

February 4, 2005

MEMORANDUM TO: Brian E. Thomas, Deputy Director
Licensing and Inspection Directorate
Spent Fuel Project Office, NMSS

FROM: Nancy L. Osgood, Senior Project Manager
Licensing Section /RA/
Spent Fuel Project Office, NMSS

SUBJECT: SUMMARY OF FEBRUARY 2, 2005, MEETING WITH BFS REGARDING
TRANSPORT OF VSC-24 CANISTERS IN THE TS125 SPENT FUEL
CASK

Background

A meeting was held on February 2, 2005, in Rockville, Maryland, at the request of BNFL Fuel Solutions (BFS) to discuss the transport of VSC-24 spent fuel canisters in the Model No. TS125 cask (NRC Certificate of Compliance No. 9276). The VSC-24 canister is part of a storage system that is currently approved under 10 CFR Part 72 (Certificate of Compliance No. 1007). BFS is planning for the eventual disposition of the 58 VSC-24 canisters that are currently loaded at three reactor sites. The meeting was held as a followup to meetings held on July 17, 2003, and January 15 and August 12, 2004. Attachment 1 is the list of meeting attendees, and Attachment 2 is the meeting handout. No regulatory decisions were made nor requested at the meeting.

Discussion

The discussion followed the meeting handout. The meeting centered on criticality analyses that BFS has performed for the TS125 cask containing the VSC-24 canisters. Primary points of discussion were:

- Burnup Credit

BFS has performed extensive calculations of the loaded canisters using certain methods to take credit for fissile material depletion and fission and activation product production. Because of the limited number of isotopic measurements in spent fuel, the statistical uncertainty is very large. BFS described the methods used to treat the uncertainty, and the results of the calculations.

- Benchmarking

BFS described the methods it is considering for benchmarking the criticality analyses. For fuel assemblies with greater than 22 GWD/MTU burnup, the uncertainty due to burnup credit dominates other uncertainties and sets the upper safety limit for the calculations.

- Future Activities and Schedule

BFS plans to perform additional calculations, considering the information that was discussed at the meeting. BFS plans to request a final meeting with NRC to discuss the final calculations, as well as risk information that will be used to supplement the calculations. BFS estimates that it will submit an application for approval of the shipments in September 2005.

- Temperature Monitoring of VSC-24 Storage Cask

BFS is planning to request modification of the Technical Specifications for the VSC-24 Storage Cask that address temperature monitoring. BFS plans to provide a revised thermal analysis using actual maximum decay heat of the loaded canisters. The accident analysis will be used to establish a new frequency for visual inspection for vent blockage.

Docket Nos. 71-9276, 72-1007

TAC No. L23810

Attachments: 1. Meeting Attendees
2. Meeting Handouts

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OFC	SFPO	E	SFPO		SPFO	
NAME	NLOsgood		MRDeBose		JDMonninger	
DATE	02 /03 /05		02 / 03 /05		02/ 04 /05	

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

February 2, 2005, Meeting
between BNFL Fuel Solutions and
the Nuclear Regulatory Commission

MEETING ATTENDEES

Andrew Barto	NRC/SFPO
Gordon Bjorkman	NRC/SFPO
Larry Campbell (part time)	NRC/SFPO
John Monninger	NRC/SFPO
Nancy Osgood	NRC/SFPO
Meraj Rahimi	NRC/SFPO
Mary Jane Ross-Lee (part time)	NRC/SFPO
Harold Scott (part time)	NRC/RES
Jorge Solis (part time)	NRC/SFPO
David Tang	NRC/SFPO
Brian Thomas (part time)	NRC/SFPO
Jacquan Walker	NRC/SFPO
Carl Withee	NRC/SFPO
James E. Hopf	BNFL Fuel Solutions
Robert D. Quinn	BNFL Fuel Solutions
Steven E. Sisley	BNFL Fuel Solutions
Suzanne Leblang	NMC
Eileen Supko	ERI