

February 7, 2017

MEMORANDUM TO: Antony H. Hsia, Deputy Director
Division of Spent Fuel Management, NMSS

FROM: Pierre Saverot, Project Manager **/RA/**
Spent Fuel Licensing Branch
Division of Spent Fuel Management, NMSS

SUBJECT: SUMMARY OF JANUARY 31, 2017, MEETING WITH HOLTEC
INTERNATIONAL, INC.

Background

By letter dated August 23, 2016, Holtec International, Inc. (Holtec) submitted an application for Certificate of Compliance No. 9374, Revision No. 0, for the Model No. HI-STAR 80 package. Staff issued a request for supplemental information (RSI) dated October 6, 2016, to which Holtec responded by letter dated October 20, 2016. Staff accepted the application for review by letter dated November 9, 2016.

Holtec requested this meeting to present a proposed approach to respond to the shielding request for additional information (RAIs). The meeting notice was posted on January 20, 2017. The meeting attendance list is provided as Enclosure No.1. The proprietary presentation is provided as Enclosure No. 2.

Discussion

Since no member of the public participated to this meeting, the meeting was not officially split, per the agenda, into public and proprietary sessions.

The original shielding evaluation, as submitted in the application, was performed with SCALE 5.1 and used design basis models predominantly based on nominal dimensions, with uncertainties being compared to conservatism through "best estimate" calculations. In its response to the shielding RSIs, Holtec had indicated that SCALE 6.2.1 would then be used for all design basis calculations in responding to future RAIs.

In view of the draft shielding RAIs that were communicated to Holtec after internal concurrence, Holtec made major changes to the shielding methodology and analyses: (i) SCALE 6.2.1 will now be used for all source terms calculations, (ii) all relevant effects such as manufacturing tolerances, MCNP and source term input uncertainties, axial profile effects, etc., will now be considered in the design basis calculations, and (iii) a more rigorous evaluation of those effects will be done to avoid unnecessary conservatism.

Staff globally agreed with this new approach, as presented by Holtec, to update the shielding evaluation of the Model No. Hi-STAR 80 package, and made only a few comments: (i): Holtec shall clearly justify which manufacturing tolerances “may have” a significant effect on dose rates, (ii) the comparison of axial profiles should not be based only a 2 m side dose rate, as presented, but also consider the 1 m dose rate under hypothetical accident conditions, (iii) the shielding evaluation for the contents of the Non-Fuel Waste Basket shall justify the selected source geometries, justify the choice of self-shielding material, including density, and discuss the potential for source non-uniformity and migration of a higher activity object towards an area of less shielding. Staff advised Holtec to review and consider RAI responses from other applicants on their “waste packages” before submitting its RAI responses.

Staff made no regulatory commitments during the meeting.

Docket No. 71-9374
CAC No. L25141

Enclosure 1: Meeting Attendees
Enclosure 2: Proprietary Presentation

A. Hsia

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Enclosure 1: Meeting Attendees

Enclosure 2: Proprietary Presentation

Distribution: Attendees

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ADAMS Package No.: ML17038A210 Memo: ML17038A213 Encl 2: ML17038A220

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**Meeting Between Holtec International, Inc. (Holtec) and the
Nuclear Regulatory Commission
January 31, 2017
Meeting Attendees**

NRC/NMSS/DSFM

Pierre Saverot

Zhian Li

Veronica Wilson

HOLTEC

Stefan Anton

Behrooz Khorsandi

Malinda Saia