



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

December 30, 1988

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

Dear Chairman Zech:

SUBJECT: COMMENTS ON THE PROPOSED DELETION OF SECTION 20.205 FROM THE  
PROPOSED REVISION OF 10 CFR PART 20, "STANDARDS FOR PROTECTION  
AGAINST RADIATION" (SECY-88-315)

During the fifth meeting of the Advisory Committee on Nuclear Waste, December 21, 1988, we held additional discussions with the NRC staff on the proposed revision of 10 CFR Part 20, Standards for Protection Against Radiation. In response to the inquiry from Commissioner Roberts (SRM dated November 28, 1988), these discussions were directed primarily to procedures for the control of certain long-lived radionuclides, such as those handled at fuel cycle facilities.

As you know, the proposed rule published in the Federal Register on January 9, 1986 contained a new Section 20.205 which addressed the procedures noted above. The proposed section recommended a modified procedure that had been drafted in recognition of the difficulties in measuring (in a practical manner and with the required accuracy) air concentrations in restricted areas and the amounts of radionuclides in bioassay samples taken from workers whose intakes had been held at or below the permissible annual limits of intake (ALI). Although the proposed revision would have required licensees to design facilities so that air concentrations averaged over the year in restricted areas would be below the derived air concentration limits and would also have required that such facilities be operated in a manner that would ensure that any individual would be unlikely to have an intake from occupational exposure in any one year in excess of the ALI value, the modified procedure would have allowed licensees to permit doses to workers in excess of the limits in Section 20.201 as long as the sum of the internal and external effective dose equivalent would not have exceeded 5 rem, and the annual effective dose equivalent from certain specified internally deposited long-lived radionuclides would not have exceeded 3 rem.

We believe that such a modified procedure is unacceptable. First, it would not be in accord with what we understand are the recommendations of either the International Commission on Radiological Protection (ICRP Publication 26, 1977) or the National Council on Radiation Protection and Measurements (NCRP Report No. 91, 1987). In addition, it is our interpretation that such a position would not be in conformance with the requirements outlined in the "Radiation Protection Guidance to Federal

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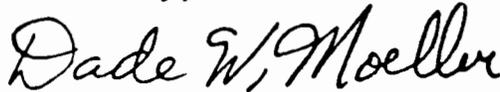
Agencies for Occupational Exposure," approved by President Reagan on January 20, 1987.

Based on our review of this issue, we recommend that annual doses arising from the intake of long-lived radionuclides be limited to a dose commitment no higher than the annual dose limit of proposed Section 20.201. To make an exception for any specific group of radionuclides or licensees would, in our opinion, be inappropriate. Hence, we concur with the NRC staff's recommendation to delete Section 20.205.

In addition, we recommend that the NRC encourage licensees to follow the guidelines contained in the Radiation Protection Guidance to Federal Agencies referred to above; namely, that record keeping include data on both the annual and committed effective dose equivalent, as well as on the cumulative (lifetime) dose.

We hope these additional comments will be helpful.

Sincerely,



Dade W. Moeller  
Chairman

References:

1. SECY-88-315 dated November 4, 1988 for The Commissioners from Victor Stello, Jr., Subject: Revision of 10 CFR Part 20, "Standards for Protection Against Radiation."
2. Staff Requirements Memo dated November 28, 1988 for Victor Stello, Jr., EDO, W. C. Parler, OGC, and D. W. Moeller, ACNW, regarding Briefing on Final Rule on Standards for Protection Against Radiation in Part 20.