

NUCLEAR REGULATORY COMMISSION

10 CFR Part 72

RIN: 3150-AG31

List of Approved Spent Fuel Storage Casks: Holtec HI-STORM 100 Addition

AGENCY: Nuclear Regulatory Commission.

ACTION: Proposed rule.

SUMMARY: The Nuclear Regulatory Commission (NRC) is proposing to amend its regulations to add the Holtec International HI-STORM 100 cask system to the list of approved spent fuel storage casks. This amendment will allow the holders of power reactor operating licenses to store spent fuel in the Holtec HI-STORM 100 cask system under a general license.

DATES: The comment period expires (insert 75 days from date of publication). Comments received after this date will be considered if it is practical to do so, but the NRC is able to assure consideration only for comments received on or before this date.

ADDRESSES: Comments may be sent to: Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attn: Rulemakings and Adjudications Staff. Hand deliver comments to 11555 Rockville Pike, Rockville, MD, between 7:30 a.m. and 4:15 p.m. on Federal workdays.

You may also provide comments via the NRC's interactive rulemaking website (<http://ruleforum.llnl.gov>). This site provides the availability to upload comments as files (any format) if your web browser supports that function. For information about the interactive rulemaking site, contact Ms. Carol Gallagher (301) 415-5905; e-mail CAG@nrc.gov.

Certain documents related to this rulemaking, including comments received by the NRC, may be examined at the NRC Public Document Room, 2120 L Street NW. (Lower Level), Washington, DC. These documents also may be viewed and downloaded electronically via the interactive rulemaking website established by NRC for this rulemaking.

FOR FURTHER INFORMATION CONTACT: Merri Horn, telephone (301) 415-8126, e-mail mlh1@nrc.gov of the Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

SUPPLEMENTARY INFORMATION:

Background

Section 218(a) of the Nuclear Waste Policy Act of 1982, as amended (NWPA), requires that "[t]he Secretary [of Energy] shall establish a demonstration program for the dry storage of spent nuclear fuel at civilian power reactor sites, with the objective of establishing one or more technologies 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, "[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 Commission approved dry storage of spent nuclear fuel in NRC-approved casks under a general license, publishing on July 18, 1990, a final rule in 10 CFR Part 72 entitled “General License for Storage of Spent Fuel at Power Reactor Sites” (55 FR 29181). 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 dry storage cask designs.

Discussion

This proposed rule would add the Holtec HI-STORM 100 cask system to the list of NRC-approved casks for spent fuel storage in 10 CFR 72.214. Following the procedures specified in 10 CFR 72.230 of Subpart L, Holtec submitted an application for NRC approval with the Safety Analysis Report (SAR): “Topical Safety Analysis Report for the HI-STORM 100 Cask System.” The NRC evaluated the Holtec submittal and issued a preliminary Safety Evaluation Report (SER) on the Holtec SAR and proposed Certificate of Compliance (CoC) for the Holtec HI-STORM 100 cask system on September 10, 1999.

The NRC is proposing to approve the Holtec HI-STORM 100 cask system for storage of spent fuel under the conditions specified in the proposed CoC. This cask system, when used in accordance with the conditions specified in the CoC and NRC regulations, will meet the requirements of 10 CFR Part 72; thus, adequate protection of the public health and safety would be ensured. This cask system is being proposed for listing under 10 CFR 72.214, “List of approved spent fuel storage casks,” to allow holders of power reactor operating licenses to

store spent fuel in this cask system under a general license. The CoC would terminate 20 years after the effective date of the final rule listing this cask in 10 CFR 72.214, unless the cask system's CoC is renewed. The certificate contains conditions for use which are specific for this cask system and addresses issues such as operating procedures, training, and spent fuel specification.

The proposed CoC for the Holtec HI-STORM 100 cask system and the underlying preliminary SER, dated September 10, 1999, are available for inspection and comment at the NRC Public Document Room, 2120 L Street, NW. (Lower Level), Washington, DC. Single copies of the proposed CoC and preliminary SER may be obtained from Merri Horn, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone (301) 415-8126, email mlh1@nrc.gov.

Discussion of Proposed Amendments by Section

§ 72.214 List of approved spent fuel storage casks.

Certificate Number 1014 would be added indicating that:

(1) The title of the SAR is "Final Safety Analysis Report for the HI-STORM 100 Cask System";

(2) The Docket Number is 72-1014;

(3) The certificate expiration date would be 20 years after final rule effective date; and

- (3) The certificate expiration date would be 20 years after final rule effective date; and
- (4) The model number affected is HI-STORM 100.

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, as amended (AEA), or the provisions of the 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.

Plain Language

The Presidential Memorandum dated June 1, 1998, entitled "Plain Language in Government Writing," directed that the Government's writing be in plain language. The NRC requests comments on this proposed rule specifically with respect to the clarity and effectiveness of the language used. Comments should be sent to the address listed under the heading "ADDRESSES" above.

Voluntary Consensus Standards

The National Technology Transfer 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 proposed rule, the NRC would add the Holtec HI-STORM 100 cask system to the list of NRC approved casks for spent fuel storage in 10 CFR 72.214. This action does not constitute the establishment of a standard that establishes generally-applicable requirements.

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. The rule is mainly administrative in nature. It would not have significant environmental impacts. The proposed rule would add the Holtec HI-STORM 100 cask system to the list of approved spent fuel storage casks that power reactor licensees can use to store spent fuel at reactor sites without additional site-specific approvals by the NRC. The environmental assessment and finding of no significant impact on which this determination is based are available for inspection at the NRC Public Document Room, 2120 L Street NW. (Lower Level), Washington, DC. Single copies of the environmental assessment and finding of no significant impact are available from

Merri Horn, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone (301) 415-8126, email mlh1@nrc.gov.

Paperwork Reduction Act Statement

This proposed 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

If a means to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

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. Any nuclear power reactor licensee can use NRC-certified casks 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. In that rule, four spent fuel storage casks were approved for use at reactor sites and were listed in 10 CFR 72.214. That rule envisioned that

storage casks certified in the future could be added to the listing in 10 CFR 72.214 through rulemaking procedures. Procedures and criteria for obtaining NRC approval of new spent fuel storage cask designs were provided in 10 CFR Part 72, Subpart L. Subsequently, additional casks have been added to the listing in 10 CFR 72.214.

The alternative to this proposed action is not to certify these new designs and give a site-specific license to each utility that proposes to use the casks. This would cost both the NRC and the utilities more time and money in that each utility would have to pursue a new site-specific license. Using site-specific licenses would ignore the procedures and criteria currently in place for the addition of new cask designs and would be in conflict with the NWPA direction to the Commission to approve technologies for the use of spent fuel storage at the sites of civilian nuclear power reactors without, to the extent practicable, the need for additional site reviews. Also, this alternative is anticompetitive because it would exclude new vendors without cause and would arbitrarily limit the choice of cask designs available to power reactor licensees. Approval of the proposed rule would eliminate the above problems and is consistent with previous Commission actions. Further, the proposed rule will have no adverse effect on public health and safety.

The benefit of this proposed rule to nuclear power reactor licensees is to make available a greater choice of spent fuel storage cask designs that can be used under a general license. The new cask vendors with casks to be listed in 10 CFR 72.214 benefit by having to obtain NRC certificates only once for a design that can then be used by more than one power reactor licensee. The NRC also benefits because it will need to certify a cask design only once for use by multiple licensees. Casks approved through rulemaking are to be suitable for use under a range of environmental conditions sufficiently broad to encompass multiple nuclear power plant sites in the United States without the need for further site-specific approval by NRC. Vendors

with cask designs already listed may be adversely impacted because power reactor licensees may choose a newly listed design over an existing one. However, the NRC is required by its regulations and the NWPA direction to certify and list approved casks. This proposed rule would have no significant identifiable impact or benefit on other Government agencies.

Based on the above discussion of the benefits and impacts of the alternatives, the NRC concludes that the requirements of the proposed 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

In accordance with the Regulatory Flexibility Act of 1980 (5 U.S.C. 605(b)), the NRC certifies that this rule will not, if promulgated, have a significant economic impact on a substantial number of small entities. This proposed rule affects only the licensing and operation of nuclear power plants, independent spent fuel storage facilities, and cask vendors. 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 proposed rule because this amendment does not involve any provisions that

would impose backfits as defined in the backfit rule. Therefore, a backfit analysis is not required.

List of Subjects In 10 CFR Part 72

Criminal penalties, Manpower training programs, Nuclear materials, Occupational safety and health, Reporting and recordkeeping requirements, Security measures, Spent fuel.

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. 553; the NRC is proposing to adopt the following amendments to 10 CFR Part 72.

PART 72--LICENSING REQUIREMENTS FOR THE INDEPENDENT STORAGE OF SPENT NUCLEAR FUEL AND HIGH-LEVEL RADIOACTIVE 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. 10d - 48b, sec. 7902, 10b Stat. 31b3 (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).

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, 2244, (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 Section 72.214, Certificate of Compliance 1014 is added to read as follows:

§ 72.214 List of approved spent fuel storage casks.

* * * * *

Certificate Number: 1014

SAR Submitted by: Holtec International

SAR Title: Final Safety Analysis Report for the HI-STORM 100 Cask System

Docket Number: 72-1014

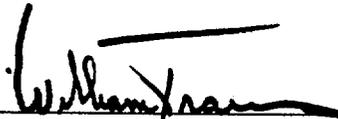
Certification Expiration Date: [insert 20 years after the effective date of the final rule]

Model Number: HI-STORM 100

* * * * *

Dated at Rockville, Maryland, this 10th day of Sept., 1999.

For the Nuclear Regulatory Commission.



William D. Travers,
Executive Director for Operations.