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September 17, 2003

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

Subject: USNRC Docket No. 71-9261
HI-STAR 100 Certificate of Compliance 9261
HI-STAR 100 Safety Analysis Report, Revision 10
Replacement Pages

References: 1. Holtec Project 5014

Dear Sir:

Enclosed please find one replacement page and one insert page for the HI-STAR 100 System 10 CFR 71 Safety Analysis Report, Revision 10. The replacement page reflects the restoration of the previously approved HI-STAR overpack closure plate bolt torque in accordance with today's discussion with the SFPO. The insert page corrects a copying error from SAR Revision 9. Please take the following actions:

1. Remove SAR page 7.1-31/32 and replace with enclosed SAR page 7.1-31/32
2. In Appendix 1.D, "Comment Resolution Letters," insert enclosed page 3 of 4 from the 1/20/1999 letter from Holtec to the NRC between pages 2 of 4 and 4 of 4 of that letter. The letters are in chronological order in the appendix.

Please contact the undersigned if you require additional information.

Sincerely,

Brian Gutherman, P.E.
Manager, Licensing and Technical Services

Enclosures: As Stated

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NRC Document Control Desk (Cover letter with enclosures)

NMSS01

**Table 7.1.3
HI-STAR 100 SYSTEM TORQUE REQUIREMENTS**

Fastener	Torque (ft-lbs)	Pattern
Overpack Closure Plate Bolts ^{†, ††}	First Pass – Hand Tight Second Pass – Wrench Tight Third Pass – 860 +25/-25 Fourth Pass – 1725 +50/-50 Final Pass - 2895 +90/-90	Figure 7.1.30
Overpack Vent and Drain Port Cover Plate Bolts ^{††}	12+2/-0	X-pattern
Overpack Vent and Drain Port Plugs	45+5/-2	None
Closure Plate Test Port Plug	45+5/-2	None
Backfill Tool Test Cover Bolts ^{††}	16+2/-0	X-pattern
Shear Ring Segments	22+2/-0	None
Overpack Bottom Cover Bolts	200+20/-0	None
Pocket Trunnion Plugs	Hand Tight	None
Threaded Fuel Spacers	Hand Tight	None
MPC Lid Threaded Plugs	Hand Tight	None
Impact Limiter Alignment Pin	Hand Tight	None
Top Impact Limiter Attachment Bolt	256+10/-0	None
Bottom Impact Limiter Attachment Bolt	1500+45/-0	None
Buttress Plate Bolts	150 +10-0	None

† Detorquing shall be performed by turning the bolts counter-clockwise in 1/3 turn +/- 30 degrees increments per pass according to Figure 7.1.30 for three passes. The bolts may then be removed.

†† Bolts shall be cleaned and inspected for damage or excessive wear (replaced if necessary) and coated with a light layer of Fel-Pro Chemical Products, N-5000, Nuclear Grade Lubricant (or equivalent).

Table 7.1.4
HI-STAR 100 SYSTEM ANCILLARY EQUIPMENT OPERATIONAL DESCRIPTION

Equipment	Important To Safety Classification	Reference Figure	Description
Annulus Overpressure System (optional)	Not Important To Safety	7.1.17	The Annulus Overpressure System is used for supplemental protection against spent fuel pool water contamination of the external MPC shell and baseplate surfaces by providing a slight annulus overpressure. The Annulus Overpressure System consists of the quick disconnects water reservoir, reservoir valve and annulus connector hoses. User is responsible for supplying clean water to the location of the Annulus Overpressure System.
Annulus Shield (optional)	Not Important To Safety	7.1.13	A shield that is placed at the top of the annulus to provide supplemental shielding to the operators performing cask loading and closure operations.
Automated Welding System (optional)	Not Important To Safety	7.1.2b	Used for remote welding of the MPC lid, vent and drain port cover plates and the MPC closure ring. The AWS consists of the robot, wire feed system, torch system, weld power supply and gas lines.
AWS Baseplate Shield (optional)	Not Important To Safety	7.1.2b	The AWS baseplate shield provides supplemental shielding to the operators during the cask closure operations.
Backfill Tool	Not Important to Safety	7.1.28	Used to dry, backfill the HI-STAR 100 annulus and install the HI-STAR 100 overpack vent and drain port plugs. The backfill tool uses the same bolts as the HI-STAR 100 overpack vent and drain cover plates.
Closure Plate Test Tool	Not Important to Safety	7.1.29	Used to helium leakage test the HI-STAR 100 overpack Closure Plate inner mechanical seal.
Cool-Down System	Not Important To Safety	7.2.5	The Cool-Down System is a closed-loop forced ventilation cooling system used to gas-cool the MPC fuel assemblies down to a temperature water can be introduced without the risk of thermally shocking the fuel assemblies or flashing the water, causing uncontrolled pressure transients. The Cool-Down System is attached between the MPC drain and vent ports. The CDS consists of the piping, blower, heat exchanger, valves, instrumentation, and connectors. The CDS is used only for unloading operations.
Forced Helium Dehydration System	Not Important To Safety	7.1.25	Used for drying the MPC cavity. Consists of a circulating blower, heat exchangers, heater and associated piping and controls.

Table 7.1.4 (Continued)
HI-STAR 100 SYSTEM ANCILLARY EQUIPMENT OPERATIONAL DESCRIPTION

Mr. Mark Delligatti
U. S. Nuclear Regulatory Commission
January 20, 1999
Page 3 of 4

B.2.1 Provide additional information in the Safety Analysis report (SAR) to verify compliance with 10CFR71.45(a) and 10CFR71.45(b)(3) regarding the design of lifting attachments and tie-down devices under excessive loads.

Commitment

Additional information will be added to the SAR to demonstrate compliance with the cited regulations. Draft Revision 8 SAR pages will be submitted to the NRC by February 3, 1999.

B.2.1 Provide additional information in the SAR Section 2.5.2.7.3 to clarify the loading, boundary conditions, and stress distribution for the pocket trunnion recess (refer to drawing 1399, Sheet 3)

Commitment

Additional information will be added to the SAR to clarify the information as requested. Draft Revision 8 SAR pages will be submitted to the NRC by February 3, 1999.

If you have any questions or comments, please contact us.

Sincerely,

Bernard Gilligan
Project Manager, HI-STAR/HI-STORM Licensing

Document LD.: 5014253

- Attachments:
1. Holtec International Proprietary Position Paper DS-213, "Acceptable Flaw Size in MPC Lid-to-Shell Welds".
 2. Shielding Information Related to Commitments A.5.2, A.5.3, A.5.7, and A.5.8
 3. Affidavit Pursuant to 10CFR2.790