

July 24, 2000

MEMORANDUM TO: Ashok C. Thadani, Director
Office of Nuclear Regulatory Research

FROM: /RA by Martin J. Virgilio, Acting For/
William F. Kane, Director
Office of Nuclear Material Safety
and Safeguards

SUBJECT: REQUEST FOR EXPEDITED ACTIVITIES RELATED TO
PROBABILISTIC ASSESSMENT OF DRY STORAGE OF
SPENT NUCLEAR FUEL

This memorandum requests expedited actions related to additional activities supporting our existing user need letter for probabilistic risk analysis on dry storage of spent nuclear fuel. The staff requests expedited activities to support the development of generic guidance that can be applied to our review of the GNB Castor Storage Cask.

In our March 10, 2000, memorandum, the Office of Nuclear Material Safety and Safeguards (NMSS) requested expedited actions in support of hearings and the draft environmental impact statement (DEIS) on the Private Fuel Storage (PFS) facility. Our memorandum requested the Office of Nuclear Regulatory Research's (RES) assistance in the following areas:

Quantification of the probability of experiencing a leak in the HI-STORM cask under normal and accident conditions.

For postulated welding defects resulting in a leak below the technical specification limit, quantification of the probability of the welding defect growing to a larger size, thereby exceeding the technical specification leak rate.

This memorandum requests similar assistance in support of our development of generic guidance on the probability of a leak in a welded carbon steel cover with a bolted secondary seal, as exists in the CastorX/32 dry storage spent fuel cask. Major differences exist between the Castor and the HI-STORM cask. The Castor cask is manufactured with carbon steel. The welding process differs for the two casks. We request RES assistance in providing a similar evaluation on the Castor cask as provided on the HI-STORM cask to support this request. Only RES has access to the prodigal code and expertise to properly execute that code for calculating the probability of a leak. The staff also intends to apply this information in its risk assessment studies. This request was coordinated with Mr. Edwin Hackett of your staff. We would appreciate your input by November 30, 2000.

CONTACT: Christopher S. Bajwa, NMSS/SFPO
(301) 415-1237

We want to express our appreciation for the RES's rapid and quality response in support of the PFS hearing and the DEIS.

cc:

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A. Rubin, RES/DRAA

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***See previous concurrence**

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