

NUCLEAR REGULATORY COMMISSION

10 CFR Part 72

[NRC-2020-0274]

RIN 3150-AK57

**List of Approved Spent Fuel Storage Casks: TN Americas LLC Standardized
NUHOMS® Horizontal Modular Storage System,
Certificate of Compliance No. 1004, Renewed Amendment No. 17**

AGENCY: Nuclear Regulatory Commission.

ACTION: Direct final rule.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is amending its spent fuel storage regulations by revising the TN Americas LLC Standardized NUHOMS® Horizontal Modular Storage System listing within the “List of approved spent fuel storage casks” to include Renewed Amendment No. 17 to Certificate of Compliance No. 1004. Because this amendment is subsequent to the renewal of the TN Americas LLC Standardized NUHOMS® Horizontal Modular System Certificate of Compliance No. 1004 and, therefore, subject to the Aging Management Program requirements of the renewed certificate, it is referred to as “Renewed Amendment No. 17.” Renewed Amendment No. 17 revises the certificate of compliance technical specifications to add Heat Load Zoning Configurations 11-13 for the 61BTH Type 2 dry shielded canister and change the

maximum assembly heat load from 1.2 kW to 1.7 kW. This amendment also makes minor clarifications to the certificate of compliance.

DATES: This direct final rule is effective June 7, 2021, unless significant adverse comments are received by April 23, 2021. If this direct final rule is withdrawn as a result of such comments, timely notice of the withdrawal will be published in the *Federal Register*. 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. Comments received on this direct final rule will also be considered to be comments on a companion proposed rule published in the Proposed Rules section of this issue of the *Federal Register*.

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

- **Federal Rulemaking Web Site:** Go to <https://www.regulations.gov> and search for Docket ID NRC-2020-0274. Address questions about NRC dockets to Dawn Forder; telephone: 301-415-3407; e-mail: Dawn.Forder@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.

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

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: Yen-Ju Chen, Office of Nuclear Material Safety and Safeguards; telephone: 301-415-1018; e-mail: Yen-Ju.Chen@nrc.gov or Alexa Sieracki, Office of Nuclear Material Safety and Safeguards; telephone: 301-415-7509; e-mail: Alexa.Sieracki@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-2020-0274 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 <https://www.regulations.gov> and search for Docket ID NRC-2020-0274.

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

(ADAMS): You may obtain publicly available documents online in the ADAMS Public Documents collection at <https://www.nrc.gov/reading-rm/adams.html>. To begin the search, 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.

- **Attention:** The Public Document Room (PDR), where you may examine and order copies of public documents, is currently closed. You may submit your request to the PDR via e-mail at pdr.resource@nrc.gov or call 1-800-397-4209 between 8:00 a.m. and 4:00 p.m. (EST), Monday through Friday, except Federal holidays.

B. Submitting Comments

The NRC encourages electronic comment submission through the Federal Rulemaking website (<https://www.regulations.gov>). Please include Docket ID NRC-2020-0274 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 <https://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 rule is limited to the changes contained in Renewed Amendment No. 17 to Certificate of Compliance No. 1004 and does not include other aspects of the TN Americas LLC, Standardized NUHOMS® Cask System design. The NRC is using the “direct final rule procedure” to issue this amendment because it represents a limited and routine change to an existing certificate of compliance that is expected to be non-controversial. The NRC has determined that, with the requested changes, adequate protection of public health and safety continues to be reasonably assured. The amendment to the rule will become effective on **[INSERT DATE 75 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**. However, if the NRC receives any significant adverse comments on this direct final rule by **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**, then the NRC will publish a document that withdraws this action and will subsequently address the comments received in a final rule as a response to the companion proposed rule published in the Proposed Rules section of this issue of the *Federal Register*. Absent significant modifications to the proposed revisions requiring republication, the NRC will not initiate a second comment period on this action.

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, certificate of compliance, or technical specifications.

III. Background

Section 218(a) of the Nuclear Waste Policy Act of 1982, as amended, requires that "[t]he 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 Nuclear Waste Policy Act states, in part, that “[t]he 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 that 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 in § 72.214 as Certificate of Compliance No. 1004.

IV. Discussion of Changes

On June 11, 2020, TN Americas LLC submitted a request to the NRC to amend Certificate of Compliance No. 1004. TN Americas LLC supplemented its request on September 11, 2020. Renewed Amendment No. 17 revises the certificate of compliance technical specifications to 1) add Heat Load Zoning Configurations 11-13 for the 61BTH

Type 2 dry shielded canister and 2) change the maximum assembly heat load from 1.2 kW to 1.7 kW. This amendment also includes minor clarification changes.

As documented in the preliminary safety evaluation report (ADAMS Accession No. ML20308A495), the NRC performed a safety evaluation of the proposed certificate of compliance amendment request. The NRC determined that this amendment does not reflect a significant change in design or fabrication of the cask. Specifically, the NRC determined that the design of the cask would continue to maintain confinement, shielding, and criticality control in the event of each evaluated accident condition. In addition, any resulting occupational exposure or offsite dose rates from the implementation of Renewed Amendment No. 17 would remain well within the limits specified by 10 CFR part 20, "Standards for Protection Against Radiation." Thus, the NRC found there will be no significant change in the types or amounts of any effluent released, no significant increase in the individual or cumulative radiation exposure, and no significant increase in the potential for or consequences from radiological accidents.

The NRC staff determined that the amended TN Americas LLC Standardized NUHOMS® Horizontal Modular Storage System cask design, when used under the conditions specified in the certificate of compliance, the technical specifications, and the NRC's regulations, will meet the requirements of 10 CFR part 72; therefore, adequate protection of public health and safety will continue to be reasonably assured. When this direct final rule becomes effective, persons who hold a general license under § 72.210 may, consistent with the license conditions under § 72.212, load spent nuclear fuel into TN Americas LLC Standardized NUHOMS® Horizontal Modular Storage System casks that meet the criteria of Renewed Amendment No. 17 to Certificate of Compliance No. 1004.

V. 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 direct final rule, the NRC revises the TN Americas LLC Standardized NUHOMS® Horizontal Modular Storage System cask design listed in § 72.214, “List of approved spent fuel storage casks.” This action does not constitute the establishment of a standard that contains generally applicable requirements.

VI. Agreement State Compatibility

Under the “Agreement State Program Policy Statement” approved by the Commission on October 2, 2017, and published in the *Federal Register* on October 18, 2017 (82 FR 48535), this rule is classified as Compatibility Category NRC – Areas of Exclusive NRC Regulatory Authority. 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, or the provisions of 10 CFR chapter I. Therefore, compatibility is not required for program elements in this category. Although an Agreement State may not adopt program elements reserved to the NRC, and the Category “NRC” does not confer regulatory authority on the State, the State may wish to inform its licensees of certain requirements by means consistent with the particular State’s administrative procedure laws.

VII. Plain Writing

The Plain Writing Act of 2010 (Pub. L. 111-274) requires Federal agencies to write documents in a clear, concise, and 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 31885).

VIII. Environmental Assessment and Finding of No Significant Impact

Under the National Environmental Policy Act of 1969, as amended, and the NRC’s regulations in 10 CFR part 51, “Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions,” the NRC has determined that this direct final 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 NRC has made a finding of no significant impact on the basis of this environmental assessment.

A. The Action

The action is to amend § 72.214 to revise the TN Americas LLC Standardized NUHOMS® Horizontal Modular Storage System listing within the “List of approved spent fuel storage casks” to include Renewed Amendment No. 17 to Certificate of Compliance No. 1004.

B. The Need for the Action

This direct final rule amends the certificate of compliance for the TN Americas LLC Standardized NUHOMS® System design within the list of approved spent fuel storage casks to allow power reactor licensees to store spent fuel at reactor sites in casks with the approved modifications under a general license. Specifically, Renewed Amendment No. 17 revises the certificate of compliance technical specifications to 1) add Heat Load Zoning Configurations 11-13 for the 61BTH Type 2 dry shielded canister and 2) change the maximum assembly heat load from 1.2 kW to 1.7 kW. This amendment also includes minor clarifications to the certificate of compliance.

C. Environmental Impacts of the Action

On July 18, 1990 (55 FR 29181), the NRC issued an amendment to 10 CFR part 72 to provide for the storage of spent fuel under a general license in cask designs approved by the NRC. The potential environmental impact of using NRC-approved storage casks was analyzed in the environmental assessment for the 1990 final rule. The environmental assessment for this Renewed Amendment No. 17 tiers off of the environmental assessment for the July 18, 1990, final rule. Tiering on past environmental assessments is a standard process under the National Environmental Policy Act of 1969, as amended.

TN Americas LLC Standardized NUHOMS® Horizontal Modular Storage System is designed to mitigate the effects of design basis accidents that could occur during storage. Design basis accidents account for human-induced events and the most severe natural phenomena reported for the site and surrounding area. Postulated accidents analyzed for an independent spent fuel storage installation, the type of facility at which a holder of a power reactor operating license would store spent fuel in casks in accordance with 10 CFR part 72, can include tornado winds and tornado-generated

missiles, a design basis earthquake, a design basis flood, an accidental cask drop, lightning effects, fire, explosions, and other incidents.

The design of the cask would prevent loss of confinement, shielding, and criticality control in the event of each evaluated accident condition. If there is no loss of confinement, shielding, or criticality control, the environmental impacts resulting from an accident would be insignificant. This amendment does not reflect a significant change in design or fabrication of the cask. Because there are no significant design or process changes, any resulting occupational exposure or offsite dose rates from the implementation of Renewed Amendment No. 17 would remain well within the 10 CFR part 20 limits. Therefore, the proposed changes will not result in any radiological or non-radiological environmental impacts that significantly differ from the environmental impacts evaluated in the environmental assessment supporting the July 18, 1990, final rule. There will be no significant change in the types or significant revisions in the amounts of any effluent released, no significant increase in the individual or cumulative radiation exposures, and no significant increase in the potential for, or consequences from, radiological accidents. The NRC documented its safety findings in the preliminary safety evaluation report.

D. Alternative to the Action

The alternative to this action is to deny approval of Renewed Amendment No. 17 and not issue the direct final rule. Consequently, any 10 CFR part 72 general licensee that seeks to load spent nuclear fuel into TN Americas LLC Standardized NUHOMS® Horizontal Modular Storage System in accordance with the changes described in proposed Renewed Amendment No. 17 would have to request an exemption from the requirements of §§ 72.212 and 72.214. Under this alternative, interested licensees

would have to prepare, and the NRC would have to review, a separate exemption request, thereby increasing the administrative burden upon the NRC and the costs to each licensee. The environmental impacts would be the same as the proposed action.

E. Alternative Use of Resources

Approval of Renewed Amendment No. 17 to Certificate of Compliance No. 1004 would result in no irreversible commitment of resources.

F. Agencies and Persons Contacted

No agencies or persons outside the NRC were contacted in connection with the preparation of this environmental assessment.

G. Finding of No Significant Impact

The environmental impacts of the action have been reviewed under the requirements in the National Environmental Policy Act of 1969, as amended, and the NRC's regulations in subpart A of 10 CFR part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions." Based on the foregoing environmental assessment, the NRC concludes that this direct final rule entitled "List of Approved Spent Fuel Storage Casks: TN Americas LLC Standardized NUHOMS® Horizontal Modular Storage System, Certificate of Compliance No. 1004, Renewed Amendment No. 17" will not have a significant effect on the human environment. Therefore, the NRC has determined that an environmental impact statement is not necessary for this direct final rule.

IX. Paperwork Reduction Act Statement

This direct final rule does not contain any new or amended collections of information subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). Existing collections of information 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 Office of Management and Budget control number.

X. Regulatory Flexibility Certification

Under the Regulatory Flexibility Act of 1980 (5 U.S.C. 605(b)), the NRC certifies that this direct final rule will not, if issued, have a significant economic impact on a substantial number of small entities. This direct final rule affects only nuclear power plant licensees and TN Americas LLC. These entities do not fall within the scope of the definition of small entities set forth in the Regulatory Flexibility Act or the size standards established by the NRC (§ 2.810).

XI. 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 1) notifies the NRC in advance, 2) the spent fuel is stored under the conditions specified in the cask's certificate of compliance, and 3) the conditions of the general license are met. A list of NRC-approved cask designs is contained in § 72.214. On December 22, 1994 (59 FR 65898), the NRC issued an amendment to 10 CFR part 72 that approved the TN Americas LLC Standardized NUHOMS® Horizontal Modular Storage System design by adding it to the list of NRC-approved cask designs in § 72.214.

On June 11, 2020, and as supplemented on September 11, 2020, TN Americas LLC submitted a request to amend the TN Americas LLC Standardized NUHOMS® Horizontal Modular Storage System as described in Section IV, "Discussion of Changes," of this document.

The alternative to this action is to withhold approval of Renewed Amendment No. 17 and to require any 10 CFR part 72 general licensee seeking to load spent nuclear fuel into the TN Americas LLC Standardized NUHOMS® Horizontal Modular Storage System under the changes described in Renewed Amendment No. 17 to request an exemption from the requirements of §§ 72.212 and 72.214. Under this alternative, each interested 10 CFR part 72 licensee would have to prepare, and the NRC would have to review, a separate exemption request, thereby increasing the administrative burden upon the NRC and the costs to each licensee.

Approval of this direct final rule is consistent with previous NRC actions. Further, as documented in the preliminary safety evaluation report and environmental assessment, this direct final rule will have no adverse effect on public health and safety or the environment. This direct final rule has no significant identifiable impact or benefit

on other government agencies. Based on this regulatory analysis, the NRC concludes that the requirements of this direct 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; therefore, this action is recommended.

XII. Backfitting and Issue Finality

The NRC has determined that the backfit rule (§ 72.62) does not apply to this direct final rule. Therefore, a backfit analysis is not required. This direct final rule revises Certificate of Compliance No. 1004 for the TN Americas LLC Standardized NUHOMS® Horizontal Modular Storage System, as currently listed in § 72.214. The revision consists of the changes in Renewed Amendment No. 17 previously described, as set forth in the revised certificate of compliance and technical specifications.

Renewed Amendment No. 17 to Certificate of Compliance No. 1004 for the TN Americas LLC, Standardized NUHOMS® Horizontal Modular Storage System was initiated by TN Americas LLC and was not submitted in response to new NRC requirements, or an NRC request for amendment. Renewed Amendment No. 17 applies only to new casks fabricated and used under Renewed Amendment No. 17. These changes do not affect existing users of the TN Americas LLC, Standardized NUHOMS Horizontal Modular Storage System, and the current Renewed Amendment No. 16 continues to be effective for existing users. While current users of this storage system may comply with the new requirements in Renewed Amendment No. 17, this would be a voluntary decision on the part of current users.

For these reasons, Renewed Amendment No. 17 to Certificate of Compliance

No. 1004 does not constitute backfitting under § 72.62 or § 50.109(a)(1), or otherwise represent an inconsistency with the issue finality provisions applicable to combined licenses in 10 CFR part 52. Accordingly, the NRC has not prepared a backfit analysis for this rulemaking.

XIII. Congressional Review Act

This direct final rule is not a rule as defined in the Congressional Review Act.

XIV. 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. / <i>FEDERAL REGISTER</i> CITATION
TN Americas LLC, Submittal of Application for Amendment 17 to Standardized NUHOMS® Certificate of Compliance No. 1004 for Spent Fuel Storage Casks, Revision 0	ML20174A089 (package)
TN America, LLC – Response to Request for Additional Information - Application for Amendment 17 to Standardized NUHOMS® Certificate of Compliance No. 1004 for Spent Fuel Storage Casks, Revision 1 (Docket No. 72-1004. CAC No. 001028, EPID: L-2020-LLA-0128)	ML20255A206 (package)
User Need Memo for Rulemaking for the Standardized NUHOMS® System, Certificate of Compliance No. 1004, Renewed Amendment No. 17	ML20308A485 (package)

The NRC may post materials related to this document, including public

comments, on the Federal Rulemaking Web site at <https://www.regulations.gov> under Docket ID NRC-2020-0274. 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-2020-0274); 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, 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; the Nuclear Waste Policy Act of 1982, 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: 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 No. 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.

Renewed Amendment Number 16 Effective Date: September 14, 2020.

Renewed Amendment Number 17 Effective Date: **[INSERT DATE 75 DAYS AFTER PUBLICATION IN THE *FEDERAL REGISTER*].**

SAR Submitted by: TN Americas LLC.

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.

* * * * *

Dated: March 9, 2021.

For the Nuclear Regulatory Commission.

/RA/

Margaret M. Doane
Executive Director for Operations.