January 8, 2003

Mr. Brian Gutherman Licensing Manager Holtec International 555 Lincoln Drive West Marlton, NJ 08053

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION - HOLTEC HI-STORM 100 ASME CODE ALTERNATIVE

Dear Mr. Gutherman:

On October 22, 2002, and supplemented by letter dated November 22, 2002, Holtec International submitted a request to the Nuclear Regulatory Commission (NRC) proposing a one-time alternative to the ASME Code, Section III, Subsection NB requirement that certain components of the HI-STORM 100 Cask System be inspected by the ultrasonic method (UT) during fabrication. The affected casks are MPC-68 serial numbers 36 and 37 at Exelon's Dresden Nuclear Station and MPC-68 serial number 23 at Southern Nuclear Operating Company's Plant Hatch Independent Spent Fuel Storage Installation. The request was submitted in accordance with Section 3.3.2 of Appendix B to Certificate of Compliance No. 1014. Enclosed is the staff's request for additional information (RAI) for the continued review of your request.

Your full and complete response to the enclosed RAI is necessary for the staff to complete its review. Upon receipt of your RAI responses, we will perform an acceptance review to determine if sufficient information has been provided to allow completion of the review and inform you if the information provided is not complete. If you respond to the staff's RAI no later than February 25, 2003, and the staff finds the responses satisfactory, the staff will approve your request by early May 2003.

If you have any comments or questions concerning this request, you may contact me at (301) 415-1179. Please refer to Docket No. 72-1014 and TAC No. L23524 in future correspondence related to this request.

Sincerely, /RA/

Christopher M. Regan, Project Manager Licensing Section Spent Fuel Project Office Office of Nuclear Material Safety and Safeguards

Docket No. 72-1014 TAC No. L23524

Enclosure: RAI on HI-STORM 100 ASME Code Alternative

January 8, 2003

Mr. Brian Gutherman Licensing Manager Holtec International 555 Lincoln Drive West Marlton, NJ 08053

SUBJECT: **REQUEST FOR ADDITIONAL INFORMATION - HOLTEC HI-STORM 100 ASME CODE EXCEPTIONS**

Dear Mr. Gutherman:

On October 22, 2002, and supplemented by letter dated November 22, 2002, Holtec International submitted a request to the Nuclear Regulatory Commission (NRC) proposing a one-time alternative to the ASME Code, Section III, Subsection NB requirement that certain components of the HI-STORM 100 Cask System be inspected by the ultrasonic method (UT) during fabrication. The affected casks are MPC-68 serial numbers 36 and 37 at Exelon's Dresden Nuclear Station and MPC-68 serial number 23 at Southern Nuclear Operating Company's Plant Hatch Independent Spent Fuel Storage Installation. The request was submitted in accordance with Section 3.3.2 of Appendix B to Certificate of Compliance No. 1014. Enclosed is the staff's request for additional information (RAI) for the continued review of your request.

Your full and complete response to the enclosed RAI is necessary for the staff to complete its review. Upon receipt of your RAI responses, we will perform an acceptance review to determine if sufficient information has been provided to allow completion of the review and inform you if the information provided is not complete. If you respond to the staff's RAI no later than February 25, 2003, and the staff finds the responses satisfactory, the staff will approve your request by early May 2003.

If you have any comments or questions concerning this request, you may contact me at (301) 415-1179. Please refer to Docket No. 72-1014 and TAC No. L23524 in future correspondence related to this request.

> Sincerely, /RA/ Christopher M. Regan, Project Manager Licensing Section Spent Fuel Project Office Office of Nuclear Material Safety and Safeguards

> > SFPO r/f BJorgenson, RIII

Docket No. 72-1014 TAC No. L23524 Enclosure: RAI on HI-STORM 100 ASME Code Alternative Distribution:

Docket	NRC File Center	PUBLIC	NMSS r/f				
WHodges	EWBrach	SO'Connor	CMiller				
LDoerflein, RI	BSpitzberg, RIV	WGloersen, RII					
C:\ADAMS\Cache\ML0300904230.wpd							

OFC	SFPO	SFPO		SFPO	
NAME	CRegan	EZiegler		JMonninger	
DATE	01/ 02 /03	01/08 /0	3	01/08 /03	

C = Cover E = Cover & Enclosure N = No copy OFFICIAL RECORD COPY

HI-STORM 100 CASK STORAGE SYSTEM DOCKET NO. 72-1014 TAC NO. L23524

REQUEST FOR ADDITIONAL INFORMATION

The following Request for Additional Information (RAI) has been identified by the U.S. Nuclear Regulatory Commission (NRC) staff, during its review of Holtec International's proposal for alternative to the requirements of the ASME Code for MPC-68 serial numbers 23, 36, and 37, specifically, relief from one of the provisions of the ASME Code, ultrasonic testing (UT) of plate material. The staff finds that most of the arguments advanced by Holtec International are valid. However, the staff needs additional analyses and information, not initially provided by Holtec International, in order to make a safety determination. Each RAI question describes information needed by the staff for it to complete its review of the request and to determine whether Holtec International has demonstrated compliance with regulatory requirements. The following questions are required for the staff to render a determination of compliance to 10 CFR 72.122.

RAI-1. Provide an analysis demonstrating the confinement/structural capability of the MPC closure ring to perform its intended function(s), assuming that the welds for which it is providing a redundant function were to fail (singly or in combination).

The first paragraph of the confinement discussion argues that the closure ring provides a redundant welded closure for the primary confinement boundary, but is not normally pressure retaining. The analysis must demonstrate that the MPC closure ring and welds would maintain confinement and meet Code stress allowables under normal, abnormal and accident conditions. Stating that the MPC closure ring does not normally perform this function is insufficient for demonstrating confinement/structural integrity under postulated conditions. Consideration of the effect(s) of postulated worst-case laminations upon the closure ring attachment welds should be included. For example, an analysis assuming two half thickness plates, simply stacked and otherwise unattached to each other except at the edge welds, may provide the bounding assumption.

RAI-2. How much area of the material from heat number 893771 has failed UT? The third paragraph of the confinement discussion mentions that 10,000 square inches of material from this heat have passed the Code required UT examination. Describe the nature of any defects discovered during examinations of other plates, lots, or heats of this material?

ROUTING AND TRANSMITTAL SLIP

NAME		INITIALS	DATE		
SFPO Secy					
CRegan					
EZiegler					
JMonninger					
Secretary (dispatch	1)				
ACTION: NOTE & RETURN: EDO/NMSS TICKET N DUE TO DIVISION: DUE TO NMSS: DUE TO EDO:	APPROVAL: PREPARE REF	PLY: C	OR YOUR INFO: COORDINATION:		
LETTER TO:	Mr. Brian Gutherman				
ROM: Christopher M. Regan, Project Manager, SFPO					
SUBJECT:	BJECT: HI-STORM 100, ASME Code Alternative				
**************************************	*************	*******	*******************************		
	۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰		***************************************		
SECRETARY:	Debra Damiano PH	ONE: 415-2385	5 5 ***********		