

February 3, 2014

MEMORANDUM TO: Catherine Haney, Director
Office of Nuclear Material Safety and Safeguards

FROM: Brian W. Sheron, Director */RA/*
Office of Nuclear Regulatory Research

SUBJECT: RESPONSE TO USER-NEED REQUEST TO ASSIST
NMSS/SFST TO REVIEW CFD METHODS APPLIED TO THE
DESIGN OF STORAGE AND TRANSPORTATION CASKS
(USER NEED REQUEST NMSS-2014-001)

The Office of Nuclear Regulatory Research (RES) is pleased to accept your user need request dated November 27, 2013, which is available in the Agency Document Access and Management System (ADAMS) under Accession No. ML13295A477, and which we have designated as NMSS-2014-001 for tracking purposes. This user need request extends RES assistance to NMSS previously carried out under user need request NMSS-2011-001, which is being closed out. Specifically, this request asks RES to assist and collaborate with the NMSS Division of Spent Fuel Storage and Transportation (SFST) on the review and applicability of detailed computational fluid dynamics (CFD) models to the analysis of spent fuel storage and transportation cask designs. In addition, RES is asked to provide technical expertise, support, and knowledge transfer to SFST during the staff's development of CFD models for confirmatory analyses and assistance with Technical Assistance Requests (TARs) from the regions. NMSS requests that the work be completed within 36 months after the starting date.

RES agrees to proceed with the work to achieve the following tasks:

Task 1: RES will help SFST review applicant's CFD results and conclusions.
Completion Date: throughout the 36 months after the starting date.

Task 2: RES will perform CFD confirmatory analyses of different cask applications if deemed necessary. Completion Date: throughout the 36 months after the starting date.

Task 3: RES will assist SFST with Technical Assistance Requests (TARs) from the regions.
Completion Date: throughout the 36 months after the starting date.

Task 4: RES will provide CFD technical expertise, and knowledge transfer for different cask designs. Completion Date: throughout the 36 months after the starting date.

CONTACT: Ghani Zigh, RES/DSA
301-251-7505

The RES lead for NMSS-2014-001 is Ghani Zigh in the Division of Systems Analysis. The NMSS office lead contact for this endeavor is Jorge Solis of the Thermal and Containment Branch in the Division of Spent Fuel Storage and Transportation. We anticipate that our respective staffs will interact as needed to ensure that the products of this work are timely and in accordance with the agency's objectives and priorities.

The RES lead for NMSS-2014-001 is Ghani Zigh in the Division of Systems Analysis. The NMSS office lead contact for this endeavor is Jorge Solis of the Thermal and Containment Branch in the Division of Spent Fuel Storage and Transportation. We anticipate that our respective staffs will interact as needed to ensure that the products of this work are timely and in accordance with the agency's objectives and priorities.

Distribution:

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