

September 9, 2010

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

FROM: Kimberly Hardin, Senior Project Manager */RA/*
Licensing Branch
Division of Spent Fuel Storage and Transportation, NMSS

SUBJECT: SUMMARY OF AUGUST 11, 2010, PRE-APPLICATION MEETING WITH
AREVA FEDERAL SERVICES, LLC, TO DISCUSS TWO NEW
PACKAGING DESIGNS TO TRANSPORT BWR AND PWR MOX
UNIRRADIATED FUEL (TAC NO. L24459)

Background

A pre-application meeting was held on August 11, 2010, in Rockville, Maryland, to discuss two new packaging designs, one for boiling water reactor (BWR) and one for pressurized water reactor (PWR) fresh mixed oxide (MOX) fuel. AREVA Federal Services, LLP (AREVA), requested the meeting to get early involvement by NRC staff as they develop and test their designs.

The meeting was noticed on July 27, 2010 (ML102100589). The meeting attendance list is provided as Enclosure No. 1.

Discussion

The discussion generally followed the agenda (Enclosure No. 2). The primary reason for the meeting was to discuss two planned upcoming new applications for BWR and PWR fresh fuel transportation packages.

The contents request for both packages is planned to include fresh MOX fuel enriched up to 6% Pu. The cladding is planned to be the containment boundary for both designs with qualification by testing rather than analysis. The original request will be based on supporting the U.S. Department of Energy's (DOE's) Global Threat Reduction Initiative (GTRI) for removal of weapons grade plutonium from Russia, converting it to MOX fresh fuel, and irradiating the MOX fuel in U.S. commercial power reactors. The plan also includes flexibility for different fuel types including LWR, AP1000, and EPRs.

Although double containment was required for Pu transportation packages prior to 10 CFR Part 71 promulgated in 2004, AREVA plans to request the implementation of the single containment distinction now allowed. AREVA maintains that the regulations make no distinction between Type B(U)F packages.

The current MOX Fuel Fabrication Plant (MFFP) is being constructed at Savannah River National Laboratory. Construction began in August 2007.

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Once the test plan is complete, AREVA plans to have another pre-application meeting to discuss it. Separate applications are planned for BWR and PWR fuel. Testing is planned for 2012 and 2013. Applications are planned to be submitted in April 2013 with requested approvals by October 2014.

A copy of the presentation slides is provided as Enclosure Nos. 3 and 4.

Docket Nos. 71-9353 and 71-9354
TAC No. L24459

Enclosures:

1. Meeting Attendees
2. Agenda
3. MOX Project Overview
4. Considerations For Two New Fresh MOX Fuel Transportation Packages

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Distribution: (closes TAC No. L24459)
NRC Attendees BWhite DJackson EBenner MRahimi BTripathi
G:\SFST\Hardin\MOX\MEETING SUMMARY 8-11-10.wpd

ADAMS Package No.: ML102520355

OFC	SFST	SFST	SFST
NAME	KHardin	MDeBose	EBenner
DATE	9/8/2010	9/9/2010	9/9/2010

"C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy
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**August 11, 2010, Public Meeting
Between AREVA Federal Services, LLC and
the Nuclear Regulatory Commission**

MEETING ATTENDANCE LIST

Kim Hardin	NRC/SFST
Meraj Rahimi	NRC/SFST
Eli Goldfeiz	NRC/SFST
Zhian Li	NRC/SFST
David Tang	NRC/SFST
Kimberly Ropon	NRC/SFST
Jeremy Smith	NRC/SFST
Pamela Longmire	NRC/SFST
Daniel Forsyth	NRC/SFST
Michele Sampson	NRC/SFST
Chris Bajwa	NRC/SFST
Natreon Jordan	NRC/SFST
Robert Einziger	NRC/SFST
Bob Tripathi	NRC/SFST
Clyde Ragland	NRC/NSIR
Oley Bucharin	NRC/NSIR
Charles Temus	AREVA Federal Services
Charlie Sanders	AREVA Federal Services
Richard Smith	AREVA Federal Services
Mike Morrell	AREVA MOX Services
Dealis Gwyn	AREVA MOX Services
George Meyer	AREVA MOX Services
Richard Clark	AREVA MOX Services
Jayant Bondre	AREVA/Transnuclear
Ken Sanders	NNSA/NA-26

Agenda for NRC-MOX Services Meeting
August 11, 2010, 1:00-4:00 pm

1. Introduction/NRC Meeting Rules---NRC
2. MOX Project Overview--MOX Services
3. Relationship of AFS and MOX Services for Packaging-- MOX Services
4. Purpose of the Meeting--AFS
 - a. Fuel cladding as the containment boundary for BWR and PWR MOX fuel
 - b. Methods of demonstrating containment integrity
5. Design Approach--AFS
 - a. Based on current licensed Type B fissile fresh fuel packages
 - b. Design by test
 - c. Demonstration of fuel integrity
6. Testing—AFS
7. Licensing—AFS
8. Anticipated schedule--AFS