



RECEIVED

State of New Jersey

Department of Environmental Protection

JAN 26 2 4 29

Robert C. Shinn, Jr.
Commissioner

Christine Todd Whitman
Governor

January 14, 2000

Secretary of the Commission
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Attention: Rulemakings and Adjudication's Staff

DOCKET NUMBER
PETITION RULE PRM 73-10
(64FR49410)

Subject: Comments on a petition for rulemaking and notice of receipt published in the Federal Register on September 13, 1999. Docket No. PRM-73-10

The U.S. Nuclear Regulatory Commission's Notice of Receipt of a petition, by Nevada, to amend regulations governing safeguards for shipment of spent nuclear fuel against sabotage and terrorism, and to initiate a comprehensive assessment for rulemaking was published in the *Federal Register* on September 13, 1999, (Docket No. PRM-73-10). As the New Jersey State Representative of the Northeast High-Level Radioactive Waste Transportation Task Force, I appreciate the opportunity to comment.

The Northeast states have a substantial interest in assisting in the development of rules, policies and procedures that effect the management of spent nuclear fuel. The Northeast states have a high concentration of spent nuclear fuel located in the region. There are 30 commercial nuclear power plants in the Northeast currently storing spent nuclear fuel on their sites.

It is the Bureau of Nuclear Engineering's position that it is not necessary to initiate rulemaking on the safeguards for transportation of spent nuclear fuel. There are a high number of shipments routinely occurring without difficulty, nationwide. Historically, spent fuel shipments in NRC certified casks have an excellent safety record. Approximately 1300 spent fuel shipments have been made since 1971 in the U.S., with no radiological releases to the environment from accidents. Over the past 35 years, there has been an average of 68 spent fuel shipments per year, totaling approximately 2,380 spent fuel shipments. All of the shipments were accomplished safely.

New Jersey is not in possession of any information that the nature of a terrorist threat has changed or that transportation casks are an attractive target. Spent nuclear fuel is transported by truck or rail in heavy metal casks. The weight of the casks used to transport the spent fuel would discourage most would-be hijackers from attempting to remove the cask from the vehicle. These casks can weigh more than 100 metric tons (98 tons) and have steel walls up to 30.5 centimeters thick or the equivalent. The cask designs are required to undergo a sequential series of tests to ensure their ability to withstand a range of accidents. They are evaluated for a 30-foot drop onto an unyielding surface, are dropped onto a vertical steel bar, are fully engulfed in a 30-minute fire, and finally, immersed in water.

The robust nature of a transportation cask would require a great deal of effort by a terrorist with very little result. The U.S. Department of Energy's (DOE) Naval Propulsion Division has reported results of tests where they shot anti-tank projection devices at a 14-inch thick, NRC approved, shipping cask.

DS10

The results, as reported, were that the entry hole appeared to resolidify and seal as the high-speed molten projectile from this sophisticated, portable armor-piercing weapon passed through the cask wall. The effectiveness of these anti-tank weapons depends on the availability of fuel and ammunition in a tank to cause an explosion. Neither of those energy sources is available in spent nuclear fuel shipping casks. At worst, there may be a small leak due to cask penetration, which could be handled like any other potential cask leak. In addition, Sandia Laboratories has recently released information on their own high explosive testing. The shipping cask was not breached; it was simply knocked off the railroad car chassis, a transportation accident covered in training offered to first responders.

Transportation casks are not an attractive target. There are safeguards already in place, which we believe provide adequate protection. High-level radioactive materials are transported under strict regulatory controls established by the NRC and DOT. There is pre-notification of the Governor or the Governor's designee of unclassified spent nuclear fuel and high-level radioactive waste shipments within or through the State. DOE also provides advance notification to Tribal governments. DOE monitors its high-level radioactive waste and spent fuel shipments through a satellite-based tracking system.

Raising concerns about transport of spent fuel is diverting our attention for the real concerns about spent fuel. The longer spent nuclear fuel is not transported to a central location, the longer it will remain stored at many sites all across the country, including at the 30 commercial nuclear power plants in the Northeast, most which have much more undesirable features with respect to protecting public health and safety than any anticipated central location. Most reactor sites are located near rivers, lakes, or seashores. In addition, American consumers of electricity have already paid about \$15 billion into the Federal Nuclear Waste Fund to develop a central repository and will have to pay billions of dollars more for on site storage if transportation of spent fuel does not occur within a reasonable time period.

In summary, we believe additional rulemaking on safeguards for spent fuel transportation is not necessary. Spent nuclear fuel shipments occur routinely and without difficulty. Transportation casks are very robust and do not make an attractive target or a successful target for sabotage. It is important to apply our energy and focus to solving the real problems we face and not be diverted into unnecessary rulemaking.

I hope you find our comments helpful and thank you again.

Sincerely,



Kent Tosch, Manager
New Jersey - Bureau of Nuclear Engineering
Governor's Designee Highway Route Control Quantity Shipments
Representative: High-Level Radioactive Waste Transportation Task Force