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EPA Docket Center (EPA/DC)  
Air and Radiation Docket  
U.S. Environmental Protection Agency  
EPA West, Mail Code 6102T  
1200 Pennsylvania Ave. NW  
Washington, D.C. 20460

Attention: Docket ID No. OAR-2005-0083

To Whom It May Concern:

The Environmental Protection Agency's ("EPA's") August 22, 2005 proposed amendments to 10 C.F.R. Part 197, "Public Health and Environmental Radiation Standards for Yucca Mountain, Nevada," include provisions at proposed section 197.36 designed to limit consideration of certain physical processes in the repository system safety performance assessment in the post-10,000 year performance period. These include a limit on the Nuclear Regulatory Commission's ability to take account of localized corrosion of the waste package. This limit is based on an EPA finding that the phenomena of localized corrosion of the waste packages at Yucca Mountain is sufficiently understood scientifically that the potential for significant new effects on public safety after 10,000 years should be ignored. In the proposed amendment EPA concludes these effects must be ignored unless they can be shown to be significant before then, which EPA seems to think is unlikely. See 70 Fed. Reg. 49053.


In its overly confident conclusions about localized corrosion processes, EPA is at odds with the experts in the field. In a December 30, 2005 letter to the Congress, the Nuclear Waste Technical Review Board advised that it "continues to be concerned about the potential for localized corrosion in deliquescent brines formed at temperatures between 160 C and 220 C from airborne dust that will be deposited on the surface of the waste packages." Further, in an October 6, 2005 scientific report (not released until late December), the Nuclear Regulatory Commission's Center for Nuclear Waste Regulatory Analysis concluded that "under a limited range of conditions, stress corrosion cracking of Alloy-22 has been observed in environments containing chloride and bicarbonate, which may be present in water entering the emplacement drifts."

It is clear from these sources, whose technical expertise on waste package corrosion far exceeds the EPA's, that the science of localized corrosion of the Yucca Mountain waste packages is still being developed, that significant technical concerns remain, and that more scientific work needs to be done before the matter can be resolved. Moreover, recent DOE initiatives to re-examine the waste package design for Yucca Mountain raise serious questions whether EPA's assumptions about the nature of the waste package subject to corrosion will comport with reality.

Given this, it is completely arbitrary for the Agency to issue a binding rule that limits the Commission ability to consider the matter. The licensing and regulatory process for Yucca Mountain must be based on sound science, but it cannot be if the Agency tells the Commission that it must willfully blind itself to significant new scientific information. The recent dramatic changes in DOE's program to develop Yucca Mountain also strongly counsels against an inflexible EPA rule that treats the Yucca Mountain Project as if it were frozen in the mid-2005 time frame.

Please consider the above as a late comment on the proposed rule. Good cause exists for your consideration of these comments since the referenced technical reports became available only recently.

Sincerely,



Robert R. Loux  
Executive Director

RRL/cs

cc Nevada Congressional Delegation  
U.S. Nuclear Waste Technical Review Board  
U.S. Advisory Committee on Nuclear Waste  
Samuel Bodman, Secretary of Energy  
David R. Hill, General Counsel, U.S. Department of Energy  
Dr. Ralph J. Cicerone, President, National Academy of Sciences  
Dr. Lars-Erik Holm, Chairman, International Commission on  
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