



UNITED STATES
NUCLEAR REGULATORY COMMISSION
ADVISORY COMMITTEE ON NUCLEAR WASTE
WASHINGTON, D.C. 20555

ACNWB-000001

September 15, 1988

The Honorable Lando W. Zech, Jr.
Chairman
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Chairman Zech:

SUBJECT: PROPOSED POLICY STATEMENT ON BELOW REGULATORY CONCERN

During the fourth meeting of the Advisory Committee on Nuclear Waste, September 13-14, 1988, we held additional discussions with the NRC staff relative to the development of a Proposed Commission Policy Statement on Exemptions from Regulatory Control for Practices Whose Public Health and Safety Impacts are Below Regulatory Concern (BRC). This topic was previously discussed with the NRC staff during a meeting of the ACRS Subcommittee on Waste Management on May 4, 1988. The ACNW also discussed this topic with the NRC staff during our second meeting, July 21-22, 1988, and reported to you on this subject on August 9, 1988. We also had the benefit of the document referenced.

As a result of these discussions, we offer the following comments:

1. The proposed exemption system is based on the risks associated with the exposures involved, and the system, if modified as suggested here, will be compatible with most relevant regulations and policies of the NRC and other federal agencies, as well as those of international organizations.
2. We urge the adoption of dose rates up to 10 mrem (0.1 mSv) per year to individuals and annual collective doses up to 100 person-rem (1 person-Sv) as acceptable limits arising from a single exempted practice. Please note that this is a different use of the dose limits than is proposed in the draft Policy Statement. Provisions should be made to ensure that individuals within any population group are not exposed to any combination of exempted practices that results in dose rates greater than one to two times the dose rate limit. Experience indicates that such occurrences should be rare.
3. The current draft of the proposed Policy Statement is in need of extensive revision, partly to comply with the recommendations made under item 2, above. Additional items that need to be addressed include:

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- a. The draft of the proposed Policy Statement should clearly specify 10 mrem (0.1 mSv) per year and 100 person-rem (1 person-Sv) per year as the limits for individual and collective dose rates, respectively. The ancillary use of a 100 person-rem (1 person-Sv) per year limit as a guide to the necessity for ALARA analysis should be removed (see item b, below).
 - b. There is a need for a much clearer statement relative to the role and application of the principle of "justification" in assessing practices being considered for exemption.
 - c. Instead of discussing dose rates at which collective dose calculations should be truncated, it would be better to do a complete calculation, and include within the data a tabulation of the number of people within each of several dose rate ranges.
 - d. The section pertaining to the linear nonthreshold hypothesis needs to be clarified. One approach would be simply to include a brief statement that risk (cancer) estimates should be based on the assumption that the linear nonthreshold hypothesis applies and that this approach will result in conservatism in the resulting estimates.
 - e. Since its use represents a change in NRC policy, the concept of the Effective Dose Equivalent should be defined within the Policy Statement. In a similar manner, since SI units are in common usage throughout the world, all dose rates and collective doses should be expressed in these units as well as in the conventional units.
4. As the proposed Policy Statement correctly points out, the Agreement States will play an important role in the implementation of the proposed exemptions. For this reason, it is important that the Statement be formally submitted to the Conference of State Radiation Control Program Directors for review and comment.

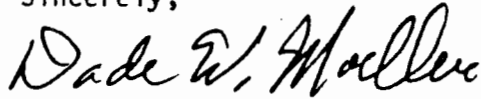
The resulting document, when properly revised, will represent a pioneering effort in nuclear safety regulation, will help conserve those of our resources that are available for the control of environmental and public health problems, and should receive strong support from the professional radiation protection community. We believe that the proposed Policy Statement, if revised as suggested above, will serve

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well as a starting point for the position to be stated at the upcoming international meeting on this subject.

Sincerely,

A handwritten signature in cursive script, reading "Dade W. Moeller".

Dade W. Moeller
Chairman

Reference:

Memorandum dated September 8, 1988 from Bill M. Morris, Office of Nuclear Regulatory Research, NRC, to R. F. Fraley, Executive Director, ACNW, transmitting Proposed Commission Policy Statement (undated)

