May 29, 2003

MEMORANDUM TO: Larry W. Camper, Deputy Director
Licensing and Inspection Directorate
Spent Fuel Project Office, NMSS

FROM: Nancy L. Osgood, Senior Project Manager /RA/
Licensing Section
Spent Fuel Project Office, NMSS

SUBJECT: SUMMARY OF MAY 15, 2003, MEETING WITH PACKAGING TECHNOLOGY REGARDING TRANSPORT PACKAGE FOR MOX FRESH FUEL ASSEMBLIES

Background

A meeting was held on May 15, 2003, in Rockville, Maryland, at the request of Packaging Technology, Inc. (PacTec), to discuss: (1) the design and testing of the transport package being developed for mixed uranium and plutonium oxide (MOX) fresh fuel assemblies, and (2) foreign-approved package designs for transport of plutonium powder and MOX fuel assemblies. The meeting was noticed on April 23, 2003. No proprietary information was discussed at the meeting, and no regulatory decisions were made nor requested at the meeting. Attachment 1 is the list of attendees, and Attachment 2 is the meeting handout.

Discussion

The discussion followed the meeting handouts.

1. Plutonium Disposition Program and Lead MOX assemblies. An overview of the program was presented. The program calls for irradiating MOX fuel in commercial reactors. Current program plans include fabrication of four MOX lead assemblies in Europe. A French-approved package design (the Model No. FS47) will be used to transport the plutonium oxide from the U.S. to Europe. Another French-approved design (the Model No. FS65) will be used to transport the lead assemblies to the U.S. reactor. PacTec will request revalidation of the French certificates from the U.S. Department of Transportation. After lead assembly testing, future MOX fuel assemblies will be fabricated in the U.S. and shipped to domestic reactors in the package being designed by PacTec (the Model No. MFFP). The MFFP will be NRC-certified.

2. Model No. FS47. The FS47 is designed for transport of up to 140 kg of plutonium dioxide powder. The package description is provided in the meeting handout. One shipment will be made using nine loaded packages along with an empty spare package. The package evaluation was discussed. PacTec plans to provide separate criticality and containment analyses using U.S. codes and methods, specifically addressing the contents needed for this shipment. PacTec plans to request DOT revalidation of the French certificate in August 2003.

3. Model No. FS65. The FS65 is designed for transport of fresh MOX fuel rods and assemblies. Each package holds a single fuel assembly or a single rod box used for loose fuel rods or scrap components. The package description is also provided in the meeting handout. A single shipment will be composed of six packages, including the four lead assemblies and two packages for scrap or archive material. PacTec also plans to provide additional criticality and containment analyses for this design. PacTec plans to request DOT revalidation of the French certificate in October 2003.

4. Model No. MFFP. The MFFP is designed for the transport of three fresh fuel assemblies positioned within a poisoned fuel basket. Design and analysis of the package were discussed at previous meetings. The discussion centered on the physical testing of the prototype package. Test payloads and orientations were discussed. The full-scale test specimen is currently being fabricated, and the certification tests are planned for September 2003. PacTec plans to submit an application for NRC certification in March 2004.

Docket No. 71-9295
TAC No. L23600

Attachments: 1. Meeting Attendees
2. Meeting Handout

Distribution: PUBLIC NRC File Center NRC Attendees JGuttmann EPEaston MWHodges SFPO r/f NMSS r/f SLBaggett APersinko
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OFC	SFPO	E	SFPO		SFPO	
NAME	NLOsgood		MRDeBose		JDMonninger	
DATE	5/ 28/03		5/ 28/03		5/ 29/03	

C=Without attachment/enclosure E=With attachment/enclosure N=No copy **OFFICIAL RECORD COPY**

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May 15, 2003, Meeting
between Packaging Technology, Inc., and
the Nuclear Regulatory Commission

MEETING ATTENDEES

Julia Barto	NRC/SFPO
Stu Brown	NRC/SFPO
Michelle DeBose	NRC/SFPO
Adelaide Giantelli	NRC/SFPO
Henry Lee	NRC/SFPO
John Monninger	NRC/SFPO
Nancy Osgood	NRC/SFPO
Bernie White	NRC/SFPO
Wilkins Smith	NRC/FCSS
Rick Boyle	DOT
David Alberstein	DOE/NNSA NA-26
Everett Goodman	DOE/NNSA/OST
Mike Klimas	DOE/CH
Patrick Rhoads	DOE
Richard Haelsig	PacTec
Joe Nichols	PacTec
Fred Yapuncich	PacTec
Arvid Jensen	DCS
Skip Copp	Duke Energy
François Derlot	Cogema Logistics
Patrice Fortier	Cogema Logistics
Pierre Malesys	Cogema Logistics
Maureen Conley	McGraw-Hill

Attachment 1