

June 25, 2013

MEMORANDUM TO: Anthony H. Hsia, Deputy Director
Division of Spent Fuel Storage and Transportation, NMSS

FROM: Pierre Saverot, Project Manager /RA/
Licensing Branch
Division of Spent Fuel Storage and Transportation, NMSS

SUBJECT: SUMMARY OF JUNE 18, 2013, MEETING WITH ROBATEL
TECHNOLOGIES, LLC

Background

Robatel Technologies, LLC (Robatel) received a request for additional information (RAI) letter dated March 28, 2013, for the Model No. RT-100 package application. The meeting was requested by the applicant to discuss their proposed RAI responses.

The meeting was noticed on May 15, 2013. The list of attendees and Robatel presentation are included in Enclosures Nos. 1 and 2, respectively.

Discussion

Robatel presented a summary of proposed responses to structural and materials RAIs to verify if their interpretation of the RAIs was correct.

Regarding the proposed response to RAI 2-1 on the acceptability of materials for use as secondary containers or shoring, staff asked the applicant to specify the type of coating for the carbon steel, and provide all applicable justifications for the analysis of plastics under irradiation. In responding to RAI 2-2, Robatel said that test results do not show any indication of foam lock-up or of package body impact onto the ground and staff asked what confidence level there was in such assertions. Robatel corrected Table 2.2.1-1 of the application, and used proper tables for stress intensity values in response to RAI 2-3, but staff did note that Robatel should be very careful in the language used in various sections of the application because inexactitudes or wrong statements may lead to additional RAIs: for example, the stress intensity value is not defined, contrary to what the applicant stated, as the lesser of $2/3 S_y$ and $1/3 S_u$.

Robatel clarified the type of welds on the impact limiters after the foam blocks are in place, and stated that the closure welds are full-penetration butt welds with a backing strip. Robatel also clarified the physical properties used in the analyses at temperatures greater than 750°C. Regarding RAI 2-9, staff told Robatel to think about the stress riser and noted that it may be necessary for the applicant to account for higher stresses due to the rapid change, due to the O-ring grooves, in the containment boundary mating surface geometry. Staff noted that applying a stress concentration factor to the post-processed results may be adequate, if there is enough safety margin. Staff questioned the factor of safety of 1.08 for the side drop, although it was noted this was for just one node, and asked Robatel to provide averages.

Robatel clarified the acceptance criteria for the containment system hydrostatic pressure test (no drop in pressure for 10 minutes and visual inspection) and said that no leakage is possible through the 30 mm thick inner shell.

Staff said that the proposed response to RAI 2-13 could be acceptable if Robatel justifies element selections, while the proposed response to RAI 2-15 was still not convincing enough: (i) the applicant states that end/side drop orientations are conservative, in order to eliminate the necessity to perform a structural analysis for the corner drop orientation, but does not provide any technical rationale for this assertion, (ii) the “homegrown” energy conservation-based Excel spreadsheet has not been independently verified or approved, (iii) the scaled model impact limiter test report did not tabulate final crush depths, and (iv) the RT-100 impact limiter design differs from that of the NUPAC-125B design (multiple piece construction vs. poured), etc. Staff said that Robatel must (i) address the technical issues using a well thought-of, clear, and understandable write-up, (ii) explain and quantify how not analyzing the shell changes results, etc., and (iii) justify the bounding of the drop orientations.

Staff made no regulatory commitments during the meeting.

Docket No. 71-9365

TAC No. L24587

Enclosure 1: Meeting Attendees

Enclosure 2: Robatel Presentation

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Distribution: Attendees, M. Sampson, M. Rahimi, C. Araguas, J. Piotter

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**Meeting Between ROBATEL and the
Nuclear Regulatory Commission
June 18, 2013
Meeting Attendees**

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Enclosure 1