TRANSNUCLEAR
AN AREVA COMPANY

February 15, 2006
E-23300

Mr. Joe Sebrosky
Spent Fuel Project Office, NMSS
U. S. Nuclear Regulatory Commission
11555 Rockville Pike MIS 0-6-F-18
Rockville, MD 20852

Subject: Transnuclear, Inc. (TN) Commitments Regarding NUHOMS® HD System Final Safety Analysis Report (FSAR) (TAC No. L23738)

Dear Mr. Sebrosky:

Based on recent discussions with the NRC staff regarding the recently submitted Revision 4 of the NUHOMS® HD System Safety Analysis Report, Transnuclear (TN) commits to the following changes when docketing the initial revision of the associated Final Safety Analysis Report:

- Correct two typographical errors (change units for "Max Uranium Loading" from "MTU" to "Kg" and add units "(lbs)" for "Max Assembly Weight with Insert components") that occur in SAR Table 2-1,

- Add a note in SAR Chapter 8, Section 8.1.1.3, step 14, which reads:

  "NOTE: Proceed cautiously when evacuating the dry shielded canister (DSC) to avoid freezing consequences,"

- Add the following caution to SAR Chapter 8, Section 8.1.1.3, steps 7, 15, and 20 and Section 8.2.2, step 11:

  "CAUTION: Radiation dose rates are expected to be high at the vent and siphon port locations. Use proper ALARA practices (e.g., use of temporary shielding, appropriate positioning of personnel, etc.) to minimize personnel exposure," and

- Add a new SAR Section 9.5.3.7, as follows:

  "Section 9.5.3.7 Required Computations for Using Neutron Beam Size Greater than 1.2 cm. Diameter

  As described in Section 9.5.2, a neutron beam greater than 1.2 cm diameter but no larger than 1.7 cm diameter may be used for acceptance testing if a criticality calculation shows

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that neutron absorber material with the following defects would still result in k_{eff} below the Upper Subcritical Limit as calculated in Chapter 6:

1. Defects of the same area as the proposed neutron beam or larger have an areal density significantly below the specified minimum areal density.

2. These defects are distributed randomly or systematically over the material, or in a manner that is conservative for the design analysis.

3. The total of such defective areas amounts to (100-x) percent of the neutron absorber material area, where x is the probability level used for determining the lower tolerance limit.

Alternately, apply more rigorous statistical criteria for lot acceptance, i.e., increase the factor K in the following expression:

Lower tolerance limit = average of sample – K * standard deviation of sample ≥ Technical Specification areal density acceptance criterion,

where, K is the one-sided tolerance limit factor for a normal distribution with a specified sample size, probability, and confidence.

The value of K should be increased to compensate for the decreased standard deviation that results from using a larger neutron beam to examine a material which has defect areas whose characteristic dimension is 1.2 cm."

Should you or your staff require additional information please do not hesitate to contact me at (410) 910-6881 or Mr. U.B. Chopra at (510) 744-6053.

Sincerely,

Jayant Bondre

Jayant Bondre, PhD
Director of Engineering and Licensing

Docket 72-1030