

January 18, 2002

MEMORANDUM TO: Patricia K. Holahan, Chief
Rulemaking and Guidance Branch
Division of Industrial and Medical
Nuclear Safety, NMSS

FROM: E. William Brach, Director
Spent Fuel Project Office, NMSS

SUBJECT: RULEMAKING FOR THE HOLTEC HI-STORM 100,
AMENDMENT 1, TO ADD ADDITIONAL CONTENTS TO THE
PACKAGE

I am forwarding the proposed Certificate of Compliance (CoC) No. 1014, Amendment No. 1 and the preliminary Safety Evaluation Report (SER) for the Holtec HI-STORM 100 Cask System, for inclusion in the direct final rulemaking package for this cask. The proposed CoC, Technical Specifications and Approved Contents (appendices to the CoC), and preliminary SER have been placed in ADAMS (see reference below) and are available for your use in the rulemaking package. The Spent Fuel Project Office will designate these documents as Official Agency Records after the EDO approves publication of the direct final rulemaking.

The proposed changes to the CoC (including its appendices) are indicated by vertical lines on the margin of the CoC. The changes proposed for Amendment No. 1 will add and modify the following:

- Add four new multipurpose canisters (MPCs). The new MPCs include the MPC-24E, MPC-24EF, MPC-32 for pressurized water reactor (PWR) fuel and the MPC-68FF for boiling water reactor (BWR) fuel.
- Add new damaged fuel containers.
- Add the HI-STORM 100S overpack and the 100A and 100SA high-seismic anchored overpacks.
- Allow the storage of high-burnup fuel.
- The amendment also utilizes revised thermal analysis tools that include natural convection heat transfer, revises the helium backfill requirements to allow a helium density measurement to be used, allows a helium drying system rather than the existing vacuum drying system, and requires soluble boron during canister loading for certain higher enriched fuels.
- Deletes the technical specification training requirements.
- Allow the storage of selected non-fuel hardware.

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These changes will require the following changes to the CoC:

- Condition 1.a. and b. were modified to include descriptions of the modifications.
- Conditions 2 and 3 were modified to reference the Final Safety Analysis Report in lieu of the Safety Analysis Report.
- Condition 5 was modified to reflect new lifting requirements associated with the modifications.
- The requirements of the original Condition 9 were relocated to Condition 10.
- Condition 9 was added to relocate the pre-operational testing requirements from CoC Appendix A to the main body of the CoC.
- Section 3.0 and 5.0 of Appendix A were changed in their entirety to reflect the modifications.
- Sections 1.0, 2.0, and 3.0 of Appendix B were changed in their entirety to reflect the modifications.

Docket No.: 72-1014

ADAMS Reference: Accession No. ML013330457

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- Condition 1.a. and b. were modified to include descriptions of the modifications.
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- Condition 5 was modified to reflect new lifting requirements associated with the modifications.
- The requirements of the original Condition 9 were relocated to Condition 10.
- Condition 9 was added to relocate the pre-operational testing requirements from CoC Appendix A to the main body of the CoC.
- Section 3.0 and 5.0 of Appendix A were changed in their entirety to reflect the modifications.
- Sections 1.0, 2.0, and 3.0 of Appendix B were changed in their entirety to reflect the modifications.

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