July 13, 1980

DOCKET RUMETER P.R.-60 (2) PROPOSED RIMF P.R.-60 (2) (45 F.R. 31393) Attached are comments on Docket No P.R 50-51 On Proposed Rulemaking - Technical Criteria for Regulating Geologic Disposal High-Level Radioactive Waste

10 CFR Part 60

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Federal Register/Vol 45, No. 94 - Proposed Rules. Nuclear Regulatory Comm

1. Lifetime of the Repository. Paragraph 3 states"...construction of repository and emplacement methods will not compromise...protect future populations." In the background info, we find that technical criteria is still under development. How, then, can we determine licensing for technical procedures that are not yet known.

Page 31395, para. 1 states "final protection is achieved by ability of geologic setting to inhibit migration of wastes..." Yet in Area 3 - Waste/Rock Interaction, we find that we know there will be a physical effect on the rock, but we do not know the extent of that effect. How, therefore, can we depend on the rock as final protection.

Page 31395 <u>4. Treatment of Uncertainties</u> "...no opportunity to observe behavior over the bong term-the decision to close the repository in effect will be a statement of its expected behavior based upon inference, deducti and extrapolation..." Considering the nature of the waste, and the uncertainties of its interaction with rock, it would seem shortsighted to be unable to observe it. With that many variables, it would also seem short-sighted to be unable to retrieve it even 1,000 years from now, with some wastes having a half-life of 24,000 years.

Page 31395. <u>5.</u> <u>Human Intrusions</u>. Those geologic, hydrologic or mineral resources that are not interesting to man now may be 1000 years from now.

Page 31396. (3)"...simplicity and stability of geologic settings." Is it feasible to try to predict geologic events with regard to the longevity of hazardous waste. (4) "...problems associated with HLW disposal are sufficiently understood, it is possible, even in absence of an EPA standard, to identify relevant areas of regulation..." This is debatable.

Page 31397 (4) Adequacy of Favorable and Unfavorable Site Characteristics to Impose Proper Technical Restrictions. Reading and re-reading consideration #4 leads one to wonder how the NRC can possibly consider licensing the DOE for HLW disposal. Specifically "...the question of general site acceptability criteria is an open one in the sense that the staff has not identified to date such criteria..."

Page 31398 Para. #2 "...Through expert opinion in public proceedings, and the exercise of judgment by the Commission, a satisfactory if imprecise margin of safety for site characteristics and engineering design can be realized..." satisfactory - maybe for DOE and NRC. What about the people who live near the site - will they be comfortable with a "satisfactory if imprecise margin of safety"?????

(6) Retrievability. Is it possible to pinpoint a safe date for sealing the repository.

(7) - Human Intrusion Problem "...Simply stated, human intrusion cannot be prevented..."Simply stated, that is seemingly a significant factor in consideration of licensing a geologic site. Page 31400 60.111 (2) (ii) "...and that some of the wastes dissolves soon after decommissioning..." What wastes, how soon???

60.121 (a) Ownership and control of the geologic repository operations area. "...lands that are either acquired lands under the juriddiction and control of the Department or lands permanently withdrawn and reserved for its use..." How does the DOE propose to "acquire" 2000-6000 Acres of land. In all probability, it will not be without considerable ill will by former land owners; certainly with the discomfort of neighboring landowners. What about control completely by DOE? is it feasible or advisable for local input? (c) Long-term control. It is good to see that the NRC recognizes that this procedure is of global concern. "...For the purpose...institutional controls will not persist for more

than one hundred years." Does that mean that after 100 years someone else (i.e. a private company) takes over management of facility?

Page 31401 (7) The Department shall continuously verify and assess any changes..." What if 51 years later adverse conditions appear and the repository is sealed? How often is "continuously"

Page 31404 (2) Waste isolation engineering (1) "The Department shall demonstrate that the underground facility includes those engineering features that are needed to limit radioactive rel**ge**ses after decommissioning to levels that are as low as reasonably achievable." "Reasonably achievable" may vary from agency to agency, expert to expert.

Page 31405. (7) In situ testing and verification (iii)... The Department shall measure and monitor changes in subsurface conditions on a regular basis..." How regular - daily, every 10 years???

(9) Water control during operations "... The Department shall provide water control systems... to minimize the potentially acdverse effect...." minimize - once again, a subjective measure. The tendency to use such terminology is algo extensive on page 31406 under (3) Waste handling an emplacement (1) and (ii)

Page 31407 60.135 Retrieval of waste "... The design of the geologic repository operations area shall provide for retrievability of the waste within a period of time that is about the same as that in which it was emplaced." --- Vague and non-specific

Respectfully submitted,

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