

October 4, 2006

MEMORANDUM TO: William H. Ruland, Deputy Director
Licensing and Inspection Directorate
Division of Spent Fuel Storage and Transportation, NMSS

FROM: Nancy L. Osgood, Senior Project Manager **/RA/**
Licensing Branch
Division of Spent Fuel Storage and Transportation, NMSS

SUBJECT: SUMMARY OF SEPTEMBER 28, 2006, MEETING WITH ENERGY
SOLUTIONS REGARDING THE MODEL NO. MIDUS PACKAGE

Background. A meeting was held on September 28, 2006, in Rockville, Maryland, at the request of Energy Solutions to discuss the design of a new package for transport of medical isotopes (Model No. MIDUS). Previous meetings were held on July 21 and November 3, 2005. Enclosure 1 is the list of meeting attendees, and Enclosure 2 is the meeting handout. No regulatory decisions were made nor requested at the meeting.

Discussion. The discussion followed the meeting handout. The following points were made:

- The design of the package has been modified. The design now includes an additional top end shield, to limit dose rates if the liquid radioactive material is released from the internal vessels under accident conditions. A thermal shunt has been added to ensure low temperatures under normal conditions of transport.
- Radiolytic gas generation has been shown experimentally to result in non-flammable gas mixtures, regardless of void volumes.
- Results of the physical tests were provided. The tests were performed on a full-scale specimen. The tests revealed a computational problem which will be addressed in the package application.
- The applicant brought a full scale model of the package, excluding the overpack. The liquid product is packaged within high quality inner stainless steel vessels. No containment credit is taken for these internal vessels under accident conditions.
- Energy Solutions plans to submit the application within the next few months.

Docket No. 71-9320
TAC No. L23870

Enclosures: 1. Meeting Attendees
2. Meeting Handout

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DATE	10/03/06		10/03/06		10/04/06	

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

September 28, 2006, Meeting
between Energy Solutions and
the Nuclear Regulatory Commission

MEETING ATTENDEES

Gordon Bjorkman	NRC/SFST
Larry Campbell	NRC/SFST
Jerry Chuang	NRC/SFST
Jose Cuadrado	NRC/SFST
Shana Helton	NRC/SFST
Bob Nelson	NRC/SFST
Nancy Osgood	NRC/SFST
Jorge Solis	NRC/SFST
Bob Tripathi	NRC/SFST
David Brown	EnergySolutions MSC
Steve Sisley	Energy Solutions SFD
Brandon Thomas	Energy Solutions SFD
April Chance	Tyco Healthcare
Rob Emmelhamp	Tyco Healthcare