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BY OVERNIGHT MAIL

March 16, 2000

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Subject: USNRC Docket No. 71-9261; TAC No. L22085
HI-STAR 100 Transportation CoC 9261
License Amendment Request 9261-1, Supplement 5

References:
1. Holtec Project 5014
2. Holtec Letter to NRC dated November 24,1999, LAR 9261-1

Dear Sir:

As discussed during our conversation with the NRC project manager yesterday, enclosed please find two sketches of the TN-designed damaged fuel and thoria rod canisters for Dresden Unit 1. These sketches are proposed to be included in Chapter 1 of the HI-STAR 100 transportation Safety Analysis Report (SAR) in lieu of including all of the detailed fabrication drawings submitted for review last November in the SAR and the Certificate of Compliance (CoC). Also included are revised pages from the CoC that delete reference to these drawings as an integral part of the CoC.

If you have any questions or require additional information, please contact us.

Sincerely,

Brian Gutherman, P.E.
Licensing Manager

Approval:

K.P. Singh, Ph.D, P.E.
President and CEO

cc: Mr. Mark Delligatti, USNRC (w/attach.)
Ms. Marissa Bailey, USNRC (w/attach.)

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Dr. Stanley Turner	Holtec International, Florida Operations Center

FIGURE WITHHELD AS SENSITIVE
UNCLASSIFIED INFORMATION

FIGURE 1.2.11; TN DAMAGED FUEL CANISTER FOR DRESDEN UNIT-1

FIGURE WITHHELD AS SENSITIVE
UNCLASSIFIED INFORMATION

FIGURE 1.2.11A; TN THORIA ROD CANISTER FOR DRESDEN UNIT-1

Overpack

The HI-STAR 100 overpack is a multi-layer steel cylinder with a welded baseplate and bolted lid (closure plate). The inner shell of the overpack forms an internal cylindrical cavity for housing the MPC. The outer surface of the overpack inner shell is buttressed with intermediate steel shells for radiation shielding. The overpack closure plate incorporates a dual O-ring design to ensure its containment function. The containment system consists of the overpack inner shell, bottom plate, top flange, top closure plate, top closure inner O-ring seal, vent port plug and seal, and drain port plug and seal.

Impact Limiters

The HI-STAR 100 overpack is fitted with two impact limiters fabricated of aluminum honeycomb completely enclosed by an all-welded austenitic stainless steel skin. The two impact limiters are attached to the overpack with 20 and 16 bolts at the top and bottom, respectively.

(3) Drawings

The package shall be constructed and assembled in accordance with drawings listed below which are found in ~~Section 1.4 of Revision 8 of the Holtec HI-STAR Safety Analysis Report (SAR), Rev. 8~~) *Appendix B to this Certificate of Compliance.*

(a) Drawing *C*1395, Sheets 1- *4*, Revision *1* ~~0~~
~~Sheet 2-3, Revision 9~~
~~Sheet 4, Revision 8~~

(b) Drawing *C*1396, Sheets 1-*4, 6*, Revision *1* ~~2~~
Sheet *5* ~~s 2-3,~~ Revision ~~9~~ *0*
~~Sheets 4-5, Revision 8~~
~~Sheet 6, Revision 7~~

(c) Drawing *C*1397, Sheets 1-*4, 6, 7*, Revision *1* ~~4~~
Sheet *5* ~~s 2-3,~~ Revision ~~9~~ *0*
~~Sheets 4, Revision 11~~
~~Sheets 5-7, Revision 8~~

(d) Drawing *C*1398, Sheets 1-*3*, Revision *1* ~~2~~
~~Sheet 2, Revision 9~~
~~Sheet 3, Revision 8~~

(e) Drawing *C*1399, Sheets 1-*3*, Revision *1* ~~0~~
~~Sheet 2, Revision 8~~
~~Sheet 3, Revision 9~~

(f) Drawing *C*1401, Sheets 1-*4*, Revision *1* ~~1~~
~~Sheets 2 and 4, Revision 8~~
~~Sheet 3, Revision 9~~

(g) Drawing *C*1402, Sheets 1-*4, 6*, Revision *1* ~~3~~
Sheet *5* ~~s 2-3,~~ Revision ~~9~~ *0*
~~Sheets 4-5, Revision 9~~
~~Sheet 6, Revision 7~~

(h) Drawing *C*1765, Sheets 1-*6*, Revision *1* ~~2~~
Sheet *7* ~~s 2-3,~~ Revision ~~9~~ *0*
~~Sheet 3, Revision 5~~
~~Sheet 4, Revision 10~~
~~Sheets 5 and 7, Revision 4~~
~~Sheet 6, Revision 1~~

(i) Drawing *C*1782, Revision 1

(j) Drawing *C*1783, Revision 1

(k) Drawing *C*1784, Revision ~~0~~ *1*

(l) Drawing BM-*C*1476, Sheets 1 *& 2*, Revision *1* ~~2~~
~~Sheet 2, Revision 13~~

(m) Drawing BM-*C*1478, Sheets 1*& 2*, Revision *1* ~~9~~
~~Sheet 2, Revision 13~~

(n) Drawing BM-*C*1479, Sheets 1*& 2*, Revision *1* ~~0~~
~~Sheet 2, Revision 13~~

(o) Drawing BM-*C*1819, Revision 1

5.b. Contents of Packaging

(1) Type and Form, and Quantity of Material

(a) Fuel assemblies meeting the specifications and quantities provided in Appendix A to this Certificate of Compliance and meeting the requirements provided in items 5.b(1)(b) through 5.b(1)(g) below are authorized for transportation.

(b) The following definitions apply:

Damaged Fuel Assemblies are fuel assemblies with known or suspected cladding defects, as determined by review of records, greater than pinhole leaks or hairline cracks, missing fuel rods that are not replaced with dummy fuel rods, or those that cannot be handled by normal means. ~~A damaged fuel assembly's inability to~~ *Fuel assemblies which cannot* be handled by normal means ~~must be~~ due to ~~mechanical damage and must not be due to~~ fuel ~~rod~~ cladding damage *are considered fuel debris.*

Damaged Fuel Containers are specially designed fuel containers for damaged fuel assemblies or fuel debris which permit gaseous and liquid media to escape while minimizing dispersal of gross particulates. *DFCs authorized for use in the HI-STAR 100 System are the Holtec design or the Transnuclear Dresden Unit 1 design as shown on the applicable design drawings in the HI-STAR 100 Safety Analysis Report.*

Fuel Debris ~~refers to~~ *is* ruptured fuel rods, severed rods, ~~and~~ loose fuel pellets *or fuel assemblies* with known or suspected defects which cannot be handled by normal means due to fuel cladding damage.

Incore Grid Spacers are fuel assembly grid spacers located within the active fuel region (i.e., not including top and bottom spacers).

Intact Fuel Assemblies are fuel assemblies without known or suspected cladding defects greater than pinhole leaks or hairline cracks and which can be handled by normal means. Partial fuel assemblies, that is fuel assemblies from which fuel rods are missing, shall not be classified as intact fuel assemblies unless dummy fuel rods are used to displace an amount of water greater than or equal to that displaced by the original fuel rod(s).

Minimum Enrichment is the minimum assembly average enrichment. Natural uranium blankets are not considered in determining minimum enrichment.

Planar-Average Initial Enrichment is the ~~simple~~ average of the distributed fuel rod *initial* enrichments within a given axial plane of the assembly lattice.

(c) For MPCs partially loaded with stainless steel clad fuel assemblies, all remaining fuel assemblies in the MPC shall meet the more restrictive of the two limits for the stainless steel clad fuel assemblies

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(3) Drawings

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(a) Drawing C1395, Sheets 1-4, Revision 1

(b) Drawing C1396, Sheets 1-4, 6, Revision 1
Sheet 5, Revision 0

(c) Drawing C1397, Sheets 1-4, 6, 7, Revision 1
Sheet 5, Revision 0

(d) Drawing C1398, Sheets 1-3, Revision 1

(e) Drawing C1399, Sheets 1-3, Revision 1

(f) Drawing C1401, Sheets 1-4, Revision 1

(g) Drawing C1402, Sheets 1-4, 6, Revision 1
Sheet 5, Revision 0

(h) Drawing C1765, Sheets 1-6, Revision 1
Sheet 7, Revision 0

(i) Drawing C1782, Revision 1

(j) Drawing C1783, Revision 1

(k) Drawing C1784, Revision 1

(l) Drawing BM-C1476, Sheets 1 & 2, Revision 1

(m) Drawing BM-C1478, Sheets 1& 2, Revision 1

(n) Drawing BM-C1479, Sheets 1& 2, Revision 1

(o) Drawing BM-C1819, Revision 1

5.b. Contents of Packaging