72-10/4



Holtec Center, 555 Lincoln Drive West, Marlton, NJ 08053

Telephone (609) 797-0900 Fax (609) 797-0909

April 14, 2000

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

Subject: NRC 10 CFR 72 Certificate of Compliance No. 1014, TAC L22221 License Amendment Request 1014-1

References: 1. Holtec Project No. 5014

- 2. Holtec Topical Safety Analysis Report No. HI-951312, Revision 10.
- 3. Holtec letter to NRC dated March 3, 2000

Dear Sir:

Holtec International hereby submits License Amendment Request (LAR) 1014-1, Revision 0, proposing certain amendments to 10 CFR 72 Certificate of Compliance (CoC) No. 1014 and its supporting Topical Safety Analysis Report for the HI-STORM 100 System. Information describing and justifying the changes requested by this LAR is contained in the attachments listed below. In preparing this amendment request package, we have intentionally included non-mandatory material, such as marked-up and final versions of the CoC, and proposed Topical Safety Analysis Report (TSAR) changes. This non-mandatory information adds to the overall bulk of the submittal, but should greatly facilitate the NRC staff's review effort.

- Attachment 1: Summary of Proposed Changes, including the descriptions, reasons, and justifications for the proposed changes.
- Attachment 2: Mark-ups of Proposed Changes to CoC Appendices A and B (strikeout/italic format).

Attachment 3: Proposed Revised CoC Appendices A and B (final form).

Attachment 4: New and Revised Holtec Design Drawings.

Attachment 5: Proposed Revision 11 Changes to the HI-STORM Topical Safety Analysis Report.

This LAR proposes changes to the Appendices to the CoC, the design drawings, and the TSAR which include 1) editorial corrections and clarifications, 2) revisions to limits for existing fuel array/classes 3) four new fuel array/classes, 4) four new fuel canisters, 5) four types of non-fuel

NMSSOIRHIC



Telephone (609) 797-0900 Fax (609) 797-0909

U. S. Nuclear Regulatory Commission ATTN: Document Control Desk Document ID: 5014372 Page 2 of 5

PWR hardware, 6) antimony-beryllium neutron sources, 7) enhanced MPC-24 and MPC-68 baskets (called MPC-24E and MPC-68FF, respectively), 8) the reintroduction of MPC-32, and 9) an alternative, slightly shorter HI-STORM 100 overpack design (labeled HI-STORM 100S).

Two of the new fuel canisters added are those in which Dresden Unit 1 fuel assemblies previously stored at West Valley are now stored in Dresden Units 2 and 3 spent fuel pools. These canisters have previously been reviewed by the NRC under HI-STAR 100 License Amendment Request 1008-1 submitted in November, 1999 (Docket 72-1008). The remaining two new fuel canisters are Holtec's new generic designs for storing a wide range of PWR and BWR damaged fuel. The MPC-24E and MPC-68FF are designed to accommodate the generic PWR and BWR damaged fuel canisters, respectively. Design drawings, as appropriate, are provided for the MPC-24E, MPC-32, and HI-STORM 100S. Revised MPC-68 drawings are provided for the MPC-68FF.

Drawing changes for the HI-STORM 100 overpack, MPC-32, MPC-24, MPC-68, HI-TRAC 100, and HI-TRAC 125 include changes (indicated by "Rev triangles" in the body of the design drawings and Bills-of-Material) that correct minor errors, internal consistencies, and ambiguities in the previous revisions which have been detected during the manufacturing process of first production unit (Serial No. 001) for Plant Hatch and an in-depth operational and fabricability review. The changes to the drawings accordingly seek to clarify inspection criteria, remove ambiguity in verbiage, provide explicit design direction to the manufacturer, eliminate internal inconsistencies, and replace unfabricable details with those that can be fabricated with reduced welding-induced distortion. In some cases, where experience has shown that a higher quality level can be achieved through well-calibrated fixturing, the recourse to inherently inferior palliatives (such as shims) has been removed to assure improved hardware quality. In all cases, the safety margins reported in the TSAR and in the NRC's Safety Evaluation Report continue to remain robust. A vast majority of these changes for the MPCs have already been reviewed by the NRC as part of HI-STAR License Amendment Request 1008-1.

All changes in the drawings and TSAR text material have been subjected to our rigorous multidisciplinary engineering change acceptance review process and appropriately documented in our quality files.

You will note that the proposed TSAR changes included in Attachment 5 indicate Revision 11. This is because the latest approved TSAR for HI-STORM is Revision 10. We understand that a *Final* Safety Analysis Report, Revision 0, is to be submitted by us within 90 days of the final approval (expected later this month) of the HI-STORM 100 System design by the NRC in



Holtec Center, 555 Lincoln Drive West, Marlton, NJ 08053

Telephone (609) 797-0900 Fax (609) 797-0909

U. S. Nuclear Regulatory Commission ATTN: Document Control Desk Document ID: 5014372 Page 3 of 5

accordance with 10 CFR 72.248. At the time this amendment request is approved, we will conform these proposed TSAR Revision 11 changes into Revision 1 of the FSAR, to be submitted in accordance with the applicable regulations.

We appreciate the SFPO's consideration of this amendment request which is tailored to fulfill the immediate needs of our existing customers. MPC-32, whose review was nearly completed before its deletion from the MPC lineup, is now a high priority item to serve TVA's Sequoyah plant. To ensure that TVA and other PWR clients of Holtec have no concern with respect to the transportability of MPC-32 (that they will load in the near future), we intend to submit an amendment request to include MPC-32 into the dual purpose HI-STAR 100 System shortly. We respectfully request a high priority review of this LAR to assist us in being responsive to our clients' needs.

Sincerely,

Brian Gutherman, P.E. Licensing Manager

Document I.D.: 5014372

Attachments: 1-5: As Stated Above

Approved:

D Cing 4

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

Cc: Ms. Virginia Tharpe, USNRC, (10 hard copies, w/attach and encl.; and floppy disk of cover letter and Attachments 1 through 3)
Dr. Stan Turner, Holtec Florida Operations Center (cover letter only)
Mr. E. W. Brach, USNRC (cover letter only)
Ms. S. Frant-Shankman, USNRC (cover letter only)
Mr. W. Hodges, USNRC (cover letter only)
Mr. R. Hall, USNRC (cover letter only)
Mr. M. McNamara, Holtec (cover letter only)
Mr. R. Kellar, Holtec (cover letter only)
Holtec Dry Storage Project Managers (cover letter only)
Mr. R. Moscardini, UST&D (cover letter only)
Mr. J. Singh, Omni Fabricators (cover letter only)



Holtec Center, 555 Lincoln Drive West, Marlton, NJ 08053

Telephone (609) 797-0900 Fax (609) 797-0909

U. S. Nuclear Regulatory Commission ATTN: Document Control Desk Document ID: 5014372 Page 4 of 5

## **Technical Concurrence:**

Mr. Bernard Gilligan (Configuration Control)

Dr. Alan Soler (Structural Evaluation)

Dr. Indresh Rampall (Thermal/Accident Evaluations)

Dr. Everett Redmond II (Shielding Evaluation)

Dr. Stefan Anton (Criticality Evaluation)

Mr. Kris Cummings (Confinement Evaluation)

Mr. Steve Agace (Operations)

Mr. Mark Soler (Quality Assurance)

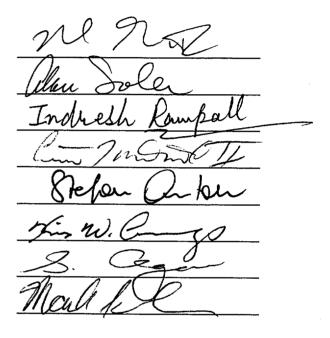
## Distribution (w/ attach. 1):

#### **Recipient**

## <u>Utility</u>

Mr. David Bland Mr. Ken Phy Mr. J. Nathan Leech Dr. Max DeLong Mr. Stan Miller Mr. Bruce Patton Mr. Bruce Patton Mr. Mark Smith Mr. Rodney Pickard Mr. David Larkin Mr. Eric Meils Mr. Paul Plante Mr. Jeff Ellis Mr. Darrell Williams Mr. Joe Andrescavage

Southern Nuclear Operating Company New York Power Authority Commonwealth Edison Private Fuel Storage Vermont Yankee Nuclear Power Corporation Pacific Gas & Electric – Diablo Canyon Pacific Gas & Electric – Diablo Canyon Pacific Gas & Electric – Humboldt Bay American Electric Power Energy Northwest Wisconsin Electric Power Company Maine Yankee Atomic Power Company Southern California Edison Entergy Operations – Arkansas Nuclear One GPUN – Oyster Creek Nuclear Power Station





Telephone (609) 797-0900 Fax (609) 797-0909

U. S. Nuclear Regulatory Commission ATTN: Document Control Desk Document ID: 5014372 Page 5 of 5

# Distribution (w/ attach. 1) (continued):

Mr. Ron Bowker **IES** Utilities Mr. William Swantz Nebraska Public Power District Mr. Chris Kudla Entergy Operations - Millstone Unit 1 Decommissioning Mr. Keith Waldrop Duke Power Mr. Matt Eyre PECO Energy Mr. Al Gould Florida Power & Light Dr. Seymour Raffety **Dairyland Power** Mr. John Sanchez **Consolidated Edison** Ms. Kathy Picciott Niagara Mohawk Mr. Charles Davis Tennessee Valley Authority - Sequoyah Nuclear Plant Mr. John Donnell Private Fuel Storage, LLC (SWEC)