

January 5, 2017

MEMORANDUM TO: Anthony H. Hsia, Deputy Director
Division of Spent Fuel Management, NMSS

FROM: Pierre Saverot, Project Manager */RA/*
Spent Fuel Licensing Branch
Division of Spent Fuel Management, NMSS

SUBJECT: SUMMARY OF DECEMBER 13, 2016, MEETING WITH
ENERGYSOLUTIONS

Background

EnergySolutions (ES) requested this meeting to present changes currently contemplated to address the licensing commitments made for the Model No. 8-120B package, Certificate of Compliance (CoC) No. 9168, including (i) an upgrade of containment criteria to leaktight, (ii) updating leak testing criteria to current standards, and (iii) changes on the vent port containment seal design. The meeting was noticed on October 24, 2016; the meeting attendance list and the presentation slides are provided as Enclosure Nos. 1 and 2, respectively.

Discussion

Information Notice IN-2016-04 provides information on both the new leak testing standard, ANSI N14.5-2014, and specific leak testing considerations, but did not require a specific action from certificate holders. Earlier this year, in response to staff's input on an amendment request to add an Ethylene Propylene (EP) compound for the lid O-ring seals of the Model No. 10-160B package, ES withdrew its amendment request, by letter dated March 21, 2016, and committed to provide at a later date a complete amendment request with detailed specifications for containment seals. ES also committed, during a review of an amendment request for grossly dewatered resins as contents of the Model No. 8-120B package, to address some aspects of the ANSI N14.5-2014 standards and provide detailed specifications for containment seals, along with an upgraded containment evaluation including new leak testing procedures.

The current containment evaluation of the Model No. 8-120B package develops leakage rate limits for powdered solids and irradiated hardware based on ANSI N14.5-1997 and also derives hold times for pre-shipment leakage rate tests per ANSI N14.5-1997. Four packages, fabricated before 1999, were not tested leaktight while their "replacement" lids were tested leaktight. The current safety analysis report includes only basic requirements for containment seals.

ES proposes to specify acceptance criteria and test variables for the 8-120B seals, and require leak test procedures to be approved by ASNT NDT Level III personnel. ES also proposes to revise the acceptance, periodic, maintenance, and pre-shipment leak tests in accordance with ANSI N14.5-2014, and make corresponding changes in the appropriate containment and package maintenance sections of the application.

Staff said that a holistic licensing approach should include both the seal issues, as proposed by ES, and the base material containment boundary and the welds that shall be leak tested per ANSI N14.5 (which is currently not the case).

However, staff noted that ANSI N14.5 also provides for alternate means to demonstrate compliance, i.e., "alternate models may be developed to estimate leakage." Staff said it would try to provide input to ES on a potential path forward in order to have a successful application for a leaktight package.

The applicant is planning to submit the amendment request at the end of January 2017. Staff made no regulatory commitments during the meeting.

Docket No. 71-9168
TAC No. L25159

Enclosure 1: Meeting Attendees
Enclosure 2: Presentation

A. Hsia

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Enclosure 1: Meeting Attendees
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Distribution: Attendees, J. McKirgan

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ADAMS Accession No.: ML17010A228
ADAMS P8 Package No.: ML17010A222

OFC	SFM	E	SFM	C	SFM			
NAME	PSaverot		SFiguroa		JMcKirgan			
DATE	12/22/16		12/29/16		01/05/2017			

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

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**Meeting Between Energy*Solutions* and the
Nuclear Regulatory Commission
December 13, 2016
Meeting Attendees**

NRC/NMSS/SFM

Pierre Saverot

Joe Borowski

Caylee Kenny

ENERGYSOLUTIONS

Steven Sisley

Gerry van Noordennen

Aleksandr Gelfond

EPRI

Keith Waldrop