



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

March 3, 2000

Dr. William J. Boyle  
U.S. Department of Energy  
Yucca Mountain Site Characterization Office  
P.O. Box 98608  
Las Vegas, Nevada 89193-8608

SUBJECT: GENERAL GUIDELINES FOR THE RECOMMENDATION OF SITES FOR  
NUCLEAR WASTE REPOSITORIES (10 CFR PART 963) – SUPPLEMENTAL  
NOTICE OF PROPOSED RULEMAKING [DOCKET NO. RW-RM-99-963]

Dear Dr. Boyle:

On November 30, 1999, the U.S. Department of Energy (DOE) published, in *the Federal Register*, for public comment, proposed amendments to its "General Guidelines for the Recommendation of Sites for Nuclear Waste Repositories," found at 10 CFR Part 960, as well as recommended new guidelines, at 10 CFR Part 963, for the evaluation of the candidate site at Yucca Mountain, Nevada. The U.S. Nuclear Regulatory Commission (NRC) hereby submits staff-level comments for the DOE's consideration (enclosed). The Department indicated in its *Federal Register* notice that it would be submitting the final versions of the amendments to the Commission, for its concurrence, before they are implemented. Therefore, because of this, the enclosed staff-level comments should not be considered to be the final NRC position on this matter.

Also, when the DOE issued the original guidelines in 1984, and when it proposed amendments to the guidelines in 1996, the DOE gave the staff complete access to the DOE's public comment process. The DOE provided the staff with copies of the public comments it received, as they were submitted, as well as copies of its analysis and responses to these comments. Access to this information allowed the staff to independently review the DOE's treatment of the comments and helped to prepare the Commission for the concurrence process. The staff again requests access to the public comments and the DOE's analyses and responses.

Finally, both the DOE and the NRC have highlighted the importance of quality assurance (QA) for the DOE's high-level waste management program. Recently, the DOE has been addressing how it will improve its QA program implementation through a series of corrective actions. The staff intends to monitor the DOE efforts and to strengthen its own independent oversight of the DOE QA activities.

Nonetheless, the *Background Information* to the draft proposed siting guidelines is silent on the significance of QA to the site suitability determination. The Department essentially will be using the same data for both its site suitability determination and any potential license application, although the DOE has noted that reaching a site suitability recommendation is not

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Dr. W.J. Boyle

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the equivalent of a determination that the site [and the design] would necessarily meet all of the requirements needed to obtain a construction authorization from the NRC (64 FR 67055). Therefore, implicit in any site suitability determination is the understanding that the data, models, and codes supporting it are of sufficient quality that the determination itself would not be called into question (or reversed) if the quality of the information supporting it were challenged. Thus, given the significance of the DOE's site suitability determination in 2001, in the staff's view, the DOE will need to acknowledge the pedigree of the scientific information supporting that decision.

If you have any questions about these comments or this request, please contact C. William Reamer of my staff. He can be reached at 301-415-6537.

Sincerely,

A handwritten signature in black ink, appearing to read "William F. Kane". The signature is fluid and cursive, with a large initial "W" and "K".

William F. Kane, Director  
Office of Nuclear Material Safety  
and Safeguards

Enclosure: NRC Staff Comments on DOE  
Siting Guidelines

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Sincerely,

[Original signed by:]

William F. Kane, Director  
Office of Nuclear Material Safety  
and Safeguards

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Siting Guidelines

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**U.S. NUCLEAR REGULATORY COMMISSION STAFF COMMENTS  
ON THE U.S. DEPARTMENT OF ENERGY'S  
PROPOSED AMENDMENTS TO ITS  
"GENERAL SITING GUIDELINES FOR THE RECOMMENDATION  
OF SITES FOR NUCLEAR WASTE REPOSITORIES: YUCCA  
MOUNTAIN SITE SUITABILITY GUIDELINES"**

1. In reaching its original 1984 concurrence on the U.S. Department of Energy (DOE) generic siting guidelines, one of the conditions and criteria used by the Commission was that the guidelines were not in conflict with NRC licensing regulations. There appears to be no discussion in the 1999 proposed revisions addressing the potential matter of a conflict between the proposed revisions and the applicable NRC regulations.

*Recommendation:*

*Add language to the statement of considerations addressing the potential matter of a conflict between the 1999 proposed guidelines and the applicable NRC regulations.*

2. The staff believes that the Department has inappropriately included a reference to the quality assurance (QA) criteria of Appendix B in 10 CFR Part 50 as "considerations" rather than as "pass/fail standards" (64 FR 67077) in its discussion of how it has defined "criteria." The criteria given in Appendix B are factors that must be present if the DOE's QA program is to be judged adequate. Hence, any implication that these Appendix B criteria are not required should be avoided, lest confusion result as to their standing as regulatory requirements.

*Recommendation:*

*Eliminate the reference to the QA criteria of Appendix B in CFR Part 50 as an example of "considerations" rather than "pass/fail standards."*

3. The proposed definition of cladding found at 10 CFR 963.2 conveys the inaccurate notion that all cladding is corrosion-resistant. Some spent nuclear fuels are clad in aluminum, which is not generally considered corrosion-resistant.

*Recommendation:*

*Strike the phrase "corrosion resistant" from the definition.*