



Global Nuclear Fuel

A Joint Venture of GE, Toshiba & Hatachi

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June 21, 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 shipments in the UX-30 overpack that we believe were not in conformance with a condition of the above referenced Certificate of Compliance (CoC). No components failed. The situation was the result of shippers not following a condition of the certificate.

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 6/10/05, 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 inattentive action to the certificate requirements and lack of an appropriate procedure. Duratek agreed and stated they believed forwarding the UX-30's without opening to verify the contents was not appropriate.

(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 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 that "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 5/12/05 thereby requiring the report to be submitted by 7/11/05.

(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.

Thirty UF6 cylinders in UX-30 overpacks were received at GNF-A from China. Four were forwarded to Westinghouse. Westinghouse telephoned GNF-A and reported that three of the four had valve covers on the valves which was not in accordance with the CoC. GNF-A discovered that twenty-three of the remaining twenty-six cylinders also had valve covers on the valves. No component failed, the situation was a result of not following a condition in the CoC.

(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 5/10/05, 5/11/05 and 5/12/05, a total of thirty 30B UF6 cylinders each in a UX-30 overpack were received at GNF-A in Wilmington, NC from the China Nuclear Energy Industry Corporation (CNEIC). Each cylinder contained UF6 less than 2,277 kgs net with an enrichment of less than 5% U235. On 5/11/05, four of these UX-30 overpacks containing a UF6 cylinder in each overpack were shipped from GNF-A to Westinghouse in Columbia, S.C. On 5/12/05, at approximately 11:30 am, Westinghouse called GNF-A and reported that three of the four UF6 cylinders had valve covers over the valves but the fourth did not. We agreed this was a reportable condition and it was stated that GNF-A would make the 10CFR71.95 - 60 day written report to the NRC. The four overpacks, part of the thirty, had been received at GNF-A from China and forwarded without opening the overpacks. There were no inoperable components or systems involved. The cause of the problem was that the shipper, CNEIC, did not comply with a condition of the certificate by placing valve covers on some of the UF6 cylinder valves. In addition, GNF-A did not verify the content of the UX-30 overpacks prior to forwarding them to Westinghouse. Because the act of forwarding was an infrequent task, there was inadequate questioning and the assumption was that the supplier had done everything correctly. We also discovered that twenty-three of the remaining twenty-six cylinders had valve covers on the valves. The failure mode was human performance for failure to comply with regulatory requirements. The event also disclosed a secondary situation where GNF-A discovered internal operating procedures were deficient. The internal procedure did not instruct the receiving operator to notify supervision in the event a valve cover was found on a UF6 cylinder received in a UX-30 overpack. There was no exposure of radiation or radioactive materials to individuals. There was no adverse affect to the cylinders as a result of the valve covers having been placed on the cylinders.

The following corrective actions have been identified:

1. Issue a stop shipment for all UF6 cylinders to be forwarded.
2. Open the overpacks received from China at GNF-A and inspect to determine if they have valve covers on the valves.
3. Conduct an internal taproot review.
4. Determine if the valve covers have caused any damage to the cylinder.
5. Modify internal procedures to instruct personnel responsible for unloading UF6 cylinders to inspect for and notify supervision of conditions where cylinders shipped in overpacks have valve covers on the valves.
6. Notify CNEIC of the problem. Also, notify other foreign UF6 suppliers of shipping requirements.
7. Establish a procedure for forwarding that includes appropriate safeguards to insure compliance with DOT and NRC requirements.
8. Review the lessons learned with the individuals who made the decision to forward the shipments.

Kurt Ellis, Manager Logistics, is knowledgeable about this event and should be contacted for additional information on (910) 675-5318

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: P. Paquin, Duratek, Columbia , SC
C. Dewitt, 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