April 21, 2000

- MEMORANDUM TO: Susan F. Shankman, Deputy Director Licensing and Inspection Directorate Spent Fuel Project Office, NMSS
- FROM: Nancy L. Osgood, Senior Project Manager Licensing Section Spent Fuel Project Office, NMSS
- SUBJECT: SUMMARY OF APRIL 19, 2000, MEETING WITH GLOBAL NUCLEAR FUELS - AMERICAS REGARDING THE MODEL NO. NPC TRANSPORT PACKAGE

Background

A meeting was held on April 19, 2000, in Rockville, Maryland, at the request of the Global Nuclear Fuel - Americas, LLC (GNF), to discuss the physical testing and the criticality analyses for the Model No. NPC package. GNF is designing the NPC package for the transport of low enriched uranium oxide powder and pellets. This was the third meeting held to discuss the package design and testing. The meeting was noticed on April 6, 2000. Attachment 1 is the list of meeting attendees. Attachment 2 is GNF's meeting handout.

Discussion

1. Application for package approval and proprietary information.

GNF has developed the application for package approval. GNF plans to patent this package design. There was a general discussion regarding the withholding of proprietary information. We informed GNF that any request for withholding information from the public must include a valid justification. Any request for withholding of information from the public is evaluated prior to initiating the technical review of the submittal.

2. Results of physical tests of the NPC package.

GNF described the results of the physical tests that were performed on the NPC test packages. Four units were subjected to the normal conditions drop test and the hypothetical accident test sequence. Two of the four units were fire tested. Two units were drop tested at the maximum normal conditions temperature and one unit was dropped at cold temperature. Based on the results of the CG over top corner tests, the top corners were reinforced on the fourth test unit. The fourth unit was then drop tested at that orientation (CG over top corner). The units were all destructively examined. GNF described the condition of the tested units, and showed an edited video of the testing.

3. Schedule.

GNF plans to submit the application for package approval the second week of May. We informed GNF that they should identify and justify the need date for the package, so that we may assign an appropriate priority for their review. Based on reviewers schedules it was estimated that the technical review would not begin until July at the earliest.

4. Criticality analyses and benchmarking.

GNF presented information regarding benchmarking of their criticality codes. A group of benchmark experiments were chosen because they included the same neutron poison material. We requested that GNF provide information about possible trending in the evaluation of their code bias.

5. Model No. SRP-2 package.

GNF provided a brief overview of the design of a new package it is designing for the transport of uranium scrap materials. The package will be subjected to the normal and hypothetical accident test conditions. The package is being designed to withstand the dynamic crush test for fissile material packages in IAEA regulations. The criticality analyses will be performed assuming internal optimum moderation in the damaged array. Physical testing is expected to begin the first week of May.

Docket No. 71-9294 TAC No. L22921

Attachments: 1. Attendance List 2. Meeting Handout S. Shankman

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Attachments: 1. Attendance List

2. Meeting Handout

<u>Distribution:</u> PUBLIC NRC File Center NRC Attendees DHTiktinsky EPEaston LEKokajko FIYoung SFPO r/f NMSS r/f

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NAME	NLOsgood		ERZiegler		JRHall	
DATE	04/20/00		04/20/00		04/21/00	

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April 19, 2000, Meeting between Global Nuclear Fuel - Americas, LLC, and the Nuclear Regulatory Commission

ATTENDANCE LIST

Name	Affiliation
Donald E. Carlson	NRC/SFPO
Randy Hall	NRC/SFPO
Henry Lee	NRC/SFPO
Nancy Osgood	NRC/SFPO
Lon Paulson	GNF-A
Roger Strine	GNF-A
Charlie Vaughan	GNF-A
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GNF Packaging and Transportation Meeting USNRC April 18, 2000

- NRC Licensing Status and Schedule
- Design Patent "Applied For"
- Protection of Reports on Testing Information
- NPC Certification Testing
- Test Sequences
 - Selected Video
- Key Observations
- SRP-2 New Package for Intermediate U Concentrations
 - Design Basis
- **Test Plan and Issues**
 - General Schedule
- Nuclear Benchmarking of Cadmium