April 9, 2014

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 APRIL 1, 2014, MEETING WITH ROBATEL TECHNOLOGIES, LLC

Background

Robatel Technologies, LLC (Robatel) requested this meeting to present a technical approach for a future authorization letter request regarding the shipment of activated metals from the Rancho Seco site. A first pre-application meeting was held on March 11, 2014.

The list of attendees and Robatel presentation are included as Enclosure Nos. 1 and 2, respectively.

Discussion

Robatel will submit, on or before June 1, 2014, an authorization letter request to ship a minimum of 8 and a maximum of 14 liners, containing Class B and Class C wastes from the decommissioning of the Rancho Seco reactor. Such shipments will remove one of the final barriers to the completion of the Part 50 license decommissioning activities that began in 1989.

Contents include upper grid core plate items, control rod guide tubes, core barrel sections, thermal shield, lower internal grid support sections, and cutting chips from the sectioning of the reactor internals. Contents have a typical radionuclide contribution, including Co-60, Fe-55, Ni-63, with Co-60 representing about 90% of the gamma source activity. Robatel stated that there was less than 1,000 Ci per liner.

Robatel also said that the characterization of the contents had been based on integral fluxes over time, and that activation reports and flux profile reports were available for each liner. Staff responded that details on flux calculations may be necessary and that it may be required to add some conservatism to a determination that was made with a 1D code.

Robatel said that all liners are in carbon steel and that the RVI-08 liner is the only one packed to capacity with upper guide plates and core barrel pieces. There is no intent to crib or restrain any material in the liners, but wood shoring will be placed both on top of and around the liners to prevent any movement in the Model No. RT-100 package.

Staff agreed with Robatel on the fact that normal conditions of transport are the most limiting for this type of waste because the geometry of the contents, such as grids and plates, is not likely to change in hypothetical accident conditions (HAC).

Robatel will build realistic shielding models, with core plates as one component, and shift the core plates to the side of the liner to lead to a distributed source in the package. For HAC, Robatel will perform a bounding analysis of the contents, e.g., 2,000 Ci of Co-60 as a line source, and 1,000 Ci of Co-60 as a point source, to obtain a reasonable estimate of the dose rates. Staff said that a proper characterization of contents is crucial in such evaluations.

A member of the public asked if the SMUD (Sacramento Municipal Utility District) activation reports and calculations were part of the Part 50 Docket or Part 72 Docket, and if consideration had been given to the operational doses incurred during the transfer from the interim on site storage building to the RT-100 package, knowing that it is not trivial to load a package with the Rancho Seco plant staff no longer available.

Staff made no regulatory commitments during the meeting.

Docket No. 71-9365
TAC No. L24900

Enclosure 1: Meeting Attendees
Enclosure 2: Robatel Presentation

Staff agreed with Robatel on the fact that normal conditions of transport are the most limiting for this type of waste because the geometry of the contents, such as grids and plates, is not likely to change in hypothetical accident conditions (HAC).

Robatel will build realistic shielding models, with core plates as one component, and shift the core plates to the side of the liner to lead to a distributed source in the package. For HAC, Robatel will perform a bounding analysis of the contents, e.g., 2,000 Ci of Co-60 as a line source, and 1,000 Ci of Co-60 as a point source, to obtain a reasonable estimate of the dose rates. Staff said that a proper characterization of contents is crucial in such evaluations.

A member of the public asked if the SMUD (Sacramento Municipal Utility District) activation reports and calculations were part of the Part 50 Docket or Part 72 Docket, and if consideration had been given to the operational doses incurred during the transfer from the interim on site storage building to the RT-100 package, knowing that it is not trivial to load a package with the Rancho Seco plant staff no longer available.

Staff made no regulatory commitments during the meeting.

Docket No. 71-9365
TAC No. L24900

Enclosure 1: Meeting Attendees
Enclosure 2: Robatel Presentation

Distribution: Attendees, M. Sampson, M. Rahimi, J. Hickman/FSME

G:\SFFT\Saverot\71-9365 Robatel\Robatel meeting April 1, 2014.doc
and 71-9365Robatel\April1presentation

ADAMS Accession No.: ML14101A018
ADAMS P8 Package No.: ML14101A016

Distribution	SFST	E	SFST	C	SFST			
NAME	PSaverot		MDeBose		MSampson			
DATE	04/03/2014		04/08/2014		4/9/14			

C=Without attachment/enclosure E=With attachment/enclosure N=No copy

OFFICIAL RECORD COPY

Meeting Between ROBATEL and the
Nuclear Regulatory Commission
April 1, 2014
Meeting Attendees

NRC/NMSS/SFST

Pierre Saverot	301-287-0759	pierre.saverot@nrc.gov
Zhian Li	301-287-0686	zhian.li@nrc.gov
Veronica Wilson	301-287-0926	veronica.wilson@nrc.gov

ROBATEL

Christopher Dane	540-525-9522	c.dane@robateltech.com
Jared Bower	540-525-9422	jbower@robateltech.com
Peter Vescovi	803-451-4362	pvescovi@tliusa.com
Philip Sewell	803-451-4366	psewell@tliusa.com

WCS

Vikki Cooper	202-758-2321	vcooper@vikkicooper.com
Janel Anderson	808-227-7425	janderson@vikkicooper.com
Kurt Colborn	724-544-5815	kcolborn@valhi.net

TALISMAN

Charles Haughney	301-254-6495	cjhaughney@mac.com

Enclosure 1