

July 13, 2012

Dr. Jayant Bondre  
Vice President, Engineering  
Transnuclear, Inc.  
7135 Minstrel Way, Ste. 300  
Columbia, MD 21045

SUBJECT: APPLICATION FOR REVISION TO CERTIFICATE OF COMPLIANCE NO. 9302  
FOR THE MODEL NO. NUHOMS<sup>®</sup>-MP197HB TRANSPORTATION PACKAGE,  
SUPPLEMENTAL INFORMATION NEEDED (DOCKET NO. 71-9302)

Dear Dr. Bondre:

By letter dated March 2, 2012, Transnuclear, Inc. (TN) submitted an application for revision to Certificate of Compliance (CoC) No. 9302 for the Model No. NUHOMS<sup>®</sup>-MP197HB transportation package. In your application, you propose to add high burnup fuel assemblies as authorized contents and to include the 32PT, 24PTH, 32PTH, 32PTH1, and 37PTH dry storage canisters (DSCs) as authorized contents of the packaging for transportation. TN also states that this application addresses the unresolved issues noted in staff's November 2, 2011, letter. Staff performed an acceptance review of your application to determine if the application contains sufficient technical information in scope and depth to allow the staff to complete the detailed technical review.

This letter is to advise you that based on our acceptance review, supplemental information is needed to continue our review. The enclosure to this letter contains the Request for Supplemental Information (RSI). As described in our letter dated June 19, 2012, the staff needs confidence that the proposed safety approach for potentially embrittled high burnup cladding, after long-term storage under 10 CFR Part 72, can satisfy the regulatory requirements of 10 CFR Part 71. The current licensing approach proposed by TN should provide evidence that the high burnup fuel remains intact (or otherwise individually confined) during normal conditions of transport. In addition, the defense-in-depth analyses (currently proposed in the application) should demonstrate the criticality, shielding, thermal, containment, and handling safety for potential fuel reconfiguration, in order to address uncertainties with the limited industry data on high burnup fuel. As noted in our phone call on June 22, 2012, the staff is performing a regulatory review of long-term compatibility of storage and transportation requirements, including potential policy issues related to cladding integrity, retrievability, and safe handling of high burnup fuel by NRC licensees in the backend of the fuel cycle. In the interim, the staff intends to request this type of supplemental information in future certification actions for high burnup fuel, depending on potential cladding condition, at the time of transport, and the specific design features of the package. Applicants may always choose to pursue alternative approaches to demonstrate compliance with 10 CFR Part 71, based on its specific high burnup transportation package technology and fuel characteristics.

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J. Bondre

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In order to schedule our technical review, the RSI responses should be provided by July 31, 2012. If the RSI responses are not received by this date, the application may not be accepted for review. This letter confirms our phone calls on April 30, May 22, and June 22, 2012, with respect to the supplemental information needed and the projected date for your submittal on July 31, 2012.

If you have any questions regarding this matter, you may contact me at (301) 492-3297 or Kim Hardin of my staff at (301) 492-3339.

Sincerely,

**/RA/**

Michael D. Waters, Chief  
Licensing Branch  
Division of Spent Fuel Storage and Transportation  
Office of Nuclear Material Safety  
and Safeguards

Docket No. 71-9302  
TAC No. L24627

Enclosure:  
As stated

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