



**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

SEM-09-014

November 18, 2009

U.S. Nuclear Regulatory Commission,
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 Report of Non-Compliance with Certificate of Compliance
USA/9319/B(U)F-96, Revision, for the Model No. MAP-12/MAP-13 Package**

To Whom It May Concern,

On September 29, 2009, AREVA NP Inc. discovered that a single MAP-12 shipping container containing two fuel assemblies, transported from our facility located in Lynchburg, Virginia to the Oconee Nuclear Station located in Oconee, South Carolina violated the requirements of NRC Certificate of Compliance (CoC) USA/9319/B(U)F-96, Revision 2, Section 5(a) (3), in that not all of the requirements of section 2.3.4 *Positive Closure* in the Safety Analysis Report (SAR) were met. Specifically, a pin did not fully engage resulting in the dislodgement during transit to the Oconee site.

The current procedure for pin insertion may not allow the pin to be fully engaged resulting in the potential to become dislodged during transit. Section 2.3.4 of the SAR states that the lid is secured to the base using numerous ball lock pins (44 for MAP-12). Based on this incident, AREVA has updated their procedures to further ensure the proper engagement of the ball lock pin. Attachment A to this letter provides additional information related to this shipment.

Per 10 CFR 71.95 (a) (1), AREVA does not consider the conditions of the subject shipment, listed in this notice, to have caused a significant reduction in the effectiveness of the package. There was no impact to the safety basis of the package or increased risk to the public. This report is being made in accordance with the requirements of 10 CFR 71.95 (A) (3); Instances in which the conditions of approval in the Certificate of Compliance were not observed in making a shipment. Further justification is provided in Attachment A.

If you or your staff have any questions, require additional information, or wish to discuss the matter further, please contact me at 434-832-5205.

Sincerely,

A handwritten signature in black ink, appearing to read 'Samuel E. Miller'.

Samuel E. Miller
Manager Environmental, Health Safety & Licensing

AREVA NP INC.
An AREVA and Siemens company

3315 Old Forest Road, P.O. Box 10935, Lynchburg, VA 24506-0935
Tel.: (434) 832-3000 - Fax: (434) 832-3840

FORM 22709VA-1 (4/1/2006)

NM5501

SEM-09-014
November 15, 2009

Cc:

E.W. Branch Director
Spent Fuel Project Office
Office of Nuclear Material Safety and Safeguards,
U.S. Nuclear Regulatory Commission,
Washington, DC 20555-0001

AREVA NP INC.
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3315 Old Forest Road, P.O. Box 10935, Lynchburg, VA 24506-0935
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FORM: 22705VA-1 (4/1/2006)

Attachment A
Additional Information

AREVA NP INC:
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10 CFR 71.95 Sections (1) and (2)

- (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 September 23, 2009, AREVA NP Inc. discovered that a single MAP-12 shipping container containing two fuel assemblies, transported from our facility located in Lynchburg, Virginia to the Oconee Nuclear Station located in Oconee, South Carolina violated the requirements of NRC Certificate of Compliance (CoC) USA/9319/B(U)F-96, Revision 2, Section 5(a) (3), in that not all of the requirements of section 2.3.4 Positive Closure in the Safety Analysis Report (SAR) were met. Specifically, a pin did not fully engage resulting in the dislodgement during transit at the Oconee site.

There were no component or system failures during the event.

An inspection of package MP-066 indicated that the package was prepared properly according to procedures and that the ball lock pin might have become lodged in the hole and not fully seated. Without being fully seated the ball lock pin could not properly engage thus allowing it to possibly becoming dislodged during transit.

To prevent a recurrence of this error, AREVA has updated procedures to have an independent reviewer to go behind and insure that the ball lock pins have engaged properly with each container for each shipment.

- (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;

There was no inoperable component or system at the start of the event of that contributed to the event. The single MAP package contained two fuel assemblies. All safety requirements were met in preparation of the packaging for shipment with the exception of the one (1) noted ball lock pin that was missing on receipt of package MP-066 at the Oconee site.

- (ii) Dates and approximate times of occurrences;

A single shipment of six (6) MAP-12 packages, each containing two fuel assemblies, was loaded as a single conveyance and subsequently shipped on September 23, 2009. The shipment arrived at the Oconee site on September 24, 2009.

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

There were no component or system failures. An issue evaluation identified no independent verification of the ball lock pin full engagement was performed because the procedure did not specify as a required process.

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

There were no failed components.

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

There were no other systems or secondary functions that were affected by the missing ball lock pin.

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

There were no component or system failures. The missing ball lock pin was discovered on package MP-066 by Hittman Transport (Kelly Sievert) prior to arriving at the Oconee site and he notified Oconee Nuclear Station upon arrival.

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

The procedure was not sufficient to prevent dislodgement of ball lock pin. AREVA did not recognize the deficiency of the procedure until this occurrence investigation was performed.

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

There were no component failures during the event.

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

The shipment involved six (6) MAP-12 packages containing two (2) fuel assemblies. Each fuel assembly consists of uranium dioxide pellets clad in zirconium alloy tubing and arranged in a lattice with installation in a cage or structure. The material is solid normal form. The enrichments were all less than 5.0 wt% ²³⁵U. Only the single MAP-12 package MP-066 was noted to have a missing ball lock closure pin.