October 9, 2008

Dr. Stefan Anton
Licensing Manager
Holtec International
555 Lincoln Drive West
Marlton, NJ 08053

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR HOLTEC INTERNATIONAL HI-STORM 100 CERTIFICATE OF COMPLIANCE AMENDMENT REQUEST NO. 7 (TAC NO. L24208)

Dear Dr. Anton:

By letter dated April 15, 2008, Holtec International (Holtec) submitted an application to amend Certificate of Compliance (CoC) No. 72-1014 for the HI-STORM 100 Cask System (License Amendment Request No. 7, Revision 0) in accordance with 10 CFR Part 72. On August 19, 2008, the Nuclear Regulatory Commission (NRC) staff notified you that the application contained sufficient information for us to initiate our technical review. The NRC staff has completed its initial review of your application and has determined that additional information is required to assess compliance with 10 CFR Part 72.

Enclosed is the staff's request for additional information (RAI), which identifies the information needed for us to continue our review of your amendment application. We request that you respond to each item in the RAI. Your response to the enclosed RAI is requested by November 17, 2008. If you are unable to meet the November 17, 2008, milestone, you must notify us in writing, at least two weeks prior to that date, of your new response date and the reasons for the delay. The staff will then assess the impact of the new response date and will issue a revised schedule, as necessary.

Please reference Docket No. 72-1014 and TAC No. L24208 in future correspondence related to this licensing action. If you have any questions, please contact me at (301) 492-3325.

Sincerely,

/RA/

John M. Goshen, Project Manager
Licensing Branch
Division of Spent Fuel Storage and Transportation
Office of Nuclear Material Safety
and Safeguards

Docket No. : 72-1014
TAC No.: L24208

Enclosure: Request for Additional Information

Dr. Stefan Anton
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Docket No. 72-1014
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Enclosure: Request for Additional Information

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REQUEST FOR ADDITIONAL INFORMATION

FOR HOLTEC INTERNATIONAL HI-STORM 100 CASK SYSTEM

CERTIFICATE OF COMPLIANCE AMENDMENT NO. 7

HOLTEC INTERNATIONAL

DOCKET NO. 72-1014

TAC NO. L24208

OCT 2008

Enclosure

INTRODUCTION

By letter dated April 15, 2008, Holtec International (Holtec) submitted an application to amend Certificate of Compliance No. 72-1014 for the HI-STORM 100 Cask System (License Amendment Request No. 7, Revision 0) in accordance with 10 CFR Part 72. On August 19, 2008, the Nuclear Regulatory Commission (NRC) staff notified you that the application contained sufficient information for us to initiate our technical review. The NRC staff has completed its initial review of your application and has determined that additional information is required to assess compliance with 10 CFR Part 72.

This request for additional information (RAI) identifies additional information needed by the NRC staff in connection with its review of this application. The requested information is listed by chapter number and title in the Updated Final Safety Analysis Report (UFSAR). NUREG -1536, "Standard Review Plan for Dry Cask Storage Systems," was used by the staff in its review of the application.

Each individual RAI section describes information needed by the staff to complete its review of the application and the UFSAR and to determine whether the applicant has demonstrated compliance with the regulatory requirements.

Chapter 2.0 Principle Design Criteria

Section 2.1.5 Structural Parameters for Design Basis SNF [Spent Nuclear Fuel]

2-1 Provide documentation demonstrating that the geometric and materials specification for an instrument tube tie rod (ITTR) is sufficient to support loads imposed on it based on the intended function of the device.

Limited material information is provided by the applicant for the ITTR, and there is no documentation provided that demonstrates the ITTR can function properly for its intended use. As described, the intended use for the ITTR is to provide structural integrity of the fuel assembly during an essentially static lifting operation. Therefore, this condition should be analyzed with appropriate dynamic amplification if necessary. If the ITTR is subject to other loading conditions while providing a structural integrity function those loads must be considered as well.

This information is necessary to determine compliance with 10 CFR 72.122 (l)

Chapter 6.0 Criticality Evaluation

Section 6.4.2 Fuel Loading or Other Contents Loading Optimization

6-1 Provide additional information on whether or not an ITTR can be stored in a damaged fuel assembly. If so, provide additional information justifying that the boron requirements for damaged fuel assemblies with an ITTR installed are conservative.

The staff is currently unsure as to whether or not a "damaged fuel assembly" can have an ITTR installed. The staff understands that a certain type of damaged fuel assembly (those classified as damaged based on the top nozzle intergranular stress corrosion

cracking) would no longer need the damaged fuel canisters and would then be stored as a normal fuel assembly. However it is unclear to the staff if an assembly classified as damaged for reasons in addition to the top nozzle intergranular stress corrosion cracking would have an ITTR in addition to being housed in a damaged fuel canister. Please clarify if it is possible, or even reasonable, to house an assembly in a damaged fuel canister with an ITTR. If so, provide justification for the minimum boron concentrations necessary for damaged fuel assemblies when an ITTR is present. Also ensure the technical specifications (TS) accurately reflect the allowable use of ITTRs that are supported by the criticality evaluation, making any needed modifications to the TS.

This information is needed to determine compliance with 10 CFR 72.124(a).