

July 11, 2013

Mr. Barry K. Miles  
Division of Naval Reactors  
U.S. Department of Energy  
Washington, DC 20585

SUBJECT: APPLICATION FOR THE MODEL NO. M-290 TRANSPORT PACKAGE –  
ACCEPTED FOR REVIEW (TAC NO. L24755)

Dear Mr. Miles:

By letter dated May 13, 2013, you submitted an application for approval of Certificate of Compliance No. 9352, for the Model No. M-290 transport package. The application, which consists of the core independent safety analysis report, proposes using the M-290 package to transport naval reactors spent fuel.

We have established a schedule for the review. The schedule allows for the staff to complete its technical review and issue the first request for additional information on the core independent safety analysis report in mid-November 2013. NRC will consider the application for the Model M-290 package to be complete upon receipt and acceptance of the core dependent safety analysis report and will schedule our review of the core dependent safety analysis report at that time. In general, no additional changes to the application should be submitted except for changes resulting from your response to the first request for additional information.

The staff observation on the core independent safety analysis report is enclosed. Staff included this observation to allow you to start earlier on an item containing the potential to be asked at a later date. A response to this observation is not required for staff to begin a detailed technical review. Observations are not the result of a detailed technical review and may be resolved once staff begins a detailed review.

If you have any questions regarding this matter, please contact me at (301) 287-0810.

Sincerely,

/RA/

Bernard H. White, Senior Project Manager  
Licensing Branch  
Division of Spent Fuel Storage and Transportation  
Office of Nuclear Material Safety  
and Safeguards

Docket No. 71-9352  
TAC No. L24755

Enclosures: 1. Observations for M-290 Acceptance Review

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Enclosures: 1. Observations for M-290 Acceptance Review  
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**ADAMS Accession No.: ML**

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<b>NAME:</b>	BWhite		MDeBose		JSmith		MRahimi		MSampson			
<b>DATE:</b>	7/10/13		7/10/13		7/11/13		7/11/13		7/11/13			

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NAVAL REACTORS

DOCKET NO. 71-9352

OBSERVATION RELATED TO THE

MODEL NO. MAGNATRAN APPLICATION

**Criticality Evaluation**

Section 1.2.1.3.9, "Shielding and Criticality Control," claims that the criticality controls for the M-290 shipments are provided by a combination of controls, which includes the containment cover. The application states that the containment cover provides a leak-tight seal to maintain an essentially moderator-free environment under all conditions. Although more details are expected to be forthcoming in the core dependent safety analysis report regarding criticality safety, staff noted that 10 CFR 71.55(b) requires that a shipment of fissile material must be evaluated assuming water leakage into the containment system to demonstrate that the contents will remain subcritical during transportation, including loading and unloading operations.

As part of the criticality safety chapter of their Core Dependent Safety Analysis Report, the applicant should ensure that the M-290 package is evaluated as fully flooded with water to satisfy 10 CFR 71.55(b), or that the containment cover is leak tight and therefore excludes moderation in order to satisfy the requirements of 10 CFR 71.55(c).