



OFFICE OF THE
SECRETARY

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555

December 9, 1994

RELEASED TO THE PDR

12/19/94
date

Initial

MEMORANDUM TO:

James M. Taylor
Executive Director for Operations

FROM:

John C. Hoyle, Acting Secretary

SUBJECT:

SECY-94-239 - PROPOSED AMENDMENTS TO 10 CFR
PART 60 ON DISPOSAL OF HIGH-LEVEL RADIOACTIVE
WASTES IN GEOLOGIC REPOSITORIES--DESIGN BASIS
EVENTS FOR THE GEOLOGIC REPOSITORY OPERATIONS
AREA

The Commission (with all Commissioners agreeing) has approved publication of the Notice of Proposed Rulemaking, subject to incorporation of the comments listed below, which includes the certification that it satisfies requirements of the Regulatory Flexibility Act. The Commission also approves the partial grant and partial denial of DOE's petition.

The proposed 10 CFR 60.136 prescribes a 5 rem TEDE dose¹. However the staff should clarify the terminology used to represent this value. For example, p. 10 of the Statement of Considerations refers to "appropriate requirements", p. 11 to "design criteria", p. 18 to "dose criteria", p. 19 to "accident dose criteria", p. 21 to "generally applicable design basis dose criteria", p. 24 to "numerical criteria", p. 27 to "applicable standards", p. 32 to "reference dose", and p. 33 to "dose limits". (These phrases sometimes referred to the two sets of requirements for Category 1 and Category 2 events). There

¹To be precise, 60.136 says "the more limiting of a total effective dose equivalent of 0.05 Sv (5 rem), or the sum of the deep-dose equivalent and the committed dose equivalent to any individual organ or tissue (other than the lens of the eye) of 0.5 Sv (50 rem). The eye dose equivalent may not exceed 0.15 Sv (15 rem), and the shallow dose equivalent to skin may not exceed 0.5 Sv (50 rem)." For simplicity, these are referred to as the 5 rem TEDE.

SECY NOTE:

THIS SRM, SECY-94-239, AND THE VOTE SHEETS OF ALL COMMISSIONERS WILL BE MADE PUBLICLY AVAILABLE 10 WORKING DAYS FROM THE DATE OF THIS SRM.

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should be greater clarity and consistency in terminology in the notice.

Similarly, the Statement of Considerations (page 33) concerning the basis for selection of 5 rem TEDE for Category 2 events should be revised to clarify how it relates to protection of public health and safety. The need to protect to a 5 rem dose limit to avoid significant radiological risk to public health and safety has not been established in the Statement of Considerations. The definition of Category 2 events focuses on "significant radiological impact" and covers a wide range of accident frequencies from 10^{-2} out to a limit of credibility. The need to protect to the 5 rem dose limit, across the entire range of accident frequencies encompassed by Category 2 events, should be addressed. Therefore, a discussion of the risk perspective should be included in the SoC to put into context the characterizations on p. 33 of "no unreasonable risk" and of "appropriate design basis for protection of public health and safety". Further, the EPA PAGs, developed for decision-making on evacuation or other protective measures, are not suitable bases for selection of dose values for design purposes. This part of the discussion on p. 33 should be deleted.

The notice should be revised to specifically seek comment on an appropriate value for the exposure limit of 60.136. Thus, the FR notice should fully discuss the issues attendant to choosing such a limit in terms of risk to public health and safety arising from potential accidents and solicit comment on how these issues should be resolved.

A term used in Part 60 that is not presently defined is "important to waste isolation". The Commission understands that the staff plans to propose a definition for this term at a later date. The FR notice should explicitly note that this action is planned as part of a subsequent rulemaking.

The staff should revise the proposed rule and SoC in accordance with the above comments, and provide the opportunity for the Commission to see the revised notice before it is published in the Federal Register.

(EDO)

(SECY Suspense: 2/15/95)

cc: The Chairman
Commissioner Rogers
Commissioner de Planque
OGC
OCA
OIG
Office Directors, Regions, ACRS, ACNW, ASLBP (via E-Mail)