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STANDARD NUMBER PR-60 (51FR 22288) 4

STONE & WEBSTER ENGINEERING CORPORATION

USNRC



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Docket No.

PDR

LPDR

Secretary of the Commission
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Distribution: August 14, 1986

Linchan
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(Return to WM) 623-SS)

Sac

Attention: Docketing and Services Branch

**DISPOSAL OF HIGH-LEVEL RADIOACTIVE WASTES
IN GEOLOGIC REPOSITORIES; CONFORMING AMENDMENTS
PROPOSED RULE 51FR22288; June 19, 1986**

We are pleased to submit our comments on the subject proposed rule.

The "Background" section for the proposed rule states that the conforming amendments "involve direct incorporation within Part 60 of the substantive requirements of the Environmental Protection Agency (EPA) standards". Because of the requirement in the Nuclear Waste Policy Act of 1982 (NWPA) that the NRC regulations shall not be inconsistent with the EPA standards, the NRC should ensure that an effective mechanism exists to review future changes to the appropriate EPA standards for potential impact on the NRC regulations.

Section 60.1 indicates that the intent of the regulations in Part 60 is to ensure compliance with the NWPA as it pertains to geologic repositories. We suggest that Section 60.1 should also state that 10CFR60 directly incorporates the EPA standards promulgated in 40CFR191. The "Background" section does include discussion to this effect; however, the "Background" section is not part of the regulation. The jurisdictional problems alluded to as the reason behind the NRC's decision to directly incorporate the EPA standards into Part 60 might still arise unless the regulation states the equivalency between the two parts.

Section 60.2: In definition of "controlled area", in the seventh line, change "form" to "from".

Section 60.2: In definition of "transmissivity", in the second line, correct spelling of "integrated". In the third line, change "or" to "of".

Section 60.2: In definition of "uranium fuel cycle", in the sixteenth line, correct spelling of "special".

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PDR PR

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DS10
add: Daniel Fehring, 623SS
Clark Picard, 1130SS

AUG 21 1986
Acknowledged by card

Section 60.101(a)(2): In the eighteenth line, change "may" to "many". Also, the portion of the sentence beginning at this point is confusing. We suggest the sentence (beginning at the fifteenth line) be changed to read: "Proof...over time periods of many hundreds of years is unobtainable."

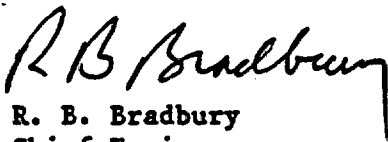
Section 60.115: The first note following Table 1 should be identified as "Note 1".

Section 60.115 Note 1.(c): In the first line, correct spelling of "gamma".

Section 60.115 Note 4: In the fifth line, change "to" to "two".

Section 60.144: In the second line, change "payment" to "permanent".

We appreciate this opportunity to comment on the subject proposed rule, and hope that the above comments will assist you in its finalization.



R. B. Bradbury
Chief Engineer
Nuclear Technology & Licensing Division

DJC:ht



ER 86/744

DECKET NUMBER PR-60 (5)
PROPOSED RULE (51 FR 22287)
United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

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USNRC

86 AUG 18 P1:32

OFFICE OF SECRETARY
AUG 15 1986 SERVICE
BRANCH

Mr. Samuel J. Chilk
Secretary of the Commission
Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Chilk:

The Department of the Interior has reviewed the proposed rule for disposal of High-Level Radioactive Wastes in Geologic Repositories; Conforming Amendments as noted in the Federal Register dated June 19, 1986, and has the following comments.

Section II, page 22292, Treatment of Uncertainties

Levels of uncertainty regarding the analyses of long-term repository performance will probably be the key technical issue at the time of licensing. The NRC has implicitly identified it as such in this section. In addition, Part 60.101 further elaborates the need for uncertainty accounting throughout repository operations. Unfortunately, neither Section II nor Part 60.101 is well represented in 60.111, 60.112, and 60.113, which deal with pre- and post-closure repository performance. It is recommended that this subject receive more emphasis in Part 60.

Part 60, page 22298, Clause 60.51 License Amendment for Permanent Closure

Item (ii) does not address the associated uncertainties of monitoring various repository parameters. Performance monitoring is subject to the same uncertainty in post-closure as during pre-closure. In addition, it is recommended that Part 60.144 reference Part 60.51.

Sincerely,


Bruce Blanchard, Director
Environmental Project Review

DS10
add: Daniel Lehninger, 62355
Clark Pritchard, 113055
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AUG 21 1986
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DOCKET NUMBER
PROPOSED RULE PR-60
(51 FR 22288)

LORING E. MILLS, Vice President

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'86 AUG 18 P1:32

August 18, 1986
DOCKETING & SERVICE
BRANCH

Secretary
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

ATTENTION: Docketing and Service Branch

Subject: Proposed Rule Concerning Disposal of
High-Level Radioactive Waste in Geologic
Repositories; Conforming Amendments (51
Fed. Reg. 22,288)

Dear Sir:

These comments are submitted on behalf of both the Edison Electric Institute (EEI) and the Utility Nuclear Waste Management Group (UNWGMG). We have reviewed the above-referenced proposed rule and are of the general view that the amendments offered for comment are appropriate for conforming existing NRC regulations to the environmental standards for management and disposal of high-level radioactive wastes promulgated by the Environmental Protection Agency (EPA), and to accommodate the "assurance requirements" contained in EPA's regulations.

EEI/UNWGMG believe, however, that certain improvements in the rule are desirable and specific suggestions are set forth in the detailed comments attached to this letter. In addition, we wish to emphasize the importance of efforts underway to foster a common technical understanding of, and to resolve, issues prior to the receipt of a license application. We especially encourage ongoing NRC/Department of Energy technical discussions concerning matters pertinent to licensing requirements. These discussions, together with appropriate rulemaking proceedings, should help to identify, narrow and resolve issues. These steps are vital to preparing for and assuring efficient repository licensing.

We would be pleased to discuss these comments with you in additional detail. If you have any questions or if we may otherwise be of assistance, please do not hesitate to contact us.

Sincerely,

Loring E. Mills
Loring E. Mills

LEM/rgp
Enclosure

1510
Add: Daniel G. Schragos, 62355
Clark Prichard, 113055

AUG 21 1986
Acknowledged by card.....

**Comments of Edison Electric Institute
and Utility Nuclear Waste Management Group
on Proposed Rule: Disposal of High-Level
Radioactive Wastes in Geologic Repositories;
Conforming Amendments (51 Fed. Reg. 22,288)**

A. COMMENTS ON SUPPLEMENTARY INFORMATION

(1) p. 22,289, col. 2 -- In its discussion of reasonable assurance, the Commission states the belief that the "concept of reasonable assurance, although somewhat different from previous usage in reactor licensing, is appropriate for evaluations of repository performance where long-term issues and substantial uncertainties are inherent in projections of repository performance." Earlier, however, the Commission has noted that, with respect to waste disposal, the reasonable assurance standard

in addition to being commonly used and accepted in the Commission's licensing activities, allows the flexibility necessary for the Commission to make judgmental distinctions with respect to quantitative data which may have large uncertainties (in the mathematical sense) associated with it.

(48 Fed. Reg. 28,204.) EEI/UNWNG agree that the reasonable assurance standard, as applied in reactor cases, does provide sufficient flexibility for use in repository licensing. Accordingly, the reference to a "somewhat different" standard in the Supplementary Information accompanying the proposed rule should be deleted.

(2) pp. 22,291, cols. 1 & 2 -- In the paragraph describing Figure 2, the last sentence should state that "the entire CCDF must lie below the 'stair-step' constraints," and not that "the entire probability distribution" must lie below such constraints (emphasis added).

(3) p. 22,292, col. 3 -- This page contains a discussion of the importance of establishing common technical understandings and resolving issues -- where it is practicable to do so -- prior to the filing of a license application. In particular, the notice states that:

As issues mature, the Commission will, where appropriate, use the rulemaking process to seek resolution of issues where a licensing proceeding might otherwise encounter difficulties due to ambiguity regarding acceptable assessment methods.

EEI/UNWVG support the use of rulemaking and encourage its use as an aid to the early resolution of licensing issues. In this connection, EEI/UNWVG believe that it would be helpful if the Commission were to develop -- in conjunction with the Department of Energy -- an overall rulemaking plan, describing the subjects and timing of anticipated rulemakings. Such a plan would not only help assure a comprehensive program, but aid in establishing an appropriate sequence of actions.

B. COMMENTS ON SPECIFIC SECTIONS OF PROPOSED RULE

(1) 60.101(a)(2) -- The first portion of this proposed section reads as follows:

While these performance objectives and criteria are generally stated in unqualified terms, it is not expected that complete assurance that they will be met can be presented. A reasonable assurance, on the basis of the record before the Commission, that the objectives and criteria will be met is the general standard that is required. For § 60.112, and other portions of this subpart that impose objectives and criteria for repository performance over long times into the future, there will inevitably be greater uncertainties. . . .

The expression "greater uncertainties," however, is somewhat ambiguous. Accordingly, the words

"than exist in cases involving predictions over the nearer future, and some reliance on prevalent expert judgment is expected"

should be added to the language quoted above.

In addition, the last two sentences of the proposed section state:

Substantial uncertainties are likely to be encountered and sole reliance on numerical predictions to determine compliance may not be appropriate. In reaching a determination of reasonable assurance, the Commission may supplement numerical analyses with qualitative judgments including, for example, consideration of the degree of diversity of redundancy among the multiple barriers of a specific repository.

To further clarify this point and, in addition, to emphasize the rule of judgment in these compliance evaluations, the following language should be substituted:

The Commission anticipates, however, that assessments of long-term compliance will involve use of expert judgment to estimate performance and to substantiate those estimates. Verification of judgment reliability will be sought through techniques such as consideration of natural analyses, bounding estimates, and use of multiple independent estimates. Minimization of reliance on judgment will be sought through means such as conservative design and barrier redundancy.

(2) § 60.144 -- In the second line of this section, the word "payment" should be "permanent."