



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

March 27, 2014

Mr. R. E. Link
Manager
Environmental Health, Safety, & Licensing
AREVA Inc.
2121 Horn Rapids Road
Richland, WA 99354

**SUBJECT: APPLICATION FOR TN-B1 TRANSPORTATION PACKAGE – FIRST ROUND
REQUEST FOR ADDITIONAL INFORMATION**

Dear Mr. Link:

By letter dated January 29, 2014, AREVA Inc., submitted an application for a new Certificate of Compliance (CoC) No. 9372 for the Model No. TN-B1 transportation package.

In connection with the staff's review, we need the information identified in the enclosure to this letter. We request you provide this information by April 25, 2014. Inform us at your earliest convenience, but no later than April 18, 2014, if a substantial date change is needed. To assist us in re-scheduling your review, you should include a new proposed submittal date.

If you have any questions regarding this matter, please contact me at 301-287-9241.

Sincerely,

/RA/

Huda Akhavannik
Licensing Branch
Division of Spent Fuel Storage and Transportation
Office of Nuclear Material Safety
and Safeguards

Docket No. 71-9372
TAC No. L24881

Enclosure: Request for Additional Information

Request for Additional Information
AREVA Inc.
Docket No. 71-9372
Certificate of Compliance No. 9372
Model No. TN-B1 Package

1.0 General Information

Provide sheets 2-4 of Drawing No. 105E3745. These sheets are missing from the safety analysis report (SAR) of the TN-B1 but are provided in the Model No. RAJ-II SAR.

This information is needed to ensure compliance with requirements in 10 CFR 71.33.

2.0 Structural and Materials

2-1

The Model No. TN-B1 SAR is based closely on the SAR for Revision No. 9 of the Model No. RAJ-II certificate of compliance approval. In Section 2.5.1 of the Model No. RAJ-II SAR, "Evaluation by Test," the applicant states that: "The package was tested full-scale by dropping four full-scale certification test units (CTUs) from 9 meters in different orientations. (Two of the test units were dropped as part of the Japanese certification process.)" However, for the Model No. TN-B1, the sentence has been revised to state: "The package was tested full-scale by dropping two units from 9 meters in different orientations," thereby removing any recognition of the Japanese CTUs.

However, there is language throughout Chapter 2 of the Model No. TN-B1 SAR (e.g., Section 2.6.7, Section 2.7.1, and Appendix 2.12.2), which points to the Japanese CTUs. For example, under Section 2.7.1, "Free Drop," of both the Model Nos. TN-B1 and RAJ-II SARs, there is language which states: "The ability of the...package to adequately withstand this specified free drop condition is demonstrated via testing of four full-scale, certification test units (CTUs)" which is greater than "two units from 9 meters" as stated in Section 2.5.1 of the Model No. TN-B1 SAR. Additionally, as part of Appendix 2.12.2 of the Model No. TN-B1 SAR, language is provided as a footnote on page 137 pointing to the RAJ-II Japanese testing.

Staff believes that this may result in confusion for any future technical reviews which may not rely on comparison to the Model No. RAJ-II SAR. Revise the language in the SAR to clarify the role of the "GNF-J" CTUs and their relation to the Model No. TN-B1.

This information is necessary for clarification purpose to assure that actual test units are described accurately.

2-2

In Section 2.5.1, the last sentence of paragraph four, replace the phrase “helium leak test” with “helium leakage rate test” as stated in the Model No. RAJ-II SAR.

This information is necessary for clarification purpose, and to describe accurate nature of the test.

2-3

Verify entries in Table 6-8, “Material Specifications for the TN-B1,” are correct.

The elemental atomic densities for the following materials: (1) stainless steel 304, (2) low density polyethylene insert, and (3) paper honeycomb, in the TN-B1 SAR do not match those of the Model No. RAJ-II SAR.

This information is needed to ensure compliance with requirements in 10 CFR 71.7(a).

2-4

Verify referencing in the first paragraphs of both Section 1.2.3.4.6, “Fuel Rods In a 5-Inch Pipe,” and Section 1.2.3.4.7, “Fuel Rods in a Protective Case.”

These paragraphs reference Section 7.1.2, “Loading of Contents,” instead of Table 6-2, “Fuel Rod Loading Criteria,” as it is appropriately done in the Model No. RAJ-II SAR.

This information is needed to ensure compliance with requirements in 10 CFR 71.7(a).

8.0 Acceptance Tests and Maintenance Program

In the Model No. RAJ-II SAR, Section 8.1.2, “Weld Examinations,” states that, “RAJ-II packaging materials of construction and welds shall be examined in accordance with requirements delineated on the drawings in Appendix 1.4.1, per the requirements of 10 CFR 71.85(a). This includes 100% liquid penetrant examination of specified areas of the first ten (10) production units.” This has been changed for the Model No. TN-B1 SAR to state: “TN-B1 packaging materials of construction and welds shall be examined in accordance with requirements delineated on the drawings in Appendix 1.4.1, per the requirements of 10 CFR 71.85(a),” thereby removing the implicit reference to the liquid penetrant examination requirements found in the American Welding Society (AWS) handbook.

Revise Section 8.1.2 to include reference to examination of fabrication and maintenance welds to AWS D1.6 – Clause 6, Part E and the requirements delineated on the drawings.

This information is needed to ensure compliance with the requirements in 10 CFR 71.85(a).

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