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NUCLEAR REGULATORY COMMISSION

10 CFR Part 72

RIN 3150–AI24

[NRC–2008–0013]

List of Approved Spent Fuel Storage Casks: HI-STORM 100 Revision 5

AGENCY: Nuclear Regulatory Commission.

ACTION: Final rule.

SUMMARY: The Nuclear Regulatory Commission (NRC) is amending its regulations by revising the Holtec International HI-STORM 100 cask system listing within the ''List of approved spent fuel storage casks'' to include Amendment No. 5 to Certificate of Compliance (CoC) Number 1014. Amendment No. 5 includes deletion of the requirement to perform thermal validation tests on thermal systems; an increase in the design basis maximum decay heat loads, namely, to 34 kilowatts (kW) for uniform loading and 36.9 kW for regionalized loading, and introduction of a new decay heat regionalized scheme; an increase in the maximum fuel assembly weight for boiling water reactor fuel in the Multi-Purpose Canister (MPC)–68 from 700 to 730 pounds; an increase in the maximum fuel assembly weight of up to 1,720 pounds for assemblies not requiring spacers, otherwise 1,680 pounds; changes to the assembly characteristics of 16 × 16 pressurized water reactor fuel assemblies to be qualified for storage in the HI-STORM 100 cask system; a change in the fuel storage locations in the MPC–32 for fuel with axial power shaping rod assemblies and in the fuel storage locations in the MPC–24, MPC–24E, and the MPC–32 for fuel with control rod assemblies, rod cluster control assemblies, and control element assemblies; elimination of the restriction that fuel debris can only be loaded into the MPC–24EF, MPC–32F, MPC–68F, and MPC–68FF canisters; introduction of a requirement that all MPC confinement boundary components and any MPC components exposed to spent fuel pool water or the ambient environment be made of stainless steel or, for MPC internals, neutron absorber or aluminum; the addition of a threshold heat load below which operation of the Supplemental Cooling System would not be required and modification of the design criteria to simplify the system; minor editorial changes to include clarification of the description of anchored casks, correction of typographical/editorial errors, clarification of the definitions of loading operations, storage operations, transport operations, unloading operations, cask loading facility, and transfer cask in various locations throughout the CoC and Final Safety Analysis Report; and modification of the definition of non-fuel hardware to include the individual parts of the items defined as non-fuel hardware. This final rule allows the holders of power reactor operating licenses to store spent fuel in this approved cask as specified in the revised conditions under the NRC's general license provisions.

DATES: The final rule is effective on July 14, 2008.

ADDRESSES: Publicly available documents related to this rulemaking may be viewed electronically at *http://www.regulations.gov* [Docket ID NRC–2008–0013] and on the public computers located at the NRC's Public Document Room (PDR), Room O–1F21, One White Flint North, 11555 Rockville Pike, Rockville, MD. The PDR reproduction contractor will copy documents for a fee.

Publicly available documents created or received at the NRC are available electronically at the NRC's Electronic Reading Room at *http://www.nrc.gov/NRC/reading-rm/adams.html*. From this site, the public can gain entry into the NRC's Agencywide Document Access and Management System (ADAMS), which provides text and image files of NRC's public documents. If you do not have access to ADAMS or if there are any problems in accessing the documents located in ADAMS, contact the NRC PDR Reference staff at (800) 397–4209, (301) 415–4737, or by e-mail to *pdr.resource@nrc.gov*.

FOR FURTHER INFORMATION CONTACT: Jayne M. McCausland, Office of Federal and State Materials and Environmental Management Programs, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, telephone (301) 415–6219, e-mail *Jayne.McCausland@nrc.gov*.

SUPPLEMENTARY INFORMATION:

Background

Section 218(a) of the Nuclear Waste Policy Act of 1982 (NWPA), as amended, requires that ''[t]he Secretary [of the Department of Energy (DOE)] shall establish a demonstration program, in cooperation with the private sector, for the dry storage of spent nuclear fuel at civilian nuclear power reactor sites, with the objective of establishing one or more technologies that the [Nuclear Regulatory] Commission may, by rule, approve for use at the sites of civilian nuclear power reactors without, to the maximum extent practicable, the need for additional site-specific approvals by the Commission.'' Section 133 of the NWPA states, in part, that ''[t]he Commission shall, by rule, establish procedures for the licensing of any technology approved by the Commission under Section 218(a) for use at the site of any civilian nuclear power reactor.''

To implement this mandate, the NRC approved dry storage of spent nuclear fuel in NRC-approved casks under a general license by publishing a final rule in 10 CFR Part 72 entitled ''General License for Storage of Spent Fuel at Power Reactor Sites'' (55 FR 29181; July 18, 1990). This rule also established a new Subpart L within 10 CFR Part 72, entitled ''Approval of Spent Fuel Storage Casks,'' containing procedures and criteria for obtaining NRC approval of spent fuel storage cask designs. The NRC subsequently issued a final rule on May 1, 2000 (65 FR 25241), that approved the HI-STORM 100 cask system design, and added it to the list of NRC-approved cask designs in 10 CFR 72.214 as Certificate of Compliance Number (CoC No.) 1014.

Discussion

On December 30, 2004, the certificate holder, Holtec International (Holtec) submitted an application to the NRC that requested an amendment to CoC

No. 1014. The amendment principally included changes to increase the design basis maximum decay heat loads of the HI-STORM 100 cask system and add a new underground storage configuration, designated the HI-STORM 100U, to the CoC. On November 29, 2006, Holtec withdrew the portion of the application that added the HI-STORM 100U to the CoC. The application, as modified by the December 22, 2006, Revision 2, submittal, and as supplemented on March 20, 2007, March 30, 2007, May 4, 2007, May 22, 2007, June 15, 2007, July 17, 2007, and September 6, 2007, requested changes to the CoC, the Technical Specifications (TS), and the Final Safety Analysis Report (FSAR), to modify the HI-STORM 100 cask system. Specifically, the proposed changes included deletion of the requirement to perform thermal validation tests on thermal systems; an increase in the design basis maximum decay heat loads, namely, to 34 kW for uniform loading and 36.9 kW for regionalized loading, and introduction of a new decay heat regionalized scheme; increase in the maximum fuel assembly weight for boiling water reactor fuel in the MPC–68 from 700 to 730 pounds; an increase in the maximum fuel assembly weight of up to 1,720 pounds for assemblies not requiring spacers, otherwise 1,680 pounds; changes to the assembly characteristics of 16x16 pressurized water reactor (PWR) fuel assemblies to be qualified for storage in the HI-STORM 100 cask system; a change in the fuel storage locations in the MPC–32 for fuel with axial power shaping rod assemblies (APSRAs) and in the fuel storage locations in the MPC–24, MPC–24E, and the MPC–32 for fuel with control rod assemblies (CRAs), rod cluster control assemblies (RCCAs), and control element assemblies (CEAs); elimination of the restriction that fuel debris can only be loaded into the MPC–24EF, MPC–32F, MPC–68F, and MPC–68FF canisters; introduction of a requirement that all MPC confinement boundary components and any MPC components exposed to spent fuel pool water or the ambient environment be made of stainless steel or, for MPC internals, neutron absorber or aluminum; the addition of a threshold heat load below which operation of the Supplemental Cooling System (SCS) would not be required and modification of the design criteria to simplify the system; minor editorial changes to include clarification of the description of anchored casks, correction of typographical/editorial errors, clarification of the definitions of loading operations, storage operations, transport operations, unloading operations, cask loading facility, and transfer cask in various locations throughout the CoC and the FSAR; and modification of the definition of non-fuel hardware to include the individual parts of the items defined as non-fuel hardware.

No other changes to the HI-STORM 100 cask system were requested in this application. The NRC staff performed a detailed safety evaluation of the proposed CoC amendment request and found that an acceptable safety margin is maintained. In addition, the NRC staff has determined that there continues to be reasonable assurance that public health and safety and the environment will be adequately protected.

The NRC published a direct final rule (72 FR 74162; December 31, 2007) and the companion proposed rule (72 FR 74209; December 31, 2007) to amend the HI-STORM 100 cask system listing in 10 CFR 72.214 to include the changes requested by Holtec as Amendment No. 5 to CoC No. 1014. The comment period ended on January 30, 2008. One comment letter was received on the proposed rule. The comment contained within the letter was considered to be significant and adverse and warranted withdrawal of the direct final rule. A notice of withdrawal was published in the **Federal Register** on March 12, 2008 (73 FR 13071). Additionally, the NRC staff is amending the CoC to remove the word ''approximate'' from the weight designation of a loaded transfer cask, as discussed in the Summary of Public Comments on the Proposed Rule Section of this document. No changes were made in the TS or the safety evaluation report (SER) as a result of the comment.

The NRC finds that the Holtec HI-STORM cask system, as designed and when fabricated and used under the conditions specified in its CoC, meets the requirements of 10 CFR Part 72. Thus, use of the Holtec HI-STORM cask system, as approved by the NRC, will provide adequate protection of public health and safety and the environment. With this final rule, the NRC is approving the use of the Holtec HI-STORM 100 cask system under the general license in 10 CFR Part 72, Subpart K, by holders of power reactor operating licenses under 10 CFR Part 50. Simultaneously, the NRC is issuing a final SER and CoC that will be effective on July 14, 2008. Single copies of the CoC and SER are available for public inspection and/or copying for a fee at the NRC Public Document Room, O–1F21, One White Flint North, 11555 Rockville Pike, Rockville, MD.

Discussion of Amendments by Section

Section 72.214 List of Approved Spent Fuel Storage Casks

Certificate No. 1014 is revised by adding the effective date of Amendment Number 5.

Summary of Public Comments on the Proposed Rule

The NRC received one comment letter on the proposed rule. Copies of the public comment letter are available for review in the NRC's Public Document Room, O–1F21, One White Flint North, 11555 Rockville Pike, Rockville, MD, and on *http://www.regulations.gov*. A review of the comment and the NRC staff's response follows:

Comment: The commenter questioned the use of the word ''approximate'' in relation to the maximum weight of a loaded transfer cask, stating that the actual weight of the transfer cask can be somewhat higher than 100 or 125 tons and still comply with the CoC. The commenter further noted that exceeding these maximum weight values would place the cask into an unanalyzed condition, thus raising a safety issue. The commenter stated that the NRC ''needs to specify a numerical range which would be considered 'approximate' in order for the cask user to make a determination of compliance with the CoC and when NRC approval would be required for the heavier transfer cask.'' The commenter recommended deletion of the word ''approximate.''

Response: The NRC staff agrees with the comment and has removed the word ''approximate'' from Section 1.b of the CoC. No changes are made to the SER or TS as a result of the comment.

In addition, two minor typographical errors identified by Holtec in Appendix A of the CoC, i.e., Table 3–1 and TS 3.1.2, have been corrected.

Summary of Final Revisions

Section 1.b. of the CoC has been revised to remove the word ''approximate'' from the description of the weight designation of a loaded transfer cask during any loading, unloading, or transfer operation. In addition, two typographical errors have been corrected in Appendix A, Table 3–1 and TS 3.1.2. No changes to the SER are required as a result of these changes.

Voluntary Consensus Standards

The National Technology Transfer and Advancement Act of 1995 (Pub. L. 104–113) requires that Federal agencies use technical standards that are developed or adopted by voluntary consensus standards bodies unless the

use of such a standard is inconsistent with applicable law or otherwise impractical. In this final rule, the NRC is revising the HI-ndash;STORM 100 cask system design listed in 10 CFR 72.214 (List of NRC-approved spent fuel storage cask designs). This action does not constitute the establishment of a standard that contains generally applicable requirements.

Agreement State Compatibility

Under the ''Policy Statement on Adequacy and Compatibility of Agreement State Programs'' approved by the Commission on June 30, 1997, and published in the **Federal Register** on September 3, 1997 (62 FR 46517), this rule is classified as Compatibility Category ''NRC.'' Compatibility is not required for Category ''NRC'' regulations. The NRC program elements in this category are those that relate directly to areas of regulation reserved to the NRC by the Atomic Energy Act of 1954 (AEA), as amended, or the provisions of Title 10 of the Code of Federal Regulations. Although an Agreement State may not adopt program elements reserved to NRC, it may wish to inform its licensees of certain requirements via a mechanism that is consistent with the particular State's administrative procedure laws but does not confer regulatory authority on the State.

Finding of No Significant Environmental Impact: Availability

Under the National Environmental Policy Act of 1969, as amended, and the NRC regulations in Subpart A of 10 CFR Part 51, the NRC has determined that this rule, if adopted, would not be a major Federal action significantly affecting the quality of the human environment and, therefore, an environmental impact statement is not required. This final rule amends the CoC for the HI-STORM 100 cask system within the list of approved spent fuel storage casks that power-reactor licensees can use to store spent fuel at reactor sites under a general license. Amendment No. 5 modifies the present cask system design by the deletion of the requirement to perform thermal validation tests on thermal systems; an increase in the design basis maximum decay heat loads, namely, to 34 kW for uniform loading and 36.9 kW for regionalized loading, and introduction of a new decay heat regionalized scheme; an increase in the maximum fuel assembly weight for boiling water reactor fuel in the MPC–68 from 700 to 730 pounds; an increase in the maximum fuel assembly weight of up to 1,720 pounds for assemblies not requiring spacers, otherwise 1,680 pounds; changes in the assembly characteristics of 16x16 pressurized water reactor fuel assemblies to be qualified for storage in the HI-STORM 100 cask system; a change in the fuel storage locations in the MPC–32 for fuel with APSRAs and the fuel storage locations in the MPC–24, MPC–24E, and the MPC–32 for fuel with CRAs, RCCAs, and CEAs; elimination of the restriction that fuel debris can only be loaded into the MPC–24EF, MPC–32F, MPC–68F, and MPC–68FF canisters; introduction of a requirement that all MPC confinement boundary components and any MPC components exposed to spent fuel pool water or the ambient environment be made of stainless steel or, for MPC internals, neutron absorber or aluminum; the addition of a threshold heat load below which operation of the SCS would not be required and modification of the design criteria to simplify the system; minor editorial changes to include clarification of the description of anchored casks, correction of typographical/editorial errors, clarification of the definitions of loading operations, storage operations, transport operations, unloading operations, cask loading facility, and transfer cask in various locations throughout the CoC and FSAR; and modification of the definition of non-fuel hardware to include the individual parts of the items defined as non-fuel hardware. In addition, in CoC Section 1.b., the word ''approximate'' is removed from the description of the weight designation of a loaded spent fuel storage cask during any loading, unloading, or transfer operation.

The Environmental Assessment (EA) and finding of no significant impact on which this determination is based are available for inspection at the NRC Public Document Room, O–1F21, One White Flint North, 11555 Rockville Pike, Rockville, MD. Single copies of the EA and finding of no significant impact are available from Jayne M. McCausland, Office of Federal and State Materials and Environmental Management Programs, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, telephone (301) 415–6219, e-mail *Jayne.McCausland@nrc.gov*.

Paperwork Reduction Act Statement

This final rule does not contain a new or amended information collection requirement subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). Existing requirements were approved by the Office of Management and Budget, Approval Number 3150–0132.

Public Protection Notification

The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid OMB control number.

Regulatory Analysis

On July 18, 1990 (55 FR 29181), the NRC issued an amendment to 10 CFR Part 72 to provide for the storage of spent nuclear fuel under a general license in cask designs approved by the NRC. Any nuclear power reactor licensee can use NRC-approved cask designs to store spent nuclear fuel if it notifies the NRC in advance, spent fuel is stored under the conditions specified in the cask's CoC, and the conditions of the general license are met. A list of NRC-approved cask designs is contained in 10 CFR 72.214. On May 1, 2000 (65 FR 25241), the NRC issued an amendment to Part 72 that approved the HI-STORM 100 cask design by adding it to the list of NRC-approved cask designs in 10 CFR 72.214. On December 30, 2004, the certificate holder, Holtec, submitted an application to the NRC that requested an amendment to CoC No. 1014. The amendment principally included changes to increase the design basis maximum decay heat loads of the HI-STORM 100 cask system and add a new underground storage configuration, designated the HI-STORM 100U, to the CoC. On November 29, 2006, Holtec withdrew the portion of the application that would have added the HI-STORM 100U to the CoC. The application, as modified on December 22, 2006 (Revision 2), and as supplemented on March 20, 2007, March 30, 2007, May 4, 2007, May 22, 2007, June 15, 2007, July 17, 2007, and September 6, 2007, requested changes to the CoC, the TS, and the FSAR to modify the HI-STORM 100 cask system.

Specifically, the proposed changes included deletion of the requirement to perform thermal validation tests on thermal systems; an increase in the design basis maximum decay heat loads, namely, to 34 kW for uniform loading and 36.9 kW for regionalized loading, and introduction of a new decay heat regionalized scheme; increase in the maximum fuel assembly weight for boiling-water reactor fuel in the MPC–68 from 700 to 730 pounds; an increase in the maximum fuel assembly weight of up to 1,720 pounds for assemblies not requiring spacers, otherwise 1,680 pounds; changes to the assembly characteristics of 16x16 pressurized water reactor fuel assemblies to be

qualified for storage in the HI-STORM 100 cask system; a change in the fuel storage locations in the MPC–32 for fuel with APSRAs and in the fuel storage locations in the MPC–24, MPC–24E, and the MPC–32 for fuel with CRAs, RCCAs, and CEAs; elimination of the restriction that fuel debris can only be loaded into the MPC–24EF, MPC–32F, MPC–68F, and MPC–68FF canisters; introduction of a requirement that all MPC confinement boundary components and any MPC components exposed to spent fuel pool water or the ambient environment be made of stainless steel or, for MPC internals, neutron absorber or aluminum; the addition of a threshold heat load below which operation of the SCS would not be required and modification of the design criteria to simplify the system; minor editorial changes to include clarification of the description of anchored casks, correction of typographical/editorial errors, clarification of the definitions of loading operations, storage operations, transport operations, unloading operations, cask loading facility, and transfer cask in various locations throughout the CoC and the FSAR; and modification of the definition of non-fuel hardware to include the individual parts of the items defined as non-fuel hardware. The alternative to this action is to withhold approval of this amended cask system design. Withholding approval, in the absence of any safety reason for doing so, would not comply with the requirements of sections 218(a) and 133 of the Nuclear Waste Policy Act.

Approval of the final rule is consistent with previous NRC actions. Further, the final rule will have no adverse effect on public health and safety. This final rule has no significant identifiable impact or benefit on other Government agencies. Based on this discussion of the benefits and impacts of the alternatives, the NRC concludes that the requirements of the final rule are commensurate with the NRC's responsibilities for public health and safety and the common defense and security. No other available alternative is believed to be as satisfactory, and thus, this action is recommended.

Regulatory Flexibility Certification

Under the Regulatory Flexibility Act of 1980 (5 U.S.C. 605(b)), the NRC certifies that this rule will not, if issued, have a significant economic impact on a substantial number of small entities. This final rule affects only the licensing and operation of nuclear power plants, independent spent fuel storage facilities, and Holtec. The companies that own these plants do not fall within the scope of the definition of ''small entities'' set forth in the Regulatory Flexibility Act or the Small Business Size Standards set out in regulations issued by the Small Business Administration at 13 CFR Part 121.

Backfit Analysis

The NRC has determined that the backfit rule (10 CFR 50.109 or 10 CFR 72.62) does not apply to this final rule because this amendment does not involve any provisions that would impose backfits as defined. Therefore, a backfit analysis is not required.

Congressional Review Act

Under the Congressional Review Act of 1996, the NRC has determined that this action is not a major rule and has verified this determination with the Office of Information and Regulatory Affairs, Office of Management and Budget.

List of Subjects in 10 CFR Part 72

Administrative practice and procedure, Criminal penalties, Manpower training programs, Nuclear materials, Occupational safety and health, Penalties, Radiation protection, Reporting and recordkeeping requirements, Security measures, Spent fuel, Whistleblowing.

■ For the reasons set out in the preamble and under the authority of the Atomic Energy Act of 1954, as amended; the Energy Reorganization Act of 1974, as amended; and 5 U.S.C. 552 and 553; the NRC is adopting the following amendments to 10 CFR part 72.

PART 72—LICENSING REQUIREMENTS FOR THE INDEPENDENT STORAGE OF SPENT NUCLEAR FUEL, HIGH-LEVEL RADIOACTIVE WASTE, AND REACTOR-RELATED GREATER THAN CLASS C WASTE

■ 1. The authority citation for part 72 continues to read as follows:

Authority: Secs. 51, 53, 57, 62, 63, 65, 69, 81, 161, 182, 183, 184, 186, 187, 189, 68 Stat. 929, 930, 932, 933, 934, 935, 948, 953, 954, 955, as amended, sec. 234, 83 Stat. 444, as amended (42 U.S.C. 2071, 2073, 2077, 2092, 2093, 2095, 2099, 2111, 2201, 2232, 2233, 2234, 2236, 2237, 2238, 2282); sec. 274, Pub. L. 86–373, 73 Stat. 688, as amended (42 U.S.C. 2021); sec. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846); Pub. L. 95–601, sec. 10, 92 Stat. 2951 as amended by Pub. L. 102–486, sec. 7902, 106 Stat. 3123 (42 U.S.C. 5851); sec. 102, Pub. L. 91–190, 83 Stat. 853 (42 U.S.C. 4332); secs. 131, 132, 133, 135, 137, 141, Pub. L. 97–425, 96 Stat. 2229, 2230, 2232, 2241, sec. 148, Pub. L. 100–203, 101 Stat. 1330–235 (42 U.S.C. 10151, 10152, 10153, 10155, 10157, 10161, 10168); sec. 1704, 112 Stat. 2750 (44 U.S.C. 3504 note); sec. 651(e), Pub. L. 109–58, 119 Stat. 806–10 (42 U.S.C. 2014, 2021, 2021b, 2111).

Section 72.44(g) also issued under secs. 142(b) and 148(c), (d), Pub. L. 100–203, 101 Stat. 1330–232, 1330–236 (42 U.S.C. 10162(b), 10168(c), (d)). Section 72.46 also issued under sec. 189, 68 Stat. 955 (42 U.S.C. 2239); sec. 134, Pub. L. 97–425, 96 Stat. 2230 (42 U.S.C. 10154). Section 72.96(d) also issued under sec. 145(g), Pub. L. 100–203, 101 Stat. 1330–235 (42 U.S.C. 10165(g)). Subpart J also issued under secs. 2(2), 2(15), 2(19), 117(a), 141(h), Pub. L. 97–425, 96 Stat. 2202, 2203, 2204, 2222, 2224 (42 U.S.C. 10101, 10137(a), 10161(h)). Subparts K and L are also issued under sec. 133, 98 Stat. 2230 (42 U.S.C. 10153) and sec. 218(a), 96 Stat. 2252 (42 U.S.C. 10198).

■ 2. In § 72.214, Certificate of Compliance 1014 is revised to read as follows:

§ 72.214 List of approved spent fuel storage casks.

* * * * *

Certificate Number: 1014.
Initial Certificate Effective Date: June 1, 2000.
Amendment Number 1 Effective Date: July 15, 2002.
Amendment Number 2 Effective Date: June 7, 2005.
Amendment Number 3 Effective Date: May 29, 2007.
Amendment Number 4 Effective Date: January 8, 2008.
Amendment Number 5 Effective Date: July 14, 2008.
SAR Submitted by: Holtec International.
SAR Title: Final Safety Analysis Report for the HI-STORM 100 Cask System.
Docket Number: 72–1014.
Certificate Expiration Date: June 1, 2020.
Model Number: HI-STORM 100.

* * * * *

Dated at Rockville, Maryland, this 22nd day of May, 2008.

For the Nuclear Regulatory Commission.

R.W. Borchardt,

Executive Director for Operations.

[FR Doc. E8–13190 Filed 6–11–08; 8:45 am]

BILLING CODE 7590–01–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 71

[Docket No. FAA–2008–0072; Airspace Docket No. 08–ASO–03]

Establishment of Class E Airspace; Lady Lake, FL

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Direct final rule, request for comments; withdrawal.