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Mr. Lake H. Barrett
Acting Director
Office of Civilian Radioactive Waste Management
Department of Energy
Washington, DC 20585

Dear Mr. Barrett:

I respond as President of the American Physical Society to your request, dated August 27, for comments on whether the Secretary of Energy should recommend to the President that Yucca Mountain be developed to serve as a repository for spent nuclear fuel and high-level radioactive waste.

We recognize the extensive studies of the Yucca Site over the last twenty years, and note that the assessments based on those studies predict very low future radiation levels in the vicinity of Yucca Mountain. However we have not made our own evaluation of the adequacy of these studies. Such evaluation, involving many areas such as chemistry, geology, hydrology, as well as nuclear science, goes beyond the main-line expertise of the APS. Thus, with respect to your first Topic for Comment, we are not now in a position to comment knowledgeably on whether the PSSE and other available documents provide an adequate basis for finding that the Yucca Mountain site is suitable for development of a repository.

However, we do want to respond to your second Topic. We believe that, if the Secretary does determine that the scientific analysis indicates that the Yucca Mountain site is likely to meet the applicable radiation protection standards established by EPA and NRC, the Secretary should definitely proceed to recommend the site to the President at this time. I append a copy of APS Statement 93.7 passed by the APS Council in 1993, and call your attention to item (b) in the second paragraph which states that keeping the nuclear energy option open requires "the development and implementation of programs for the safe disposal of spent fuel and radioactive wastes".

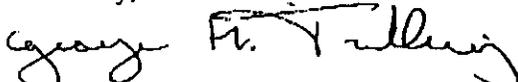
We believe that concerns about greenhouse gas emissions have only increased since 1993, and that therefore nuclear power may be needed as an important element of our energy policy. If that is so, the capability to dispose safely of nuclear waste is mandatory. In addition we note that there already exists a substantial amount of radioactive waste and spent nuclear fuel that has been

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accumulating at commercial reactor sites and storage facilities since 1957. It is time to set up a more permanent repository for this waste. There may be some risks associated with Yucca Mountain, but there are also serious risks associated with taking no action in this important area.

We appreciate the opportunity to comment on the important policy issues that you have brought to our attention.

Sincerely,


George Trilling



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STATEMENT ON NUCLEAR ENERGY (Adopted by the APS Council -- 21 November 1993)

The American Physical Society has a long-standing interest in the establishment of a technically sound national energy policy. Such a policy must include steps to decrease the heavy dependence of the United States on fossil fuels. Their use entails significant environmental costs, including possibly substantial changes in global climate with uncertain consequences for human well being. Moreover, since resources of oil and, less immediately, natural gas are limited, U.S. reliance on foreign sources creates economic burdens and military dangers. We therefore endorse increases in federal funding and general support for programs in conservation and in the development of renewable energy sources.

A balanced energy policy, however, also requires that the Department of Energy have strong programs to keep the nuclear energy option open, through: (a) the continued development of nuclear reactors which can be built, operated, and eventually decommissioned in a manner which is simple, safe, environmentally sound and cost-effective; (b) the development and implementation of programs for the safe disposal of spent fuel and radioactive wastes; and (c) the development of an effective public education program to allow a more informed debate on the strengths and weaknesses of nuclear power. The American Physical Society is deeply concerned that the current progress in these areas is inadequate.

A CENTURY OF SERVICE TO SCIENCE AND HUMANITY since 1899, the American Physical Society, a non-profit scientific and educational organization, is devoted to the advancement and diffusion of the knowledge of physics and is the principal membership organization of physicists in the United States, with over 40,000 members in academia, industry and government.