



Global Nuclear Fuel

A Joint Venture of GE, Toshiba, & Hitachi

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December 12, 2006

Mr. E. William Brach, Director
Spent Fuel Project Office, M/S O-13D13
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Subject: Correction to GNF-A submittal of 10/3/06 - Modification to Certificate of Compliance for the New Powder Container (NPC)

Reference: Docket 71-9294, USA/9294/AF-85

Dear Mr. Brach:

Global Nuclear Fuel-Americas, LLC (GNF-A) facility in Wilmington, North Carolina has identified a page was inadvertently omitted in our 10/3/06 submittal. The missing page is referenced in Attachment 1 as Section 1.1, Introduction (Page 1-1) and should have been included in Attachment 2. The reference made in the submittal to this page was correct.

Attached to this letter is the missing page 1-1, Revision 4, 10/2006 and should be inserted into the SAR.

We apologize for this omission. If you have questions please contact me at (910) 675-5950.

Sincerely,

Original Signature on File

Scott P. Murray, Manager
Licensing & Liabilities COE

Attachment

cc: SPM 06-020

1.0 GENERAL INFORMATION

This chapter of the Global Nuclear Fuel (GNF) New Powder Container, Model No. NPC (Patent #6,166,391), Safety Analysis Report presents a general introduction and description of the NPC. The major components comprising the NPC are presented in Figures 1.1-1, 1.1-2, and 1.1-3. Figure 1.1-1 presents an exploded view of all major NPC packaging components. Figure 1.1-2 illustrates details of the outer closure region. Figure 1.1-3 presents a detailed view of the inner containment canister and its closure seal region. A detailed description of the major packaging and payload components is presented in the following sections. Detailed drawings are presented in Appendix 1.3.1, *Packaging General Arrangement Drawings*.

1.1 Introduction

The GNF NPC is a transportation system designed to transport homogeneous or heterogeneous forms of Type A quantities of uranium bearing material that is enriched up to 5 weight percent (w/o). The packaging consists of a stainless steel sheet metal Outer Confinement Assembly (OCA) body and lid that encases ceramic fiber insulation and rigid polyurethane foam, and nine equally spaced, individually sealed stainless steel Inner Containment Canister Assemblies (ICCA's). The closure of each canister is provided by a closure lid with a silicone rubber gasket and a standard stainless steel bolted band clamp assembly.

The package is a Type A-fissile package. To provide criticality control, the outer cylindrical surface of each canister is wrapped with a minimum 20-mil cadmium sheet, a 15-mil High Density Polyethylene (HDPE) sheet wrapped to achieve a minimum hydrogen areal density of 0.199 gm/cm², and a stainless steel wrapper. Criticality control is also provided by the neutron moderating polyurethane insulating foam distribution within the OCA body and lid. The uranium bearing material is contained in the individual ICCA's. A stainless steel closure strip covers the OCA lid/body joint for additional protection.

Authorization is sought for shipment of 1,190 pounds (540 kg) of enriched uranium oxides or compounds per package (includes packaging) as a Type A(F)-85, fissile material package per the definitions delineated in 10 CFR §71.4¹. The transport index (TI) for the package, determined in accordance with the definitions of 10 CFR §71.4, is determined for each shipment. The TI is based on the number of packages for criticality control purposes (method for the transport index is defined in Chapter 6.0, *Criticality Safety Evaluation*).

¹ Title 10, Code of Federal Regulations, Part 71 (10 CFR 71), *Packaging and Transportation of Radioactive Material*, 1-1-98 Edition.