for final implementation of the Standards. This should avoid any unnecessary burden on most licensees.
2. We recommend that the NRC encourage and assist in the development of training programs to assist licensees in understanding and implementing the revised Standards. We consider such programs to be a mandatory part of the implementation procedure.
3. Although the main goal in preparing this revision is to provide scientific updating of the standards, we believe that greater emphasis should be placed on the associated improvements that are anticipated in terms of occupational and environmental protection. These include reductions in the annual whole body dose limit to 5 rem, increased emphasis on the implementation of the ALARA criterion, recording of more accurate and useful data on internal and external exposures, summation of doses from internal and external sources, reduction in the dose limit for extremities, and corrections (reductions) in the annual intake limits for alpha emitting radionuclides.
4. We believe the revision provides an excellent opportunity to move the U. S. radiation protection community into the everyday use of the International System of Units (SI). This aspect of the Standards should be strengthened. The nomenclature used in the report should also be made compatible with the existing scientific data base. At present, the revision perpetuates the use of obsolete terms, such as "absorbed dose," and provides definitions and applications of terms and concepts that are inconsistent with current (ICRP) usage.

Specific Comments:

1. The proposed approach for protecting the fetus (Section XII) appears nebulously worded. We recommend that more positive action

be considered.

2. The NRC Staff has suggested (Section XVIII) that individual dose rates of 1 mrem per year or less be considered below the limit of regulatory concern and that this dose rate be used as a cutoff for calculating collective doses to the population. Although we commend the staff for this action, the current text seems to have been designed to support a value of 0.1 mrem and inadequately justifies the choice of 1 mrem. In addition, Figure 1 (Section XVIII) is not clear on the dose rate that would be considered de minimis for the most exposed individual member of the public. This should be clarified.
3. In connection with collective dose calculations, we suggest that data on population dose include not only the collective dose but also the number of people within each dose range. Although the collective dose is important, we believe the presentation of the additional data, as described, will be useful in providing information on the number of people within each range of risk.
4. We see no justification (Section XXV) for exempting excreta from medical patients from regulatory control. The rationale as presented is not adequate. Most importantly, we can see no justification for exempting exposures from such discharges from being included in dose assessments for individual members of the public (SECY-85-147).
5. Section XXIII refers to "Disposal into Sewerage." The term "sewerage" refers to the sewers and the sewage they contain. This Section would more properly be titled, "Disposal into Sewers."
6. A distinction should be made in the words used on warning signs which designate radiation areas in contrast to high radiation areas. In our opinion, the word "danger" should be reserved for signs designating high (and very high) radiation areas; the word "caution" should be used on signs designating radiation areas in general.
7. In considering several of the Regulatory Guides that provide supporting information for radiation protection programs, we note that the NRC Staff considers that certification in the nuclear power plant specialty by the American Board of Health Physics (ABHP) is adequate confirmation of the qualifications of a person to serve as a Radiation Protection Manager at a commercial nuclear power plant. We believe that certification by the ABHP in the comprehensive practice of health physics should be equally considered by the NRC Staff as adequate confirmation of the qualifications of a person to serve as a Radiation Safety Officer or Manager for other licensees such as a university, a hospital, or a major research or industrial installation.

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