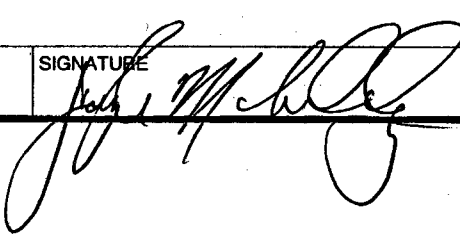


NRC FORM 699 (9-2003)		U.S. NUCLEAR REGULATORY COMMISSION		DATE 11/17/2005
CONVERSATION RECORD				TIME 1:00pm
NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU Tara Neider, Jayant Bondre, et. al.		TELEPHONE NO.		TYPE OF CONVERSATION <input type="checkbox"/> VISIT <input type="checkbox"/> CONFERENCE <input checked="" type="checkbox"/> TELEPHONE <input type="checkbox"/> INCOMING <input checked="" type="checkbox"/> OUTGOING
ORGANIZATION Transnuclear Inc				
SUBJECT Phone call with Transnuclear to discuss pressure testing and helium leak testing for the NUHOMS-HD design				
SUMMARY (Continue on Page 2)				
NRC Attendees: Wayne Hodges, Gordon Bjorkman, Joe Sebrosky, Ron Parkhill, Shana Helton, Geoffery Hornseth				
<p>The purpose of the call was to provide the staff's position to Transnuclear Inc. (TN) regarding helium leak testing and pressure testing for the NUHOMS HD design. It was recently identified by the staff that the NUHOMS HD design did not require helium leak testing or pressure testing of the dry shielded cask (DSC). During the call the staff provided guidance regarding pressure testing of the DSC and changes that the staff was considering regarding ISG-18, "The Design/Qualification of Final Closure Welds on Austenitic Stainless Steel Canisters as Confinement Boundary for Spent Fuel Storage and Containment Boundary for Spent Fuel Transportation."</p> <p>Regarding ISG-18, the staff provided guidance on the minimum weld conforming to the intent of ISG-18 and attributes of the confinement boundary for the DSC. The staff stated that this guidance would be captured in a revision to the ISG-18 in the future. The staff stated that the minimum weld conforming to the intent of ISG-18 consists of:</p> <ul style="list-style-type: none"> - three distinct weld "layers" - each layer connects the parts to be joined - each layer consists of one or more weld passes (beads). - each layer is PT examined. - each layer's maximum depth is based on flaw-tolerance calculations in accordance with ISG-15. <p>For the confinement boundary for the DSC the staff stated the following:</p> <ol style="list-style-type: none"> 1. Two confinement boundaries (inner and outer) must seal the closure per 72.236(e). 2. Required: <ul style="list-style-type: none"> - One of the two confinement boundaries must be helium leak tested by actual test, by exemption per ISG-18 and test, or by exemption, depending on the make-up of the boundary. - All welds under pressure or potentially under pressure due to valve leakage at the time of welding shall be helium leak tested. 				
Continue on Page 2				
ACTION REQUIRED None				
NAME OF PERSON DOCUMENTING CONVERSATION Joe Sebrosky		SIGNATURE 		DATE 12/9/05
ACTION TAKEN				
TITLE OF PERSON TAKING ACTION		SIGNATURE OF PERSON TAKING ACTION		DATE

CONVERSATION RECORD (Continued)**SUMMARY (Continue on Page 3)**

3. For the single confinement boundary of the canister shell, all welds shall be volumetrically examined, have surface NDE and be helium leak tested.

The ramifications of the staff position for the NUHOMS HD design included the following:

- a. The NUHOMS HD DSC vent and siphon cover plate welds should be leak tested under current ISG-18 guidance and also under the proposed revision to ISG-18
- b. The NUHOMS HD DSC shield plug weld may not need to be leak tested under proposed revised ISG-18 guidance depending on how TN defines its confinement boundary. Because ISG-18 will not be revised in the short term, TN's option for resolving the issue include leak testing the shield plug and vent and siphon cover plate welds
- c. Leak testing to (10E-7) allows some relaxation of dose calculations for radiological consequences

The staff then discussed NUHOMS HD DSC pressure testing guidance. The staff provided the following information relative to pressure testing of the NUHOMS HD DSC:

a. The shield plug weld for the NUHOMS HD design should be pressure tested in accordance with the ASME Code, Section III, Subarticle NB-6300

- This is consistent with TN's commitment in safety analysis report (SAR) 7.1.1 and SAR 9.1.2
- TN can use water or gas to perform the pressure test
- The test pressure for the DSC shell is 18 psig per section 9.1.2. of the SAR. This section states that "The test pressure is conservatively set at 18 psig which is greater than 1.5 X MNOP(9.6 psig)."

b. TN needs to define test pressure for shield plug weld and the basis for the pressure

The staff also stated that TN should clearly define the DSC confinement boundary. The staff noted that the SAR was not always consistent in its definition of this boundary.

TN stated that it would consider the staff guidance provided in the phone call and provide the staff at a later date with its plans on how it intended to address the staff's guidance.