



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001**

November 24, 2015

Mr. Wren Fowler
Director, Licensing
NAC International Inc.
3930 East Jones Bridge Road, Suite 200
Norcross, GA 30092

**SUBJECT: UNRESOLVED ISSUES FOR THE APPLICATION TO REVISE
THE MODEL NO. NAC-STC PACKAGE TO ADD DIRECTLY - LOADED
UNCANISTERED HIGH BURNUP FUEL AS AUTHORIZED CONTENTS**

Dear Mr. Fowler:

By letter dated November 26, 2013, as supplemented on April 24, 2014, August 29, 2014, June 5, 2015, August 12, 2015, September 11, 2015, and October 15, 2015, NAC International Inc. (NAC or the applicant), requested to revise the certificate of compliance (CoC) for the Model No. NAC-STC (NAC-STC) transport package. The application proposes to modify the NAC-STC package to authorize the following contents (in separate shipments and distinctive designs):

1. West Valley Demonstration Project vitrified high-level waste poured into welded canisters, and
2. Directly-loaded uncanistered high-burnup pressurized water reactor 17x17 (PWR 17x17) fuel.

The staff will be approving the contents related to item No. 1 of this letter. The application also proposes modifications to the neutron absorbers and fuel tube dimensions for the directly loaded fuel basket, which the staff will also be approving. In terms of the contents related to item No. 2, the applicant requested approval of high-burnup fuel for up to 60 gigawatt-day per metric ton of uranium (GWd/MTU). However, since technical issues remain unresolved related to high-burnup fuel, the staff cannot approve the request related to the transportation of high-burnup fuel in the Model No. NAC-STC package, CoC No. 9235. This correspondence includes a summary of unresolved technical issues that will need to be resolved in any future revision request for adding high-burnup fuel as authorized contents.

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this document is uncontrolled.**

W. Fowler

- 2 -

If you have any questions regarding this licensing action, please contact me at (301) 415-1985 or Norma Garcia Santos of my staff at (301) 415-6999.

Sincerely,

/RA/

Steve Ruffin, Acting Chief
Spent Fuel Licensing Branch
Division of Spent Fuel Management
Office of Nuclear Material Safety
and Safeguards

Docket No. 71-9235
TAC No. L24860

**Upon removal of Enclosures 2 and 3,
this document is uncontrolled.**

Enclosures:

1. Unresolved Issues Related to the Request to Revise the Certificate of Compliance for the Model No. NAC-STC dated November 26, 2013 – Public Version
2. Applicant's Submittals and Assumptions Related to the Proposed Approach for Evaluation High-Burnup Fuel as Authorized Contents– Proprietary Information
3. Unresolved Issues Related to the Request to Revise the Certificate of Compliance for the Model No. NAC-STC dated November 26, 2013 – Proprietary Information

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