

NUCLEAR REGULATORY COMMISSION

10 CFR Part 72

[NRC-2018-0212]

RIN 3150-AK16

**List of Approved Spent Fuel Storage Casks: TN Americas LLC, Standardized
NUHOMS® System, Certificate of Compliance
No. 1004, Renewed Amendment No. 15**

AGENCY: Nuclear Regulatory Commission.

ACTION: Proposed rule.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is proposing to amend its spent fuel storage regulations by revising the TN Americas LLC Standardized NUHOMS® Horizontal Modular Storage System (NUHOMS® System) listing within the “List of approved spent fuel storage casks” to include Renewed Amendment No. 15 to Certificate of Compliance No. 1004. Because this amendment is subsequent to the renewal of the TN Americas LLC Standardized NUHOMS® Certificate of Compliance 1004 system and, therefore, subject to the Aging Management Program requirements of the renewed certificate, it is referred to as “Renewed Amendment No. 15.” Renewed Amendment No. 15 would revise the Certificate of Compliance’s technical specifications to: unify and standardize fuel qualification tables; revise existing and add new heat load zoning configurations; increase the allowable maximum assembly average burnup; allow loading of damaged fuel assemblies under certain conditions; expand the definition of

the poison rod assemblies to include rod cluster control assembly materials; allow other zirconium alloy cladding materials; add model OS197 as an authorized transfer cask; add the description for the solar shield in the updated final safety analysis report; and add flexibility to general licensees in verifying compliance regarding the storage pad location and the soil-structure interaction. Additionally, the rulemaking would make clarifications to rule text related to Certificate of Compliance No. 1004 by removing redundant language.

DATES: Submit comments by December 7, 2018. Comments received after this date will be considered if it is practical to do so, but the NRC is able to ensure consideration only for comments received on or before this date.

ADDRESSES: You may submit comments by any of the following methods:

- **Federal Rulemaking Web Site:** Go to <http://www.regulations.gov> and search for Docket ID NRC-2018-0212. Address questions about NRC dockets to Carol Gallagher; telephone: 301-415-3463; e-mail: Carol.Gallagher@nrc.gov. For technical questions, contact the individuals listed in the FOR FURTHER INFORMATION CONTACT section of this document.

- **E-mail comments to:** Rulemaking.Comments@nrc.gov. If you do not receive an automatic e-mail reply confirming receipt, then contact us at 301-415-1677.

- **Fax comments to:** Secretary, U.S. Nuclear Regulatory Commission at 301-415-1101.

- **Mail comments to:** Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, ATTN: Rulemakings and Adjudications Staff.

- **Hand deliver comments to:** 11555 Rockville Pike, Rockville, Maryland 20852, between 7:30 a.m. and 4:15 p.m. (Eastern Time) Federal workdays; telephone: 301-415-1677.

For additional direction on obtaining information and submitting comments, see “Obtaining Information and Submitting Comments” in the SUPPLEMENTARY INFORMATION section of this document.

FOR FURTHER INFORMATION CONTACT: Christian Jacobs, Office of Nuclear Material Safety and Safeguards; telephone: 301-415-6825; e-mail: Christian.Jacobs@nrc.gov or Edward M. Lohr, Office of Nuclear Material Safety and Safeguards; telephone: 301-415-0253; e-mail: Edward.Lohr@nrc.gov. Both are staff of the U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

SUPPLEMENTARY INFORMATION:

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I. Obtaining Information and Submitting Comments

A. Obtaining Information

Please refer to Docket ID NRC-2018-0212 when contacting the NRC about the availability of information for this action. You may obtain publicly-available information related to this action by any of the following methods:

- **Federal Rulemaking Web Site:** Go to <http://www.regulations.gov> and

search for Docket ID NRC-2018-0212.

- **NRC's Agencywide Documents Access and Management System**

(ADAMS): You may obtain publicly-available documents online in the ADAMS Public Documents collection at <http://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "[ADAMS Public Documents](#)" and then select "[Begin Web-based ADAMS Search](#)." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to pdr.resource@nrc.gov. For the convenience of the reader, instructions about obtaining materials referenced in this document are provided in the "Availability of Documents" section.

- **NRC's PDR:** You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

B. Submitting Comments

Please include Docket ID NRC-2018-0212 in your comment submission.

The NRC cautions you not to include identifying or contact information that you do not want to be publicly disclosed in your comment submission. The NRC will post all comment submissions at <http://www.regulations.gov> as well as enter the comment submissions into ADAMS. The NRC does not routinely edit comment submissions to remove identifying or contact information.

If you are requesting or aggregating comments from other persons for submission to the NRC, then you should inform those persons not to include identifying or contact information that they do not want to be publicly disclosed in their comment submission. Your request should state that the NRC does not routinely edit comment submissions to remove such information before making the comment submissions

available to the public or entering the comment into ADAMS.

II. Rulemaking Procedure

This proposed rule is limited to the changes contained in Renewed Amendment No. 15 to Certificate of Compliance 1004 and does not include other aspects of the TN Americas LLC Standardized NUHOMS® System design. Because the NRC considers this action non-controversial and routine, the NRC is publishing this proposed rule concurrently with a direct final rule in the Rules and Regulations section of this issue of the *Federal Register*. The direct final rule will become effective on January 22, 2019. However, if the NRC receives significant adverse comments on this proposed rule by December 7, 2018, then the NRC will publish a document that withdraws the direct final rule. If the direct final rule is withdrawn, the NRC will address the comments received in response to these proposed revisions in a subsequent final rule. Absent significant modifications to the proposed revisions requiring republication, the NRC will not initiate a second comment period on this action in the event the direct final rule is withdrawn.

A significant adverse comment is a comment where the commenter explains why the rule would be inappropriate, including challenges to the rule's underlying premise or approach, or would be ineffective or unacceptable without a change. A comment is adverse and significant if:

1) The comment opposes the rule and provides a reason sufficient to require a substantive response in a notice-and-comment process. For example, a substantive response is required when:

a) The comment causes the NRC to reevaluate (or reconsider) its position or conduct additional analysis;

b) The comment raises an issue serious enough to warrant a substantive

response to clarify or complete the record; or

c) The comment raises a relevant issue that was not previously addressed or considered by the NRC.

2) The comment proposes a change or an addition to the rule, and it is apparent that the rule would be ineffective or unacceptable without incorporation of the change or addition.

3) The comment causes the NRC to make a change (other than editorial) to the rule.

For procedural information and the regulatory analysis, see the direct final rule published in the Rules and Regulations section of this issue of the *Federal Register*.

III. Background

Section 218(a) of the Nuclear Waste Policy Act (NWPA) of 1982, as amended, requires that “the Secretary [of the Department of Energy] 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 “[the Commission] shall, by rule, establish procedures for the licensing of any technology approved by the Commission under Section 219(a) [sic: 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 by publishing a final rule

which added a new subpart K in part 72 of title 10 of the *Code of Federal Regulations* (10 CFR) 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 in 10 CFR part 72 entitled “Approval of Spent Fuel Storage Casks,” which contains procedures and criteria for obtaining NRC approval of spent fuel storage cask designs. The NRC subsequently issued a final rule on December 22, 1994 (59 FR 65898), that approved the TN Americas LLC Standardized NUHOMS® System design and added it to the list of NRC-approved cask designs provided in § 72.214 as Certificate of Compliance No. 1004. Most recently, on September 27, 2017 (82 FR 44879), the NRC issued a Renewal of the revised initial certificate and Amendment Nos. 1 through 11, 13 and 14.

IV. Plain Writing

The Plain Writing Act of 2010 (Pub. L. 111-274) requires Federal agencies to write documents in a clear, concise, well-organized manner. The NRC has written this document to be consistent with the Plain Writing Act as well as the Presidential Memorandum, “Plain Language in Government Writing,” published June 10, 1998 (63 FR 31883). The NRC requests comment on the proposed rule with respect to the clarity and effectiveness of the language used.

V. Availability of Documents

The documents identified in the following table are available to interested persons through one or more of the following methods, as indicated.

Document	ADAMS Accession No. / Web link / <i>Federal Register</i> Citation
TN Americas LLC Request to Add Amendment No. 15 to Certificate of Compliance No. 1004, letter dated March 28, 2017	ML17094A714 (Package)
Revision to TN Americas LLC Request to Add Amendment No. 15 to Certificate of Compliance No. 1004, letter dated July 18, 2017	ML17202Q145
Revision to TN Americas LLC Request to Add Amendment No. 15 to Certificate of Compliance No. 1004, letter dated December 14, 2017	ML17363A276 (Package)
Revision to TN Americas LLC Request to Add Amendment No. 15 to Certificate of Compliance No. 1004, letter dated March 22, 2018	ML18088A180
TN Americas LLC Renewed Amendment No. 15 to Certificate of Compliance No. 1004	ML18228A531
Technical Specifications for TN Americas LLC Renewed Amendment No. 15 to Certificate of Compliance No. 1004	ML18228A530
Preliminary Safety Evaluation Report for TN Americas LLC Renewed Amendment No. 15 to Certificate of Compliance No. 1004	ML18234A012

The NRC may post materials related to this document, including public comments, on the Federal Rulemaking Web site at <http://www.regulations.gov> under Docket ID NRC-2018-0212. The Federal Rulemaking Web site allows you to receive alerts when changes or additions occur in a docket folder. To subscribe: 1) navigate to the docket folder (NRC-2018-0212); 2) click the "Sign up for E-mail Alerts" link; and 3) enter your e-mail address and select how frequently you would like to receive e-mails (daily, weekly, or monthly).

List of Subjects in 10 CFR Part 72

Administrative practice and procedure, Hazardous waste, Indians,

Intergovernmental relations, Nuclear energy, Penalties, Radiation protection, Reporting and recordkeeping requirements, Security measures, 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; the Nuclear Waste Policy Act of 1982, as amended; and 5 U.S.C. 552 and 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, 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: Atomic Energy Act of 1954, secs. 51, 53, 57, 62, 63, 65, 69, 81, 161, 182, 183, 184, 186, 187, 189, 223, 234, 274 (42 U.S.C. 2071, 2073, 2077, 2092, 2093, 2095, 2099, 2111, 2201, 2210e, 2232, 2233, 2234, 2236, 2237, 2238, 2273, 2282, 2021); Energy Reorganization Act of 1974, secs. 201, 202, 206, 211 (42 U.S.C. 5841, 5842, 5846, 5851); National Environmental Policy Act of 1969 (42 U.S.C. 4332); Nuclear Waste Policy Act of 1982, secs. 117(a), 132, 133, 134, 135, 137, 141, 145(g), 148, 218(a) (42 U.S.C. 10137(a), 10152, 10153, 10154, 10155, 10157, 10161, 10165(g), 10168, 10198(a)); 44 U.S.C. 3504 note.

2. In § 72.214, Certificate of Compliance 1004 is revised to read as follows:

§ 72.214 List of approved spent fuel storage casks.

* * * * *

Certificate Number: 1004.

Initial Certificate Effective Date: January 23, 1995, superseded by Initial Certificate,

Revision 1, on April 25, 2017, superseded by Renewed Initial Certificate, Revision 1, on December 11, 2017.

Renewed Initial Certificate, Revision 1, Effective Date: December 11, 2017.

Amendment Number 1 Effective Date: April 27, 2000, superseded by Amendment Number 1, Revision 1, on April 25, 2017, superseded by Renewed Amendment Number 1, Revision 1, on December 11, 2017.

Renewed Amendment Number 1, Revision 1, Effective Date: December 11, 2017.

Amendment Number 2 Effective Date: September 5, 2000, superseded by Amendment Number 2, Revision 1, on April 25, 2017, superseded by Renewed Amendment Number 2, Revision 1, on December 11, 2017.

Renewed Amendment Number 2, Revision 1, Effective Date: December 11, 2017.

Amendment Number 3 Effective Date: September 12, 2001, superseded by Amendment Number 3, Revision 1, on April 25, 2017, superseded by Renewed Amendment Number 3, Revision 1, on December 11, 2017.

Renewed Amendment Number 3, Revision 1, Effective Date: December 11, 2017.

Amendment Number 4 Effective Date: February 12, 2002, superseded by Amendment Number 4, Revision 1, on April 25, 2017, superseded by Renewed Amendment Number 4, Revision 1, on December 11, 2017.

Renewed Amendment Number 4, Revision 1, Effective Date: December 11, 2017.

Amendment Number 5 Effective Date: January 7, 2004, superseded by Amendment Number 5, Revision 1, on April 25, 2017, superseded by Renewed Amendment Number 5, Revision 1, on December 11, 2017.

Renewed Amendment Number 5, Revision 1, Effective Date: December 11, 2017.

Amendment Number 6 Effective Date: December 22, 2003, superseded by Amendment Number 6, Revision 1, on April 25, 2017, superseded by Renewed Amendment Number 6, Revision 1, on December 11, 2017.

Renewed Amendment Number 6, Revision 1, Effective Date: December 11, 2017.

Amendment Number 7 Effective Date: March 2, 2004, superseded by Amendment Number 7, Revision 1, on April 25, 2017, superseded by Renewed Amendment Number

7, Revision 1, on December 11, 2017.

Renewed Amendment Number 7, Revision 1, Effective Date: December 11, 2017.

Amendment Number 8 Effective Date: December 5, 2005, superseded by Amendment Number 8, Revision 1, on April 25, 2017, superseded by Renewed Amendment Number 8, Revision 1, on December 11, 2017.

Renewed Amendment Number 8, Revision 1, Effective Date: December 11, 2017.

Amendment Number 9 Effective Date: April 17, 2007, superseded by Amendment Number 9, Revision 1, on April 25, 2017, superseded by Renewed Amendment Number 9, Revision 1, on December 11, 2017.

Renewed Amendment Number 9, Revision 1, Effective Date: December 11, 2017.

Amendment Number 10 Effective Date: August 24, 2009, superseded by Amendment Number 10, Revision 1, on April 25, 2017, superseded by Renewed Amendment Number 10, Revision 1, on December 11, 2017.

Renewed Amendment Number 10, Revision 1, Effective Date: December 11, 2017.

Amendment Number 11 Effective Date: January 7, 2014, superseded by Amendment Number 11, Revision 1, on April 25, 2017, superseded by Renewed Amendment Number 11, Revision 1, on December 11, 2017.

Renewed Amendment Number 11, Revision 1, Effective Date: December 11, 2017, as corrected (ADAMS Accession No. ML18018A043).

Amendment Number 12 Effective Date: Amendment not issued by the NRC.

Amendment Number 13 Effective Date: May 24, 2014, superseded by Amendment Number 13, Revision 1, on April 25, 2017, superseded by Renewed Amendment Number 13, Revision 1, on December 11, 2017.

Renewed Amendment Number 13, Revision 1, Effective Date: December 11, 2017, as corrected (ADAMS Accession No. ML18018A100).

Amendment Number 14 Effective Date: April 25, 2017, superseded by Renewed

Amendment Number 14, on December 11, 2017.

Renewed Amendment Number 14 Effective Date: December 11, 2017.

Renewed Amendment Number 15 Effective Date: January 22, 2019.

SAR Submitted by: Transnuclear, Inc.

SAR Title: Final Safety Analysis Report for the Standardized NUHOMS® Horizontal Modular Storage System for Irradiated Nuclear Fuel.

Docket Number: 72-1004.

Certificate Expiration Date: January 23, 2015.

Renewed Certificate Expiration Date: January 23, 2055.

Model Number: NUHOMS®-24P, -24PHB, -24PTH, -32PT, -32PTH1, -37PTH, -52B, -61BT, -61BTH, and -69BTH.

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Dated at Rockville, Maryland, this 24th day of October, 2018.

For the Nuclear Regulatory Commission.

/RA/

Margaret M. Doane,
Executive Director for Operations.