July 30, 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 JULY 22, 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. This meeting was the fourth of a series of meetings requested by the applicant to discuss their proposed RAI responses.

The meeting was noticed on July 8, 2013. The list of attendees and Robatel presentation are included as Enclosures Nos. 1 and 2, respectively.

Discussion

Robatel presented their proposed responses to structural, materials, containment, and shielding RAIs to verify if their interpretation of the RAIs was correct. While the proposed approach for responding to either materials or containment RAIs appears to be conducive to a proper resolution of staff's questions, staff had still numerous comments on the structural and shielding RAI proposed responses.

Staff advised the applicant that, for design evaluation, the package design community does not use the term "margin" to describe impact limiter performance and that, for clarity purposes, the application should focus only on using the 3/10-scale drop test for benchmarking the Robatel proprietary code. Staff also said that there are currently unknown multipliers - or multiplication factors - introduced in the so-called spreadsheet calculation code (energy balance method) since there is not a 1 to 1 correspondence from a non-mechanistic behavior. In general, staff told Robatel to address inconsistencies still apparent from the proposed RAI responses. Staff and the applicant discussed the use of the American Society of Mechanical Engineers (ASME) Code, Section III, Subsection NF, versus the American National Standards Institute (ANSI) N14.6, "Special Lifting Devices for Shipping Containers Weighing 10 000 Pounds (4500 kg) or More," in responding to RAI 2.14; staff stated that N14.6 is "nebulous" on shear and maximum tension stress and does not "talk the same language" than Subsection NF. Staff said that using stress intensity in hand calculations will lead to additional questions and requested the applicant to go back to the assumptions and use upper bound estimates for shear stress.

Staff expressed multiple concerns on the current shielding evaluation since several of the proposed responses to the shielding RAIs appear to fall short of staff's expectations. The

applicant discussed several topics with staff, i.e., (i) source term accuracy, (ii) design tolerances, and (iii) benchmarking of the MCNP model against practical experiments. Staff said that, as presented, the proposed responses will lead to a second round of RAIs because (i) the shielding model is not conservative enough, (ii) the convergence of the calculations is not clearly established, (iii) the shielding model shall converge for most cases, (iv) not all indexes pass criteria and no justification is provided, (v) 2σ is small compared to doses and not conservative just like using the minimum tolerance of 85 mm cannot be claimed to be "conservative" in itself, etc.

The applicant will submit its RAI responses and revised application on September 3, 2013. Before the meeting was concluded, a member of the public made a general statement on the need for an applicant to make an effort to understand the rationale of an RAI without dismissing off-hand its validity. The member of the public said that no RAI can be considered as "absurd," because the staff is ready to defend its evaluation even in court, if needed, once a certificate of compliance is issued and a safety evaluation report concurred upon by staff.

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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Meeting Between ROBATEL and the
Nuclear Regulatory Commission
July 22, 2013
Meeting Attendees

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Enclosure 1