

71-9315



Department of Energy
Washington, DC 20585

FEB 28 2005

Mr. John Monninger
Chief, Licensing Section
Spent Fuel Project Office, NMSS
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Monninger:

The U. S. Department of Energy is pleased to submit the Safety Analysis Report for Packaging (SARP) for the ES-3100 shipping container for your review. Ten copies of the SARP have been submitted to your office under separate cover. By this submittal, DOE is requesting that the Nuclear Regulatory Commission certify this shipping container as a Type B fissile container for the contents identified in Chapter 1 of the SARP.

The SARP demonstrates through analysis and full-scale performance testing that the proposed ES-3100 shipping container is fully compliant with the latest requirements set forth in Title 10, Part 71 of the Code of Federal Regulations (10 CFR Part 71 as of October 1, 2004). The SARP has been prepared in accordance with NRC Draft Guide 7003.

Throughout the design and testing process, the ES-3100 design agency, BWXT Y-12, was in regular communication with the NRC. Three public meetings were held at the NRC for the purpose of describing design features of the ES-3100, reviewing plans for full-scale testing, presenting results of analyses and testing, and clarifying methods for presentation of data in the SARP. During these meetings, BWXT Y-12 presented detailed information about the container and received information that was useful in the container development and SARP preparation processes. In addition, two members of the NRC witnessed the full-scale thermal accident conditions test at a facility in Latrobe, PA.

The timely certification of this container is very important to DOE. As you know, the Department of Transportation announced that the Specification 6M container is being removed from service for Type B radioactive material shipments on October 1, 2008. Consequently, DOE operators of the Transportation Safeguards System have imposed a further restriction specifying that all secure shipments with the (non-performance-based) 6M container must terminate by January 1, 2006. Because of this impending termination, DOE began the development of the ES-3100 in early 2003. About three years was planned for the development, licensing, and implementation of this new container.



NMSSOP

It is essential that DOE have a licensed replacement for the 6M by January 1, 2006. The department relies heavily on the 6M for many ongoing missions involving the shipment of highly enriched uranium including, but not limited to, nuclear nonproliferation. Equally important, the department needs the 6M replacement as close to the 6M termination date as possible so that critical missions can continue on schedule. For this reason, DOE is respectfully requesting that the NRC review this submittal on the most expeditious schedule that is prudent. Representatives of BWXT Y12 are available to answer any questions during the review in as prompt a manner as possible.

For your convenience, a draft of the text for a Certificate of Compliance for this container will be submitted within a month. Also, it was requested that DOE submit the Quality Assurance Plan (QAP) that governed the development (and will govern the use) of this container. In compliance, the QAP from BWXT Y-12 Packaging Engineering is enclosed.

If you have any further questions, please contact Dr. James Shuler at 301-903-5513.



Dae Y. Chung
Director, Licensing Office
Environmental Cleanup and Acceleration
Office of Environmental Management

Enclosure

cc:

James Shuler, EM-24
Dean Tousley, NA-261