NRC FORM 699 (03-2013)

U.S. NUCLEAR REGULATORY COMMISSION

CONVERSATION RECORD

DATE OF SIGNATURE: 11/16/2015

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU	DATE OF CONTACT	TYPE OF CONVERSATION
See below.	11/12/2015	☐ E-MAIL ☑ TELEPHONE ☐ INCOMING ☑ OUTGOING
E-MAIL ADDRESS	TELEPHONE NUMBER	
	(888) 447-9153	

ORGANIZATION	DOCKET NUMBER(S)
Department of Transportation	71-3034
LICENSE NUMBER(S)	CONTROL NUMBER(S)

SUBJECT

Second Additional Information Request Teleconference

SUMMARY

Nuclear Regulatory Commission (NRC): Chris Allen, Joe Borowsky, Tae Ahn and Zhian Li
Department of Transportation: Michael Conroy
Transnuclear International (TNI): Gregory Gallais and Nicholas Guibert

The call began at approximately 11 :00 A.M. Eastern Standard Time. A copy of the questions and issues discussed is attached. TNI began by explaining that, with regard to the containment question, the safety analysis report (SAR) submitted with the revalidation request had been written for contents which included irradiated uranium. The NRC stated their appreciation for this information, but they explained it didn't clarify the use of two different values in the SAR for radioactive releases. The NRC further stated that, since the proposed contents were unirradiated uranium, the radioactive release value associated with the revalidation request should be "Unlimited" per the International Atomic Energy Agency regulations. Subsequently, the NRC requested TNI explain in their information request response the reason for the different numbers relative to the SAR contents as well as identify the activity for the revalidation. TNI agreed to address both issues in their response.

Next, for the materials question, TNI questioned how the information already provided for the resin didn't address this question.

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ACTION REQUIRED (IF ANY)

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NAME OF PERSON DOCUMENTING CONVERSATION

Chris Allen

SIGNATURE

William C. Allen

CONVERSATION RECORD (continued)

SUMMARY: (Continued from page 1)

After a brief discussion about the adequacy of the previously provided information, the NRC explained to TNI that this information was necessary because the NRC must assume that, due to the melting point of aluminum (the material used to fabricate the structural "cage" which surrounded the package shell), the "cage" would not maintain its strength during a hypothetical accident fire. If the "cage" could not support the weight of the package shell, the resin could potentially be crushed or otherwise damaged when the package shell fell onto any surface below it. Consequently, the resin may not be able to maintain the package contents subcritical under hypothetical accident conditions. The NRC explained that, for the purposes of the revalidation, TNI could alternatively declare the "cage" was important to maintaining the package contents subcritical under accident conditions (an assertion which TNI had not made in the SAR submitted with the revalidation request). If TNI declared the "cage" important to maintaining the package contents subcritical under accident conditions, the NRC would review the SAR information regarding the performance of the "cage" under hypothetical accident conditions in order to make a determination on TNI's revalidation request. NRC requested TNI make a decision on these two alternatives as quickly as possible, and TNI agreed to make a decision with in a couple of days. The ca ll was concluded at approximately 12: 00 P.M.

In addition to the questions below, I'd like to briefly discuss the impact the structural aluminum cage has on criticality safety under ACT conditions or if it has any impact at all.

Containment Review

1. Identify the maximum activity (in units of Bq and A_2/g) for content 11 to be transported for this revalidation.

   SAR Chapter 6 (page 15/42, section 7.3.2) states the package release rates will be below regulatory limits provided the contents associated with Case 2, which include content 11, have an activity less than 46 A_2/g under NCT and less than 1448 A_2/g for ACT/HAC. Since Case 2 includes contents other than content 11, it is unclear with which content(s) these activities are associated. The maximum activity (in units of Bq and A_2/g) of content 11 is needed to review the application.

This information is needed to determine compliance withTS-R-1 paragraph 658, 730, and 807.

Additional Materials Review

1. Provide information on changes in resin materials properties due to thermolysis, radiolysis or a ACT/HAC fire.

   To evaluate the resin performance after the ACT/HAC fire, the applicant needs to provide information on changes to resin properties such as mechanical strength, density and chemical composition due to thermolysis, radiolysis or a ACT/HAC fire from the as fabricated resin properties.

   The staff needs this information to proceed with its review per para. 506, TS-R-1 (2009 Edition).