



## CONVERSATION RECORD

4/8/2015

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU Wren Fowler, George Carve, Mike Yaksh, and Holger Pfeifer		DATE OF CONTACT 7/1/2015	TYPE OF CONVERSATION <input type="checkbox"/> E-MAIL <input checked="" type="checkbox"/> TELEPHONE <input checked="" type="checkbox"/> INCOMING <input type="checkbox"/> OUTGOING
E-MAIL ADDRESS Norma.Garcia-Santos@nrc.gov		TELEPHONE NUMBER (301) 415-6999	
ORGANIZATION NAC International, Inc.	DOCKET NUMBER(S) 71-9235		
LICENSE NUMBER(S) N/A	CONTROL NUMBER(S) ED20150060		
SUBJECT 7/1/15, 10:00 AM-CONFERENCE CALL-DISCUSS STRUCTURAL AND CRITICALITY RAI NO. 1 RESPONSES FOR MODEL NO. NAC-STC TO ADD HBU AND WVDP HLW AS AUTHORIZED CONTENTS (DOCKET NO. 71-9235)(TAC NO. L24860)			
SUMMARY ATTENDEES:  NRC : Norma Garcia Santos, Project Manager David Tang, Senior Structural Reviewer Michel Call, Criticality Safety Reviewer  NAC International Inc.: Wren Fowler, Director, Licensing George Carver, VP, Engineering Mike Yaksh, Manager, Applied Mechanics Holger Pfeifer, Manager, Nuclear  <b>Continue on Page 2</b>			
ACTION REQUIRED (IF ANY) NAC agreed to provide the following information to the NRC staff: I.A. RAI No. St-2-6: (1) identification of section cuts and a table with correlations between the NAC-STC sections location and high burn up fuel section numbers. The applicant agreed to submit this information as page changes to the application after finalizing all teleconferences for clarifying RAI responses; and (2) calculation package No. 2025 the week of June 29th by correspondence. I.B. RAI No. St-2-3: a more descriptive Figure 2.12.6.12-9, page 2.12.6-20, when submitting the page changes to the application. II.A. Traceability of drawings in terms of the appropriate configuration as presented for transport. II.B. Tolerances that affect the criticality safety analysis including the safe configuration of the package, the design of the neutron absorbers, and on the basket tube opening size in the drawings (see application, Revision 17, page 6.4.2-3).  <b>Continue on Page 3</b>			
NAME OF PERSON DOCUMENTING CONVERSATION Norma Garcia Santos (reviewed by NRC staff and W. Fowler)			
SIGNATURE 			

## CONVERSATION RECORD (continued)

SUMMARY: (Continued from page 1)

On July 1, 2015, NRC and NAC International Inc., (NAC or the applicant) participated on a phone call to clarify responses to requests for additional information (RAIs) related to the Structural and Criticality Safety Evaluations for the Model No. NAC-STC (NAC-STC) amendment request to include high burn up fuel and high-level waste from the West Valley Demonstration Project as authorized contents. The staff received the RAI responses on June 9, 2015 (by letter dated June 5, 2015).

### I. Structural Evaluation

The discussion focused on discussing discrepancies between the application submitted in 2013 (i.e., Revision 13A) and the RAI response (including page changes, Revision 15A) submitted on June 5, 2015 ; and RAI No. St-2-3.

#### A. Discrepancies between Revisions 13A and 15A of the application

1. The staff pointed out that all the information submitted in the RAI response should be incorporated into the application in order to understand the proposed changes and facilitate the review. Some of these items included identification of section cuts and a table with correlations between the NAC-STC sections location and high burn up fuel section numbers.

ACTION: The applicant agreed to submit this information as page changes to the application after finalizing all teleconferences for clarifying RAI responses.

2. The staff also asked about discrepancies between Figure 2.12.6.12-9 in Revisions 13A and 15A of the application. It appeared that the model used in Revision 15A was different from the one submitted in Revision 13A. Also, the staff mentioned that the figure in Revision 15A does not look like a figure for a weld. The applicant explained that the figure submitted with Revision 13A was not correct and changed it in Revision 15A, since the figure in Revision 13A pertains to storage and not to transportation. This new figure is related to a new analysis included in calculation package No. 2025. In order to clarify the staff's questions, the applicant made reference to calculation package No. 2025 and realized that this calculation package was not submitted as part of the RAI response. The staff mentioned that the applicant needs to submit a justification stating why the approach related to Figure 2.12.6.12-9, Revision 15A, is acceptable.

ACTION: The applicant agreed to submit calculation package No. 2025 this week (week of June 29th) by correspondence.

#### B. RAI No. St-2-3

In response to RAI No. St-2-3, the applicant made reference to a stress linearization path, but the staff did not find this information in the figure referenced in the RAI response (i.e., Figure 2.12.6.12-9, page 2.12.6-20). The applicant pointed out that the figure includes peak and radial sections. The staff did not find Figure 3.12.6.12-9 sufficient to support its response.

ACTION: The applicant agreed to submit a more descriptive figure when submitting the page changes to the application.

### II. Criticality Safety Evaluation

#### A. Traceability of Drawings and References to Ensure Appropriate Package Configuration

The staff pointed out that it could not follow the drawings provided in the application to determine that proposed contents would be in the appropriate configuration as presented for transport (e.g., Drawings Nos. 423-843, 423-900; 423-901).

ACTION: The applicant agreed to provide traceability of drawings in terms of the appropriate configuration as presented for transport.

#### B. Add Tolerances to Drawings

The staff asked the applicant to include tolerances that affects the criticality safety analysis including the safe configuration of the package, the design of the neutron absorbers, etc. (see geometric tolerance evaluation included on safety analysis report, page 6.4.2-3, Revision 17). The applicant pointed out that, based on previous discussions with NRC staff, the tolerances did not need to be included in drawings because these were additional details and, moreover, the width of the plates did not change. The staff mentioned that tolerances may not be relevant for a particular discipline, but may be relevant for other disciplines like criticality safety.

## CONVERSATION RECORD (continued)

ACTION REQUIRED (Continued from page 1)

**ACTION:** The applicant agreed to add tolerances that affects the criticality safety analysis including the safe configuration of the package, the design of the neutron absorbers, and on the basket tube opening size in the drawings (see application, Revision 17, page 6.4.2-3).

### C. Loading configurations (thermal shunts)

The staff mentioned that scenarios in which thermal shunts are included or removed should be included in Chapter 7 of the application. The applicant stated that the operations in Sections 7.1.2.2 dealing with loading and 7.3.3.1 for unloading the package addresses the scenarios mentioned by the staff. The staff concluded that the current contents in these sections are adequate to address RAI No. 7-1.