

September 14, 2000

Mr. John Hadder  
Northern Nevada Coordinator  
Citizen Alert  
P.O. Box 17173  
Las Vegas, Nevada 89114

Dear Mr. Hadder:

Thank you for taking the time to inform me and my fellow Commissioners about your organization's concerns regarding the Yucca Mountain Project. You raised three specific issues involving the U.S. Nuclear Regulatory Commission (NRC). I will respond to each in turn:

Issue 1

Citizen Alert is troubled by the Commission's consideration of an informal hearing process for evaluating a potential license application for a repository at Yucca Mountain. You urge the Commission to retain formal adjudicatory hearings for the licensing of a repository.

Response:

The Commission is committed to a full and fair public hearing of its review of a potential license application for a repository at Yucca Mountain. It is true that the Commission is reexamining NRC's hearing process, in general. The Commission is currently considering the possibility of changes to its existing hearing procedures in 10 C.F.R. Part 2 that would allow greater use of informal hearing procedures and reduce the adversary nature of some proceedings. Last October, for example, NRC's Office of the General Counsel sponsored a public panel discussion and hearing process workshop. Participants in this workshop represented a wide range of interests, including environmental advocacy groups, industry coalitions, and experts in administrative law and procedure, as well as a representative from Nye County, Nevada. You can find a transcript of this workshop at <http://www.nrc.gov/NRC/PUBLIC/HEARING/index.html>.

As the NRC staff explained at the public meeting, the Commission is considering whether to propose changes to the NRC hearing process as a whole. At this time, the Commission has not decided on the scope or form of changes, if any, that it might ultimately propose or on the type of proceedings to which informal procedures should apply. If, as a result of our deliberations, we conclude that changes to the hearing process are warranted, the Commission intends to make such changes only through the process of notice-and-comment rulemaking. Such rulemaking will provide the opportunity for members of the public and all stakeholders to express their views and provide comments and suggestions on the proposals. We welcome your comments, and those of Citizen Alert, at that time. After the Commission has made a

decision on whether to modify its overall hearing process, the NRC staff, as it promised at the May meeting, will return to Nevada to conduct additional public meetings. These meetings will provide information on the nature of NRC's hearing process in the particular context of a potential application for a repository at Yucca Mountain. Members of the NRC staff will be available at these meetings to answer questions about how individual members of the public, as well as representatives of interested organizations, such as Citizen Alert, can participate in NRC's licensing process.

No decision has been made as yet as to whether to modify the general NRC hearing process or, if there are changes, as to how any changes would affect a proceeding concerning Yucca Mountain.

### Issue 2

Citizen Alert criticizes the Commission's proposal of new regulations, at 10 CFR Part 63, that would apply solely to the proposed repository at Yucca Mountain. Your letter implies that NRC's motive in having "singled out" Yucca Mountain is to create an "easier path" to licensing of the proposed repository, through allegedly "less stringent licensing rules."

### Response:

The U.S. Congress, not NRC, directed that separate standards should apply to a proposed repository at Yucca Mountain. The Energy Policy Act of 1992, Pub. L. 102-486 (EnPA), directed the Commission to modify its requirements for geologic disposal to be consistent with the new standards for Yucca Mountain that the U.S. Environmental Protection Agency (EPA) was going to develop. The law also specified the type of standards EPA had to develop and NRC had to implement [i.e., standards that limit individual dose and which are based on, and consistent with recommendations of the National Academy of Sciences].

After carefully considering the options our technical staff articulated in a publicly available policy paper,<sup>1</sup> the Commission decided to create a new part of its regulations to address a potential repository at Yucca Mountain, rather than modify its existing regulations at 10 CFR Part 60. It decided this was necessary in light of the fundamentally different approach laid out for Yucca Mountain by the Congress. A careful review of the history of the Part 60 regulations, including the subsystem performance criteria you cite in your letter, reveals that much of the basis for the subsystem requirements was a generic judgment of what the Commission believed was appropriate in 1983 – a judgment based on technical assumptions now outdated or inappropriate for Yucca Mountain. In following the Congressional direction that the NRC relook at its high level waste regulations, the Commission concluded that its Part 63 regulations should reflect the improved scientific understanding of the site, the improvements in how the performance of complex disposal systems are assessed, and the site-specific standards that EPA will issue eventually for Yucca Mountain.

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<sup>1</sup>SECY-97-300, "Proposed Strategy for Development of Regulations Governing Disposal of High-Level Radioactive Wastes in a Proposed Repository at Yucca Mountain, Nevada," December 24, 1997. Available on NRC's Website at <http://www.nrc.gov/NRC/COMMISSION/SECYS/secy1997-300/1997-300SCY.html>.

You are correct that there are significant differences between Part 60 and the proposed Part 63. In the Commission's view, the proposed Part 63 regulations do not lessen the U.S. Department of Energy's (DOE) responsibility in any way to site, design, construct, and operate the proposed repository in a safe manner. Much has been learned regarding the expected performance of geologic repositories in general and a potential Yucca Mountain repository in particular, over the nearly two decades since Part 60 was written. The proposed Part 63 reflects and incorporates much of this new information. Nonetheless, Part 63 still requires DOE to demonstrate: effective use of multiple barriers; the ability to retrieve the waste for an extended period of time; a sound performance confirmation program; a transparent safety case; and application of rigorous quality assurance controls. The Commission is currently considering public comments on the proposed Part 63 and may make significant changes in the final rule in light of those comments.

You also express concern that NRC's proposed regulations for Yucca Mountain provide less protection than EPA's standard for the Waste Isolation Pilot Plant (WIPP) in Carlsbad, New Mexico (40 CFR Part 191). You cite the absence of separate criteria for protection of ground water in NRC's proposed regulation as evidence that the WIPP standards, which include separate requirements for protection of ground water, are more restrictive. You also note differences in the individual protection limits [the 0.15-mSv/yr (15-mrem/yr) limit for WIPP, compared with the 0.25-mSv/yr (25-mrem/yr) limit for Yucca Mountain]. Both limits represent small fractions of the national and international public dose limit of 1 mSv/yr (100 mrem/yr). In the Commission's view, the level of protection provided by either a 15 or 25 mrem/yr standard is so large that any difference in public health and safety effects resulting from exposures to radiation at these low levels would be undetectable by state-of-the-art epidemiology. Further, NRC's all-pathways analysis considers the groundwater pathway in the assessment of potential risks to public health and safety. Consequently, we see no health and safety basis for separate standards for the groundwater pathway. Nonetheless, we will modify our Part 63 requirements, as necessary, to make them consistent with the final standards that EPA promulgates for a Yucca Mountain repository. Thus, if EPA promulgates standards that include a separate standard for the groundwater pathway, the NRC regulations will be brought into conformance with the EPA standards.

### Issue 3

Citizen Alert notes "remarkable similarities" between the Commission's proposed regulations at Part 63 and DOE's site suitability guidelines, for Yucca Mountain, proposed at 10 CFR Part 963. Citizen Alert implies NRC acted improperly by deliberately choosing Part 63 requirements that would match DOE's proposed guidelines.

### Response:

There are sound reasons for the similarities between DOE's siting guidelines and NRC's proposed regulations. For DOE to find any site suitable for development as a geologic repository, it must have some degree of confidence that the site will comply with applicable regulatory requirements. When NRC publicly announced its intent to pursue development of new, site-specific regulations at Part 63 in early 1998, as discussed above, DOE elected to

repropose its corresponding siting guidelines in November of 1999.<sup>2</sup> DOE obviously sought to make its proposed guidelines consistent with NRC's proposed implementing regulations.

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In closing, I want to thank you again for bringing your concerns, and those of your organization, to the attention of the Commission. If you have any further questions or comments, please feel free to contact Dr. Janet Kotra of the NRC staff. Dr. Kotra can be reached toll-free, via the NRC operator, at 1-800-368-5642 or via e-mail, at [jjk@nrc.gov](mailto:jjk@nrc.gov).

Sincerely,

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Richard A. Meserve

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<sup>2</sup> "General Guidelines for the Recommendation of Sites for Nuclear Waste Repositories; Yucca Mountain Site Suitability Guidelines (10 CFR 963) and the Announcement of Public Hearings" [64 FRN 229, p. 67054].