

August 3, 2001

MEMORANDUM TO: Chairman Meserve
Commissioner Dicus
Commissioner McGaffigan

FROM: Commissioner Merrifield /RA/

SUBJECT: TRANSPORTATION OF SPENT FUEL

The National Transportation Safety Board is currently investigating the CSX train derailment which occurred in Baltimore, Maryland on July 18, 2001. The 60-car CSX train was carrying hazardous chemicals and flammable products and derailed in a 1.7 mile tunnel below the city of Baltimore. Because the accident occurred in a tunnel, firefighters were not able to put out the resultant fire for several days. Initial reports indicate that temperatures in the tunnel were approaching 1,500 degrees.

This accident emphasizes the importance of transportation safety and specifically the safety of transporting spent nuclear fuel and other high-level waste. I recognize that the NRC staff has developed detailed regulations containing requirements for rigorous testing of shipping casks to ensure their integrity and safety during transportation and during accidents. However, I believe this accident provides us with an opportunity to review our requirements and the steps we have taken to preclude an accident such as this from happening in the first place.

I believe it would be prudent for the staff to follow the National Transportation Safety Board investigation as well as any other related investigation, and to use the resulting information to assess NRC's regulations associated with the transportation of spent nuclear fuel and high-level waste. The staff should determine if NRC's current regulations are sufficient to ensure that a transportation cask would maintain its integrity, and that the public health and safety would be protected, if an accident similar to the one which occurred in Baltimore (i.e. flame temperature, fire duration, presence of flammable and other hazardous cargo) were to occur to a train carrying spent nuclear fuel and high-level waste. Based on my discussions with the staff, I do not anticipate that this request will have significant resource implications. The staff should report back to the Commission with their findings on this issue.

SECY please track.

cc: EDO
SECY
OGC
STP
NMSS