

April 5, 2011

MEMORANDUM TO: Doug Weaver, Deputy Director  
Licensing and Inspection Directorate  
Division of Spent Fuel Storage and Transportation, NMSS

FROM: Jennie Rankin, Project Manager */RA/*  
Licensing Branch  
Division of Spent Fuel Storage and Transportation, NMSS

SUBJECT: SUMMARY OF MARCH 31, 2011, PRE-APPLICATION MEETING WITH  
AREVA FEDERAL SERVICES, TO DISCUSS PROPOSED CONTENT  
AND TEST PLAN FOR THE MODEL NO. LANL-B TRANSPORTATION  
PACKAGE

#### Background

A pre-application public meeting was held on March 31, 2011, in Rockville, Maryland, at the request of AREVA Federal Services (AREVA) to discuss the proposed content and test plan for the Model No. LANL-B transportation package.

The meeting was noticed on March 9, 2011 (ML110691124). The meeting attendance list is provided as Enclosure 1. The meeting agenda is provided as Enclosure 2. The version of the meeting handouts with the security-related information redacted is provided as Enclosure 3. The version of the meeting handouts with the security-related information included is provided as Enclosure 4.

#### Discussion

The discussion generally followed the agenda (Enclosure 2). The primary reason for the meeting was to discuss the licensing strategy of the proposed content and the test plan for the packaging.

The LANL-B package supports two payloads: the Long Term Storage Shield and intact devices containing Co-60 and Cs-137 sources (e.g., teletherapy heads or industrial irradiators). The devices provide shielding of the sources within the package. An obstacle to licensing the transport of these shielded sources is that the engineering drawings and quality assurance records are not available for most of the devices. As a result, AREVA has proposed categorizing the devices by source design, isotope, and manufacturer into approximately 11 groups. The information needed for modeling was taken from de-sourced specimens by sectioning and shielding analysis performed from a representative device model. Staff noted that due to the unavailable drawings and records, the operating procedure should be detailed and comprehensive to ensure that the package is representative of the as analyzed configuration and content. Staff also noted that groupings of the devices should be clearly defined.

The shielded sources are secured inside an inner container by a blocking and bracing configuration. AREVA explained that a sketch showing this configuration would be provided in Chapter 7 of the Safety Analysis Report. Staff noted that this sketch is sufficient only if the blocking and bracing is not needed to meet the regulatory requirements, otherwise, a more detailed design drawing should be submitted.

AREVA explained the certification strategy including a discussion of the different free drop and puncture test configurations. AREVA plans to fabricate three full scale prototypic Certification Test Units (CTUs). The CTUs are fully prototypic except for adjustment of the foam density to facilitate temperature extremes and omitting the thermal shield. Each CTU will undergo a worst-case series of free drop and puncture tests. Staff noted that due to the unbalanced shape of this package, the friction coefficient used for modeling may need to be evaluated to account for possible sliding tendencies of the package. Additionally, staff notes that since the thermal shield is omitted in the CTUs, the effects of the tests on the thermal model should be explained.

AREVA projects submitting the LANL-B application by May 2012. Staff noted that an acceptance review would be performed on the LANL-B package and the acceptance review process is outlined in SFST Office Instruction No. 14. A copy of the office instruction will be forwarded to AREVA for information.

Docket No. 71-9355  
TAC No. L24522

Enclosures:

1. Meeting Attendees
2. Agenda
3. Presentation Slides (Security Related Information Removed)
4. Presentation Slides (Security Related Information Included)

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Distribution:

NRC Attendees

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**ADAMS Package No.: ML111010034**

OFC	SFST		SFST		SFST	
NAME	JRankin		MDeBose		MWaters	
DATE	4-4-11		4/4/11		4/5/11	

"C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy  
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**March 31, 2011, Public Meeting  
Between AREVA Federal Services and  
the Nuclear Regulatory Commission**

**MEETING ATTENDANCE LIST**

Jennie Rankin	NRC/SFST	301-492-3268
Meraj Rahimi	NRC/SFST	301-492-3338
Alexis Sotomayor	NRC/SFST	301-492-3291
David Tang	NRC/SFST	301-492-3328
Joe Borowsky	NRC/SFST	301-492-3563
Michele Sampson	NRC/SFST	301-492-3292
Matthew Gordon	NRC/SFST	301-492-3331
Ron Burnham	AREVA	253-552-1325
Rick Migliore	AREVA	253-552-1324
Phil Noss	AREVA	253-552-1321
Abigail Cuthbertson	GTRI	202-586-2391
John Zarling	GTRI	202-586-9265
Darcy Campbell	GTRI	202-287-6726
Julia Whitworth	LANL	505-699-3915
Michael Pearson	LANL	505-665-0483
Randolph Vaugh	LANL	505-667-1985
Dwayne Brown	OSRP	505-412-7437

**Enclosure 1**

Agenda for the  
LANL-B Pre-Application  
Public Meeting  
March 31, 2011, 9:30 a.m – 2:30 p.m.

9:30 a.m.	Introduction/Opening Remarks	NRC/AREVA
9:40 a.m.	Plan for Shipment of Intact Irradiation Devices	AREVA
11:30 a.m.	Adjourn for Lunch	AREVA
12:30 p.m.	Test Plan Considerations	AREVA
2:20 p.m.	Closing Remarks	NRC/AREVA
2:30 p.m.	Adjourn	

**Enclosure 2**