

July 20, 2007

Mr. Fred Yapuncich  
Project Manager  
Packing Technology, Inc.  
1102 Broadway Plaza, Suite 300  
Tacoma, WA 98402

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR REVIEW OF  
CERTIFICATE OF COMPLIANCE NO. 71-9295, REVISION 4, FOR THE  
MIXED OXIDE FRESH FUEL PACKAGE (TAC. NO. L24054)

Dear Mr. Yapuncich:

By letter dated January 19, 2007, Packaging Technology, Inc., submitted an application to the U.S. Nuclear Regulatory Commission (NRC) requesting a revision to the Mixed Oxide Fresh Fuel Package, Certificate of Compliance (CoC) No. 71-9295. The application requests three new payloads be added to the CoC. In addition, several corrections and clarifications to the Safety Analysis Report are requested.

In connection with our review of all information received to date, we need the information identified in the enclosure to this letter to continue with this review. We request that you provide this information by August 20, 2007. Please inform us immediately, if you are not able to provide the information requested. To assist us in re-scheduling your review, you should include a new proposed submittal date and the reasons for the delay.

Please reference Docket No. 71-9295 and TAC No. L24054 in future correspondence related to this request. The staff is available to meet to discuss your proposed responses. If you have any questions regarding this matter, I may be contacted at 301-492-3331.

Sincerely,

**/RA/**

Meraj Rahimi, Senior Project Manager  
Licensing Branch  
Division of Spent Fuel Storage and Transportation  
Office of Nuclear Material Safety  
and Safeguards

Docket No. 71-9295  
TAC No. L24054

Enclosure: Request for Additional Information

Mr. Fred Yapuncich  
 Project Manager  
 Packing Technology, Inc.  
 1102 Broadway Plaza, Suite 300  
 Tacoma, WA 98402

**SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR REVIEW OF CERTIFICATE OF COMPLIANCE NO. 71-9295, REVISION 4, FOR THE MIXED OXIDE FRESH FUEL PACKAGE (TAC. NO. L24054)**

Dear Mr. Yapuncich:

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Docket No. 71-9295  
 TAC No. L24054  
 Enclosure: Request for Additional Information

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**Request for Additional Information**  
**Packing Technology, Inc.**  
**Docket 71-9295, Amendment No. 4**  
**Request for an Amendment to Certificate of Compliance No. 9295**  
**for the PACTEC MIXED OXIDE FRESH FUEL Package**

Under cover letter dated January 19, 2007, Packaging Technology, Inc. (PACTEC), submitted a request for an amendment to Certificate of Compliance (CoC) No. 9295 for the Mixed Oxide Fresh Fuel Package to incorporate three new payloads as approved contents and implement several corrections and clarifications to the Safety Analysis Report.

The information requested in this RAI is needed by the staff to complete its review of the amendment request and to determine whether the proposed plan has demonstrated compliance with regulatory requirements.

Additional information requested include the following:

Chapter 4 - Thermal Evaluation

- 4-1 Provide a justification for the cladding temperature limits stated in the SAR (page 3.2-3) for the MOX fuel assemblies.

On page 3.2-3 of the SAR, cladding temperature limits of 392°F for NCT and 1,337°F for HAC are cited. It is understood that the cladding in question is unirradiated, and although the values stated are below the currently accepted limits for irradiated fuel cladding for NCT (400°C/570°F), it exceeds the currently accepted limits for HAC (752°C/1058°F). It is assumed that the limit is associated with the material properties of the unirradiated cladding; however, it is not clear where these values are derived from. Section 1.2.3 in the SAR does not provide insight into the origination of these values.

This information is needed to meet the regulatory requirements of 10 CFR 71.35(a) which requires the applicant to demonstrate that the package satisfies the thermal requirements under normal and accident conditions.

- 4-2 Provide documentation that describes, in detail, the validation effort for the SINDA/FLUINT code for thermal analysis of spent fuel packages.

Validation of computer codes and methods used for analysis of radioactive material transportation packages is needed to provide confidence that the code and analysis method(s) can accurately predict package temperatures for the thermal conditions in 10 CFR Part 71. Page 3.3-2 of the SAR states that "SINDA/FLUINT has been validated for simulating the thermal response of spent fuel packages...."

This information is needed to meet the regulatory requirements of 10 CFR 71.33 which requires the applicant to provide a description in sufficient detail to identify the package accurately and provide sufficient basis for evaluation of the package.