

September 10, 2009

MEMORANDUM TO: R. W. Borchardt
Executive Director for Operations

FROM: Mark R. Shaffer, Director
Division of Intergovernmental Liaison
and Rulemaking **/RA M. Thaggard for/**
Office of Federal and State Materials and
Environmental Management Programs

SUBJECT: DIRECT FINAL RULE TO AMEND 10 CFR 72.214 LIST OF
APPROVED SPENT FUEL STORAGE CASKS (HI-STORM 100,
AMENDMENT 7)

Enclosed, for your signature, is a direct final rule, along with the companion proposed rule (Enclosures 1 and 2), amending U.S. Nuclear Regulatory Commission (NRC) regulations, by revising the cask system listing for the Holtec International (Holtec) HI-STORM 100 Certificate of Compliance (CoC) No. 1014 cask system. This amendment will allow holders of power-reactor operating licenses to load spent fuel into a cask meeting the revised conditions. Amendment No. 7 to the HI-STORM 100 CoC would add the HI-STORM 100U system to the HI-STORM 100 cask systems. The HI-STORM 100U allows for the underground storage of dry spent nuclear fuel (SNF) by utilizing an underground vertical ventilated module (VVM) that can accept certain Holtec multipurpose canisters previously certified for storage of SNF in the aboveground overpacks. The amendment also incorporates a mandatory radiation protection perimeter around the loaded VVMs. In addition, the amendment would reinstate the decay heat limits for damaged fuel and fuel debris in Appendix B, Technical Specification (TS) 2.4, for the aboveground system that had been inadvertently deleted from Amendments 5 and 6; incorporate separate TS Appendices A and B for the aboveground system (Apps. A and B) and for the HI-STORM 100U system (Apps. A-100U and B-100U); revise Appendix B, TS 3.4.5, to be consistent with the required system thermal boundary conditions, as submitted in the applicant's safety analysis report for a fire accident condition, and with Holtec's original (i.e., initial certificate application or Amendment 0) submittal and the NRC's original safety evaluation report; and revise and add certain definitions in Appendix A, TS 1.1, to include the VVM. The amendment would also incorporate minor editorial corrections in the TS for the aboveground system.

This amendment is considered to be noncontroversial because it only amends the CoC for a previously approved cask system. In addition, the amended HI-STORM 100 cask system, when used under the conditions specified in the CoC, the TS, and NRC regulations, will meet the requirements of Part 72; thus, adequate protection of public health and safety will continue to be

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ensured. The HI-STORM 100U provides the option of interim storage of SNF in a low-profile and more physically-hardened system. Therefore, we are using the direct final rule approach to simplify the process and to shorten the time before the rule becomes effective.

Notices: Enclosure 3 (“EDO Daily Note”) documents that the Executive Director for Operations (EDO) intends to sign the two *Federal Register* notices. Enclosure 4 (“Notice of Final Rule Signed by the EDO”) and Enclosure 5 (“Weekly Report to the Commission”) document that the EDO has signed the two *Federal Register* notices. The “Approved for Publication,” the Environmental Assessment, and the Congressional Review Act forms can be found in, respectively, Enclosures 6 through 8 of this paper. The appropriate Congressional committees will be notified.

Resources: No additional resources will be needed to implement the amendment to this rulemaking.

Coordination: The Offices of Administration and Nuclear Material Safety and Safeguards concur with this amendment. The Office of the General Counsel has no legal objection.

Enclosures:

1. FRN for Direct Final Rule
2. FRN for Proposed Rule
3. “EDO Daily Note”
4. “Notice of Final Rule Signed by the EDO”
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