

April 22, 2004

MEMORANDUM TO: Farouk Eltawila, Director
Division of Systems Analysis and Regulatory Effectiveness
Office of Nuclear Regulatory Research

FROM: E. William Brach, Director **/RA/**
Spent Fuel Project Office
Office of Nuclear Material Safety and Safeguards

SUBJECT: USER NEED MEMORANDUM – REQUEST FOR EXTENSION
ON RESEARCH ASSISTANCE.

Reference: Memorandum from E. W. Brach to F. Eltawila, December 19,
2003

The Office of Nuclear Material Safety and Safeguards (NMSS) seeks an extension to the above Reference Memorandum requesting further assistance from the Office of Nuclear Regulatory Research (RES) on CFD analyses in support of the HI-STORM 100 storage cask licensing application. Due to the complexities of the storage cask design, multiple thermal-hydraulic models were developed in response to several iterations with the applicant. These iterations led to increased scope of the Reference Memorandum and continued departures between the applicant's and the staff's results. To resolve the ongoing technical issues, RES's thermal model, developed using the FLUENT computer code, requires modifications to model the fuel assembly and associated flow paths in great detail. The Spent Fuel Project Office is very pleased with the in-house analytic support RES provided thus far and requests continued support through resolution of the technical issues.

Background

Reference Memorandum.

Area of Needed Assistance

Reference Memorandum.

It is our projection that the completion of this task will take on the order of 3 additional months.

CONTACT: Jorge Solis, NMSS/SFPO
(301)415-3040

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