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July 29, 2002

Richard A. Meserve, Chairman
Nuclear Regulatory Commission
One White Flint North Building
11555 Rockville Pike
Rockville, Maryland 20852

Attn. Rulemaking and Adjudications Staff

**Subject: Proposed Rulemaking Pursuant to Provisions of
10 CFR 2.802 Regarding the "Special Requirements of
Plutonium Shipments," 10 CFR 71.63, NRC Docket No.
PRM-71-12**

Dear Chairman Meserve:

For the reasons set forth below, we the undersigned strongly oppose the Nuclear Regulatory Commission (NRC) proposal under Issue 17 to remove the double containment requirement of Sec. 71.63(b) for shipments of radioactive material containing quantities of plutonium exceeding 20 curies. Existing container requirements for these shipments represent the minimum standards necessary for safety, security, and public acceptance. We believe that the NRC's proposed relaxation of these requirements would be unacceptable. We also strongly endorse the NRC's proposal to retain the requirement that shipments whose contents exceed 20 curies of plutonium must be made in a solid form as provided under Section 71.63(a).

The proposed rule change to remove the double containment requirement is inconsistent with our nation's commitment to reducing vulnerabilities to emerging terrorist threats. Given the heightened awareness of possible terrorist attacks, widespread public fear of anything "nuclear" or "radioactive", and public concern over the safety of nuclear waste shipments, we believe that the NRC should not relax the double containment requirement until the NRC completes a valid safety assessment comparing the vulnerability of single versus double containment to acts of terrorism. A recent National Academy of Sciences study to develop recommendations for making the nation safer against terrorism concluded that the NRC should "tighten regulations for obtaining and possessing radiological sources that could be used in terrorist attacks, as well as requirements

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Chairman Meserve
July 29, 2002
Page 2

for securing and tracking these sources." Clearly, the trend post-September 11 is toward stricter, rather than more relaxed, safety standards for radioactive materials.

The original rationale for establishing the double containment requirement in 1974 is still valid. In 1974, the Atomic Energy Commission (AEC) imposed the double containment requirement, when large numbers of plutonium shipments were anticipated from commercial reprocessing of spent nuclear fuel. The AEC's regulatory concern was based on the increased possibility of human error combined with the expected increase in the number of shipments, and that this would yield an increased probability of leakage during shipment. Although commercial reprocessing was abandoned in the United States in the late 1970s, a large increase in plutonium shipments is once again anticipated from the United States Department of Energy's (DOE) programs for facilities' clean-up, waste management, R & D, and weapons dismantlement. With such an increase in shipments, the potential for human error (e.g., improperly assembled and closed packages) and transport incidents would similarly be expected to increase.

The NRC justifies its recommendation for eliminating the double containment requirement by arguing that "the worldwide performance record over 40 years of Type B packages demonstrates that a single containment barrier is adequate." However, this record only reflects accidental releases of plutonium, not potential deliberate acts of aggression or terrorism. As no new risk-related studies were cited in the proposed rulemaking, it appears that none have been conducted on this issue.¹ Further, the petitioner who originally proposed the rule change argues that single containers would be safer for the personnel who currently must handle the inner container. Adopting a single containment requirement may, in effect, just be shifting the probabilities of risk from the package handlers to the general public. However, until studies are done, such a shift cannot be justified.

Managing the transportation of transuranic (TRU) waste from the DOE facilities to the Waste Isolation Pilot Plant (WIPP) in southeastern New Mexico is the joint responsibility

¹It is worth noting that in June 1986 the Environmental Evaluation Group (EEG) issued a report entitled "EEG-33: Adequacy of TRUPACT-1 Design for Transporting Contact-Handled Transuranic Waste to WIPP." On page -iv- of this document, EEG concluded: *A principal advantage of a TRUPACT with double containment is the estimated decrease from 12 to .02 in the number of accidents involving radionuclide releases during the WIPP Project. Even minor accidents involving little public radiation exposure are costly to monitor and clean up and can decrease public confidence in the safety of radioactive material shipments. An additional advantage of double containment is the extra protection it is expected to provide in the event of a low probability (0.1-1%) /high consequence accident. These very severe accidents could result in up to 10-30 latent cancer fatalities with the present design. Double containment is estimated to reduce this by at least 60% to 80%.*

Chairman Meserve
July 29, 2002
Page 3

of federal, state, local, and tribal governments. For more than 10 years, the Western Governors Association, which consists of 21 western states and territories, has assisted its member states in the development and coordination of a WIPP transportation program that would be acceptable to the public. At the heart of this WIPP transport safety program is the TRUPACT II double containment packaging. The public was led to believe that the extra barrier provided by double containment along with adoption of the other transportation safety protocols would lead to safe shipments. We are concerned that removal of the double containment requirement could seriously erode public confidence in the WIPP transportation safety program.

In the two and a half years since WIPP opened, the WIPP transport safety protocols have been fully implemented and are now accepted by most of the people along shipment corridors. We believe strict adherence to these protocols has not only resulted in the safe and uneventful transportation of more than 1,000 truckloads of TRU waste to WIPP, but also fostered public confidence as well. It is our goal to ensure that record will continue. If the rule on double containment is relaxed, this safety record could be jeopardized unless the NRC obtains scientific evidence that demonstrates beyond a reasonable doubt that single containment is as safe as double containment. The NRC should also weigh the potential damage to public confidence in the WIPP shipments, if the double containment requirements are relaxed.

In conclusion, we believe that it is inappropriate for the NRC to reduce the required levels of protection for plutonium shipments, when there is no compelling technical or scientific basis provided for doing so, the numbers and quantities of plutonium shipments are expected to sharply increase, and concern about potential acts of aggression against radiological material shipments has risen. The NRC's proposal to relax the double containment requirement for plutonium shipments is flawed in its failure to provide the necessary analyses needed to compare the costs, safety benefits, and radiation exposure trade-offs for single versus double containment or to demonstrate that the existing regulations are overly burdensome. We are concerned that eliminating the requirement for double containment could jeopardize existing transportation programs, such as the WIPP Transportation Safety Program. The DOE's commitment to using double containment packages for transporting wastes to WIPP is fundamental to the WIPP Transportation Safety Program and the public acceptance of these shipments. Therefore, we strongly oppose the proposed elimination of the double containment standard.

Should the NRC continue to pursue the proposal to relax the plutonium shipment double containment standards, we believe it necessary for the NRC to conduct a series of hearings on the rulemaking, with at least one of those hearings held in the West.

Chairman Meserve
July 29, 2002
Page 4

Sincerely,

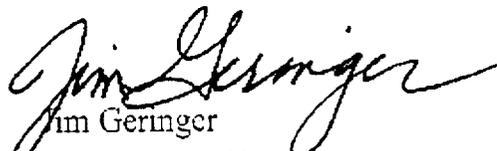

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Cc: Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attention:
Rulemaking and Adjudications Staff.