### April 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 APRIL 16, 2013, MEETING WITH

**ENERGYSOLUTIONS** 

### <u>Background</u>

Compliance with the NRC Regulatory Issue Summary 2013-04, "Content Specification and Shielding Evaluations for Type B Transportation Packages" (ML13036A135) led to more restrictive radiological payload qualifications conditions in Certificate of Compliance (CoC) No. 9168 for the Energy Solutions Model No. 8-120B package, and Energy Solutions is estimating a 30% loss of capacity for the higher activity resin payloads when Revision No. 19 of the CoC comes into effect on August 31, 2013. Energy Solutions will submit an amendment request on or around May 15, 2013, to regain the reduced capacity of the package by adding a 3/8" plate to the lower impact limiter in order to correct the current imbalance in the shielding analysis, i.e., bottom versus sides and top of the package.

The meeting was noticed on March 29, 2013. The meeting attendance list and the presentation slides are provided as Enclosure Nos. 1 and 2, respectively.

#### **Discussion**

The applicant briefly explained that (i) Steven Sisley and Brandon Thomas are now the only points of contact for official correspondence, after the retirements of Pat Paquin and Mark Whittaker, (ii) the four Model No. 8-120B packages currently in service will be retrofitted with the proposed plate within 90 days of CoC issuance, and (iii) the four new packages that are being manufactured will obviously include the 3/8" thick steel plate located in the "donut hole" on the lower impact limiter.

The entire suite of MCNP analyses will be re-performed and the applicant believes that the results will allow high activity resins to be shipped again because bottom axial shielding would be now balanced with both the sides and top shielding. The applicant believes the thermal and structural evaluations of the package are not impacted by the new plate. Staff requested a clear justification of the lack of effect on the package structural response to normal conditions of transport (NCT) and to hypothetical accident conditions (HAC). Staff also requested an evaluation of the puncture of the plate and a discussion on the weight distribution and potential shifting of the contents. Staff asked if there had been any consideration of streaming issues through the foam and the applicant responded that the radial gap had been modeled.

A. Hsia -2-

The amendment request will include several corrections to the licensing drawings for manufacturing reasons and some clarifications to the safety analysis report (SAR). The applicant will also request a revision of Condition No. 7 of the CoC to indicate that it only applies to payloads with non-uniform sources, and wants to bring back a wording from a previous CoC exempting LSA and SCO shipments from pre-shipment leak tests. Staff responded that a Type B package has to follow the operating procedures as specified in the application and the CoC, that loaded contents do not really matter because it is difficult to conceive separate and specific operating procedures for LSA shipments.

Staff advised the applicant to clarify the role of the liner and to include in the SAR specific language for (i) loose crud, (ii) concentrated sources vis a vis the holes in the liner, and (iii) limitation of such contents.

The applicant said that it will request a 90 day transition period for installation of the new lower impact limiter cover plates. Staff made no regulatory commitments during the meeting.

Docket No. 71-9168 TAC No. L24735

Enclosure 1: Meeting Attendees

Enclosure 2: Presentation

A. Hsia -2-

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Distribution: Attendees, M. Sampson, D. Pstrak, C. Araguas, M. Lombard

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**ADAMS Accession No.:** 

ADAMS P8 Package No.: ML13126A375

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# Meeting Between EnergySolutions and the Nuclear Regulatory Commission April 16, 2013 Meeting Attendees

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## **ENERGYSOLUTIONS**

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