

June 22, 2007

U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852-2738

Attn: Document Control Desk

Subject: Supplement to the Response to Request for Additional Information (RAI) 3-1 on the Amendment Application for CoC No. 9225 for the NAC-LWT Cask to Incorporate Various Changes to the Authorized Contents and the Operating Procedures (TAC L24043)

Docket No. 71-9225

- Reference:**
1. Model No. NAC-LWT Package, Certificate of Compliance (CoC) No. 9225, Revision 43, U.S. Nuclear Regulatory Commission (NRC), December 15, 2006
 2. Safety Analysis Report (SAR) for the NAC Legal Weight Truck Cask, Revision 37, NAC International, June, 2005
 3. Submittal of a Request for an Amendment of Certificate of Compliance (CoC) No. 9225 for the NAC-LWT Cask to Incorporate Various Changes to the Authorized Contents and the Operating Procedures, NAC International, November 17, 2006
 4. Submittal of Proposed Certificate of Compliance (CoC) Changes and a Supplement to the November 17, 2006 Request for an Amendment of CoC No. 9225 for the NAC-LWT Cask, NAC International, March 2, 2007
 5. NAC-LWT Review Telephone Call and Request for Additional Information (TAC L24043), NRC, April 30, 2007
 6. Responses to Request for Additional Information (RAI) on the Amendment Application for CoC No. 9225 for the NAC-LWT Cask to Incorporate Various Changes to the Authorized Contents and the Operating Procedures (TAC L24043), NAC International, May 3, 2007

Supplementing NAC International's (NAC) response to the thermal RAI 3-1 (see References 5 and 6) on NAC's application for an amendment to Reference 1 to incorporate various changes to the NAC-LWT contents and the operating procedures as described in References 3 and 4, NAC is providing the following information.

To confirm the justification provided in the May 3, 2007 response to RAI 3-1, the finite element model referenced in Section 3.5.1.2 of the NAC-LWT Safety Analysis Report (SAR), which employed gas properties of air for Condition 2, was revised using helium temperature dependent gas properties. The initial temperature of the inner shell for the model was revised to use steady state temperature for Condition 1 (helium properties for the cask in the ISO container). The temperature time history of the inner shell is the temperature time history for the Condition 2 solution with an offset to permit the initial temperature to correspond to the helium steady state condition of Condition 1.

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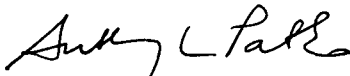
Using the revised properties and temperature time history of the inner shell for Condition 1, the maximum clad temperature was determined to be 838°F as compared to the maximum clad temperature of 1014°F for the model using the air properties for Condition 2. While helium conductivity is significantly larger than air conductivity, the increase in conduction is not sufficient to overcome the initial temperature differences between the inner shell and the maximum fuel clad.

As agreed upon during a June 19, 2007 NRC/NAC conference call, NAC will expand the justification contained in Section 3.5.1.2 of the NAC-LWT SAR to include the above observation and include it in the next NAC-LWT amendment request. No revision is being made to the NAC-LWT SAR at this time due to the above supplemental information.

Timely approval of this amendment request as supplemented will allow transport of the proposed modified contents in the NAC-LWT cask. To support NAC-LWT cask operations and spent fuel shipments scheduled for July 2007 and the Department of Energy National Nuclear Security Administration's Foreign Research Reactor (FRR) Program operations scheduled for late August /early September of 2007, as well as the associated equipment preparation and project planning, NAC respectfully requests approval of this amendment request by June 29, 2007.

If you have any comments or questions, please contact me on my direct line at 678-328-1274.

Sincerely,



Anthony L. Patko
Director, Licensing
Engineering