



Global Nuclear Fuel

A Joint Venture of GE, Toshiba & Hitachi

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Scott P. Murray
Manager
Licensing and Liabilities COE

December 6, 2006

ATTN: Document Control Desk
Director, Spent Fuel Project Office
Office of Nuclear Material Safety and Safeguards
Washington, DC 20555-0001

Subject: 10 CFR 71.95 - 60-Day Report – Missing Part on RAJ-II Shipping Container Hold Down Bar

Reference: NRC Certificate of Compliance (COC) 9309, Docket 71-9309

Dear Sir:

Global Nuclear Fuel, Americas – LLC (GNF-A) in Wilmington, NC hereby submits a report pursuant to 10CFR 71.95(a)(3) for a condition found involving the RAJ-II package that we believe was not in conformance with the above referenced Certificate of Compliance (CoC).

Our responses to the italicized requirements of 10CFR 71.95 are as follows:

(a) The licensee, after requesting the certificate holder's input, shall submit a written report to the Commission of -

GNF-A is the certificate holder.

(1) Instances in which there is a significant reduction in the effectiveness of any NRC-approved Type B or Type AF packaging during use; or

There was no indication of a reduction in effectiveness of the RAJ-II packaging.

(2) Details of any defects with safety significance in any NRC-approved Type B or fissile material packaging, after first use.

There was no indication of defects with safety significance in the RAJ-II packaging.

(3) Instances in which the conditions of approval in the Certificate of Compliance were not observed in making a shipment.

The RAJ-II package consists of an outer and inner container. The inner container is held in place by four hold down bars. Condition 5.(a)(3) of NRC's CoC 9309 identifies the approved drawings for the RAJ-II. On Page 2 of Drawing 105E3739, Rev 4, locations 3E and 7E, item 10, two clamp flange blocks are shown on each of the hold down bars where the bolts seat. The intended purpose of these blocks are to act as a spacer to seat a standard length bolt without having to drive them all the way down. We discovered six of eight blocks were missing on RAJ-II serial number RA-1332. Although the blocks are not structurally significant, absence of the blocks is not consistent with our licensing drawing.

(b) The licensee shall submit a written report to the Commission of instances in which the conditions in the certificate of compliance were not followed during a shipment.

This is the written report.

(c) Each licensee shall submit, in accordance with § 71.1, a written report required by paragraph (a) or (b) of this section within 60 days of the event or discovery of the event. The licensee shall also provide a copy of each report submitted to the NRC to the applicable certificate holder. Written reports prepared under other regulations may be submitted to fulfill this requirement if the reports contain all the necessary information, and the appropriate distribution is made. Using an appropriate method listed in § 71.1(a), the licensee shall report to: ATTN: Document Control Desk, Director, Spent Fuel Project Office, Office of Nuclear Material Safety and Safeguards. These written reports must include the following:

This report is being submitted to the NRC, in accordance with 10CFR 71.95(a)(3), within 60 days of the event. GNF-A is the certificate holder.

(1) A brief abstract describing the major occurrences during the event, including all component or system failures that contributed to the event and significant corrective action taken or planned to prevent recurrence.

On 11/16/06, we discovered six missing clamp flange blocks on the topside of the inner container hold down bars of the RAJ-II packaging S/N RA-1332. No component failed. The situation was a result of the vendor not attaching these blocks to the inner container hold down bar and their inspection plan did not detect these particular parts were missing. Although there is no indication to believe the situation affects our fleet, we initiated additional inspections on the RAJ-II containers prior to bundle load. To date we have found no additional containers with the missing parts.

To prevent recurrence, the vendor, Columbiana Hi Tech, LLC (CHT), Greensboro, NC developed a checklist for their inspectors to use in looking for these and other drawing specific components. Inspections at their facility and also have not found any additional hold down bars with this defect. Other registered users have containers fabricated by this supplier. CHT has agreed to notify the other potentially affected users.

(2) A clear, specific, narrative description of the event that occurred so that knowledgeable readers conversant with the requirements of part 71, but not familiar with the design of the packaging, can understand the complete event. The narrative description must include the following specific information as appropriate for the particular event

- (i) Status of components or systems that were inoperable at the start of the event and that contributed to the event;*
 - (ii) Dates and approximate times of occurrences;*
 - (iii) The cause of each component or system failure or personnel error, if known;*
 - (iv) The failure mode, mechanism, and effect of each failed component, if known;*
 - (v) A list of systems or secondary functions that were also affected for failures of components with multiple functions;*
 - (vi) The method of discovery of each component or system failure or procedural error;*
 - (vii) For each human performance-related root cause, a discussion of the cause(s) and circumstances;*
 - (viii) The manufacturer and model number (or other identification) of each component that failed during the event; and*
 - (ix) For events occurring during use of a packaging, the quantities and chemical and physical form(s) of the package contents.*
- (3) An assessment of the safety consequences and implications of the event. This assessment must include the availability of other systems or components that could have performed the same function as the components and systems that failed during the event.*
- (4) A description of any corrective actions planned as a result of the event, including the means employed to repair any defects, and actions taken to reduce the probability of similar events occurring in the future.*
- (5) Reference to any previous similar events involving the same packaging that are known to the licensee or certificate holder.*
- (6) The name and telephone number of a person within the licensee's organization who is knowledgeable about the event and can provide additional information.*
- (7) The extent of exposure of individuals to radiation or to radioactive materials without identification of individuals by name.*
- (d) Report legibility. The reports submitted by licensees and/or certificate holders under this section must be of sufficient quality to permit reproduction and micrographic processing.*

The RAJ-II is a rectangular stainless steel box approximately 2.5 feet high by 2.5 feet wide by 17 feet long. It contains a stainless steel inner container that may hold up to two BWR fuel assemblies. Both the inner and the outer container have lids that are bolted down.

The blocks are shown on the drawing as being attached to each end of the 4 inner container hold down bars. The intended purpose of these blocks are to act as a spacer to seat a standard length bolt without having to drive them all the way down. We discovered six blocks were missing on RAJ-II serial number RA-1332. Although the blocks are not structurally significant, absence of

the blocks is not consistent with our licensing drawing.

Based on the finding in RA-1332, both the supplier and GNFA have begun additional inspections of the RAJ-II packages to verify the presence of these blocks. To date, a total of 118 packages have been checked and RA-1332 has been the only container identified with the missing components. Based on this information we have concluded that the missing blocks in RA-1332 was an isolated random occurrence. The blocks in question, while indicated on the licensing drawing, is an assembly aid and in no way plays a safety significant role in the performance of the package.

We are continuing to check packages from the entire CHT fleet as they become available for inspection and will not use any found with this missing part. In addition, we have upcoming fuel shipments that are packed in combinations of packages some of which have been inspected and some not. We do not plan to unpack packages that have not been inspected because the data indicates that there is no widespread problem with this non-safety significant part and the added exposure for unpack-repack would not be ALARA.

I am the individual knowledgeable about this event and can provide additional information as needed. If you wish to contact me, please call me on (910) 675-5950.

Sincerely,

Original Signature on File

S.P. Murray, Manager
Licensing and Liabilities COE

cc: SPM-06-018
Dr. W. Travers, NRC Region II, Atlanta, GA
J. Pelchat, NRC Region II, Atlanta, GA
N. Baker, NRC HQ, Washington, DC