Global Nuclear Fuel

A Joint Venture of GE, Toshiba & Hatachi

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August 24, 2005

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

Reference: NRC Certificate of Compliance 9196, Docket 71-9196

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 shipment of a 30B cylinder in a UX-30 overpack that we believe was not in conformance with a condition of the above referenced Certificate of Compliance (CoC). No components failed. The situation was the result of not following a condition of the certificate and internal procedures.

Our responses to the following 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 -

On 08/09/05, GNF-A personnel contacted Duratek, the certificate holder, and requested their input of the event as described below. They discussed the reason that the valve cover restriction was made in the certificate, and Duratek asked if GNF-A believed anything in the certificate needed to be changed as a result of this event. GNF-A personnel stated the prohibition of using the valve cover was clear, and did not believe a change to the certificate was needed, because the event appeared to be the result of not following an internal procedure. GNF-A personnel discussed the corrective action of having an independent internal review to assure the valve cover on the cylinder had been removed after loading the cylinder into the overpack. Duratek agreed there was no need to change the certificate and believed the proposed corrective action should prevent future problems.

(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 30B cylinder or the UX-30.

(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 UX-30.

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

Condition 9.(c) of CoC 9196 requires the package to be prepared for shipment and operated in accordance with the Operating Procedures of Chapter 7 of the application. Chapter 7, section 7.1.5 in the first "Note:" states: "If a standard 30-B cylinder is being transported, ensure that the valve cover ("valve protector") is removed prior to shipment."

(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 the above, within 60 days of the event, and a copy is being sent to Duratek, the applicable certificate holder. The event was discovered on 7/12/05 thereby requiring the report to be submitted by 9/10/05.

(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 7/1/05, three UF6 cylinders in UX-30 overpacks were shipped from GNF-A in Wilmington, N.C. to Westinghouse, in Columbia, S.C. On 7/12/05, Westinghouse telephoned GNF-A and reported that one of the three UF6 cylinder had a valve covers on the valve which was not in accordance with the CoC. No component failed, the situation was a result of GNF-A not following an internal procedure when preparing the shipment. A temporary procedure was issued until the permanent procedure could be revised to include an independent visual check to verify the valve cover has been removed after a cylinder has been placed inside the UX-30.

(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.

On 7/1/05, three UX-30 overpacks, each containing a 30B UF6 cylinder, were shipped from GNF-A to Westinghouse in Columbia, S.C. One of these cylinders was empty and the other two cylinders each contained less than 2,277 kgs net. On 7/12/05, at approximately 4:00 p.m., Westinghouse called GNF-A and reported that one the full UF6 cylinders had a valve cover over the valve. The other two cylinders did not. We agreed this was a reportable condition, and it was stated that GNF-A would make the10CFR71.95 - 60 day written report to the NRC. There were no inoperable components or systems involved. The situation occurred when three UF6 cylinders from our outside pad were brought inside to be surveyed prior to being placed inside three UX-30 overpacks. When the cylinders were brought inside, the cylinders were placed on the dock, the valve covers that are required to be on cylinders when moved were taken off, and the cylinders were surveyed by the radiation protection function. The valve covers were then replaced, and the three cylinders were loaded into three separate UX-30 overpacks. Two of the three valve covers were then removed, but the third one was not removed. The cause of the problem was that the operator unintentionally overlooked removing the valve cover. Our internal procedure did not require an independent verification that the valve cover had been removed after placing the cylinders into the overpack. The failure mode was human performance for failure to comply with the internal procedure that required the valve cover to be removed. There was no exposure of radiation or radioactive materials to individuals. There was no adverse affect to the cylinder as a result of the valve cover having been placed over the valve.

Although this occurrence was similar to a previous event reported to the NRC on 6/21/05, the basic cause of the event was different.

The following corrective actions have been identified:

1. Issued a stop shipment for all UF6 cylinders until an evaluation could be performed.
2. Issued a Temporary Operating Procedure (TOP), until modification of the permanent procedure, to have cylinder dock operators perform an independent verification to insure valve covers have been removed from the cylinder valves once they have been placed in UX-30 overpacks.
3. Conducted an internal review.
4. Communicated to the cylinder dock operators the expectation of following procedures.

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) 675-5656.

Sincerely,

Global Nuclear Fuel – Americas, LLC

Original Signature on File

C. M. Vaughan, Manager
Facility Licensing

cc: CMV-05-050
P. Paquin, Duratek, Columbia, SC
C. Witt, Duratek, Columbia, SC
N. Kent, Westinghouse, Columbia, SC
T. Ross, Westinghouse, Columbia, SC
Dr. W. Travers, NRC Region II, Atlanta, GA
D. Seymour, NRC Region II, Atlanta, GA
N. Baker, NRC HQ, Washington, DC