



May 29, 2009
REL:09:024

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Director, Spent Fuel Project Office
Office of Nuclear Material Safety
and Safeguards
Washington, D.C. 20555

Gentlemen:

Subject: 10 CFR 71.95 Report of Event Involving Invalid United Kingdom Transit Certificates for Uranium Dioxide Pellet Shipments in Model ANF-250 Packagings (NRC/USDOT USA/9217/AF)

On April 1, 2009 AREVA NP Inc. (AREVA) identified the potential that two shipments of low-enriched uranium dioxide pellets previously shipped from its Richland, Washington fuel fabrication plant to an AREVA facility in Lingen, Germany lacked valid Transit Certificates for transiting United Kingdom (UK) territorial waters. As requested by AREVA, the UK Department for Transportation (DfT) reviewed the certificates, as provided by AREVA, for the fourteen (14) other pellet shipments subject to the UK transit certificate requirement. That review determined that a third prior shipment had transited UK waters without a valid Transit Certificate issued by the DfT.

The shipments were made in ANF-250 fissile radioactive material shipping packagings utilized (maintained, packed, shipped) in compliance with the NRC Certificate of Compliance and U.S. Department of Transportation (DOT) Competent Authority Certification for that container. At no time were the packagings or their contents challenged in conjunction with these shipments; there were no container system/component failures or exposures of individuals to radiation or radioactive materials. As such the actual safety significance of these occurrences is low.

This report is being provided to the NRC in recognition of the NRC's participation with the DOT and UK DfT in the investigation of this event. Separately, AREVA is working directly with the DfT in the resolution of this issue. While AREVA believes no violation of NRC Certificate of Compliance USA/9217/AF for the ANF-250 packaging or the Competent Authority Certification provided by the DOT has occurred, AREVA is conservatively providing this report to meet the information requirements specified in 10 CFR 71.95(c). That information is attached.

JETA

AREVA NP INC.

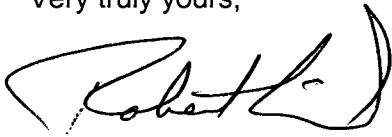
An AREVA and Siemens company

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If you have questions or require additional information, please feel free to contact me at 1-509-375-8409.

Very truly yours,

A handwritten signature in black ink, appearing to read "Robert Link", enclosed in a large, stylized loop.

R. E. Link, Manager
Environmental, Health, Safety, & Licensing

cc: E.W. Brach, Director
Division of Spent Fuel Storage
And Transportation
Office of Nuclear Material Safety
and Safeguards
Washington, D.C. 20555

/mah

Event Information Required by 10 CFR 71.95(c)

(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.

Shipments of low-enriched uranium dioxide pellets are routinely made from AREVA NP Inc.'s (AREVA's) Richland, Washington fuel fabrication plant (NRC License No. SNM-1227) to its sister facility in Lingen, Germany. The shipments are made using the Model ANF-250 fissile radioactive material shipping container licensed under NRC Certificate of Compliance USA/9217/AF and U.S. Department of Transportation(USDOT) Competent Authority Certification USA/9217/AF. These shipments routinely transit United Kingdom (UK) territorial waters and dock in the UK at Liverpool as part of the standard routing to Hamburg, Germany, where the containers are off-loaded for transport to Lingen.

Based on their questions regarding the criticality safety analysis underlying the ANF-250 container, the UK Department for Transportation (DfT) did not provide UK competent authority certification for Revision 13 (the latest and current revision) of USDOT Competent Authority Certification USA/9217/AF. Accordingly, all Richland to Lingen pellet shipments using the ANF-250 container transshipped via the UK since May 27, 2005 (the effective date of USA/9217/AF Rev. 13) have required special UK Transit Certificates on a shipment-by-shipment basis. These shipments were enabled via applying for a Transit Certificate with the UK DfT authority on a case by case basis outlining specific characteristics of the package contents. Sixteen (16) such shipments subject to these special transit certificates have been made between October 21, 2005 and March 19, 2009.

On April 1, 2009 AREVA identified that certificate documents for two of the shipments invalid, having been altered by the AREVA employee responsible for acquiring the UK Transit Certificates. The alterations were self-reported by the responsible employee to AREVA and to the US and UK competent authorities. AREVA notified the NRC Region II via phone on April 1, 2009 to inform them of the issue. Based on a review requested by AREVA of all pertinent ANF-250 transit certificates, the UK DfT discovered a third altered certificate document, i.e., a permit not issued by the UK.

There were no package-related component or system failures that contributed to this event.

For discussion of corrective actions resulting from this event, see discussion under (4), below.

(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.

A narrative discussion of the event was provided under (1), above. The event is not related to the design of the ANF-250 packaging. Additional information related to the event is provided in (i) - (ix), below.

(i) Status of components or systems that were inoperable at the start of the event and that contributed to the event;

As described in (1) above, the event involved the lack of valid Transit Certificates for three of 16 uranium dioxide pellet shipments transiting the UK in ANF-250 containers. The event did not involve any system or component failures with the containers themselves.

(ii) Dates and approximate times of occurrences;

The three shipments lacking valid UK Transit Certificates transited Liverpool on December 30, 2008; March 24, 2009; and March 31, 2009.

(iii) The cause of each component or system failure or personnel error, if known;

There were no ANF-250 component or system failures associated with this event. The cause of the inappropriate action by the AREVA employee is discussed in (vii), below.

(iv) The failure mode, mechanism, and effect of each failed component, if known;

No failed components were involved in this event.

(v) A list of systems or secondary functions that were also affected for failures of components with multiple functions;

There were no component failures associated with this event.

(vi) The method of discovery of each component or system failure or procedural error.

There were no component or system failures associated with this event.

As noted in (1) above, two of the certificate alterations were self-reported by the AREVA employee to AREVA management and to the competent authorities in the US and the UK. The third occurrence was discovered based on the UK DfT's review of the other 14 pertinent Transit Certificates, as requested by AREVA.

(vii) For each human performance-related root cause, a discussion of the cause(s) and circumstances;

The human performance deficiency, i.e., certificate alteration, was investigated under AREVA's formal corrective action program and determined to be caused by management's over-reliance on a single individual's knowledge and expertise to carry out the UK permitting function, using informal processes. These informal processes relative to UK permitting and international shipping lacked clarity of roles and responsibilities and, combined with a breakdown in internal communications, resulted in the inappropriate decision to alter the UK Transit Certificates when schedule pressures were magnified.

(viii) The manufacturer and model number (or other identification) of each component that failed during the event;

There were no component failures associated with this event.

(ix) For events occurring during use of a packaging, the quantities and chemical and physical form(s) of the package contents;

While this event did not involve any actual challenge to the ANF-250 packagings or their contents, the contents information for the shipments lacking valid certificates is as follows:

Shipment ID	No. ANF-250 Containers	Contents Description (total)
Lingen 444	21	1752.8 kg UO ₂ pellets at 3.75% U-235 and 3.5% Gd ₂ O ₃
Lingen 447	96	308 kg UO ₂ pellets at 4.6% U-235 and 5% Gd ₂ O ₃
		7137.9 kg UO ₂ pellets at 4.6% U-235 and 0% Gd ₂ O ₃
Lingen 448	36	2816.8 kg UO ₂ pellets at 4.6% U-235 and 0% Gd ₂ O ₃

(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.

The actual safety consequences of this event are low. The packages were utilized (maintained, loaded, shipped) in compliance with the USNRC and USDOT ANF-250 container licenses. No challenges to the containers or their contents occurred. The package contents were similar to contents of other shipments issued Transit Certificates by the UK DfT. The occurrences did not result in the exposure of individuals to radiation or radioactive materials.

(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;

With support of the UK DfT, all invalid transit certificates relative to the Lingen pellet shipments were identified. One of these shipments lacking a valid Transit Certificate was in Liverpool at the time of the initial event discovery (April 1). In cooperation with the UK DfT, the shipment (Lingen 448) was subsequently released in accordance with a Certificate of Approval for a Special Arrangement Shipment of Radioactive Materials issued by the DfT.

The AREVA employee responsible for altering the UK Transit Certificates has been suspended and further disciplinary action is under consideration.

The AREVA Root Cause Analysis team investigating this event has identified corrective actions to prevent recurrence as follows:

- *Formalization of an AREVA NP Fuel Sector global international transportation process to ensure efficient and successful shipment of AREVA commodities;*
- *Improvement in oversight of personnel task assignments and quality processes in the international shipping area;*
- *Provision of additional training to improve knowledge and understanding of requirements associated with international shipping and contracting;*

- *Provision of training relative to a strong safety culture as required in the nuclear industry emphasizing effective communication and a culture in which schedule pressures do not override regulatory compliance; and*
- *Implementation of measures to track and assure effective implementation of corrective action commitments, including audits, surveillances, and an independent one year post-event effectiveness review.*

These corrective actions and lower-tier implementing actions will be tracked to completion in AREVA's formal corrective action program.

(5) Reference to any previous similar events involving the same packaging that are known to the licensee or certificate holder.

AREVA is not aware of any previous similar events involving the ANF-250.

(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.

Additional information about this event can be obtained by contacting:

*Robert E. Link, Manager
Environmental, Health, Safety & Licensing
AREVA Richland Fuel Fabrication Facility
(509) 375-8409*

(7) The extent of exposure to individuals to radiation or radioactive materials without identification of individuals by name.

This event did not involve the exposure of individuals to radiation or radioactive materials.