

NUCLEAR REGULATORY COMMISSION

10 CFR Part 72

[NRC-2017-0138]

RIN 3150-AK05

**List of Approved Spent Fuel Storage Casks: TN Americas LLC, Standardized NUHOMS®
Horizontal Modular Storage System, Certificate of Compliance No. 1004,
Renewal of Initial Certificate
and Amendment Nos. 1 Through 11, 13, Revision 1, and 14**

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 Standardized NUHOMS® Horizontal Modular Storage System (NUHOMS® System) listing within the “List of approved spent fuel storage casks” to renew, for an additional 40-year period, Revision 1 of the initial certificate and Amendment Nos. 1 through 11, and 13, and Amendment No. 14 of Certificate of Compliance (CoC) No. 1004. These changes require, among other things, that all future amendments and revisions to this CoC include evaluations of the impacts to aging management activities (i.e., time-limited aging analyses and aging management programs (AMPs)) to ensure that they remain adequate for any changes to spent fuel storage cask systems, structures, and components (SSCs) within the scope of the renewal. Each general licensee using a NUHOMS® System at a reactor site must have a program to establish, implement, and maintain written procedures for each AMP

described in the AREVA Inc. (AREVA) Updated Final Safety Analysis Report (UFSAR). In addition, the renewals reflect the change in the name of the CoC holder from AREVA to TN Americas LLC, and make several other changes as described in Section IV, "Discussion of Changes," in the SUPPLEMENTARY INFORMATION section of this document.

DATES: This direct final rule is effective December 11, 2017, unless significant adverse comments are received by October 27, 2017. If this direct final rule is withdrawn as a result of such comments, timely notice of the withdrawal will be published in the *Federal Register*.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 Commission 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 <http://www.regulations.gov> and search for Docket ID NRC-2017-0138. 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, 301-415-6825; e-mail: Christian.Jacobs@nrc.gov, or Robert D. MacDougall, Office of Nuclear Material Safety and Safeguards, 301-415-5175; e-mail: Robert.MacDougall@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-2017-0138 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-2017-0138.

- **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-2017-0138 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 rule is limited to the changes associated with renewal of the initial certificate and Amendment Nos. 1 through 11, 13, Revision 1, and Amendment No. 14 to CoC No. 1004 and does not include other aspects of the NUHOMS® System design. The NRC is using the “direct final rule procedure” to issue these renewals because they represent a limited and routine change to an existing CoC that is expected to be noncontroversial. Adequate protection of public health and safety continues to be ensured. This direct final rule will become effective on December 11, 2017. However, if the NRC receives significant adverse comments on this direct final rule by October 27, 2017, 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 staff 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 staff.

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 staff to make a change (other than editorial) to the rule, CoC, or technical specifications (TSs).

For detailed instructions on filing comments, please see the companion proposed rule published in the Proposed Rules 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). A general license authorizes a reactor licensee to store spent fuel in NRC-approved casks at a site that is licensed to operate a power reactor under 10 CFR parts 50 or 52. 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 NUHOMS® System design and added it to the list of NRC-approved cask designs in 10 CFR 72.214 as CoC No. 1004. Most recently, on January 25, 2017 (82 FR 8353), the NRC approved Revision 1 to the initial certificate and Amendment Nos. 1 through 11 and 13, and issued Amendment No. 14.

IV. Discussion of Changes

On November 4, 2014, AREVA submitted a renewal application for the Standardized NUHOMS® Horizontal Modular Storage System, CoC No. 1004, for a period of 40 years beyond the initial certificate term. AREVA supplemented its request on October 16, 2015; June 6, 2016; and September 29, 2016.

On November 18, 2016, TN Americas LLC provided notification that it had changed from AREVA TN Americas, a former operating division of AREVA Inc., to a stand-alone entity named TN Americas LLC, which is a wholly owned subsidiary company of AREVA Nuclear Materials LLC. Because the renewed CoCs will be issued to TN Americas LLC, this notice will specify “TN Americas” when referring to the CoC holder, and “AREVA” when referring to the applicant.

The renewal of the initial certificate and Amendment Nos. 1 through 11, 13, and 14 (Amendment No. 12 was never issued) were conducted in accordance with the renewal provisions in 10 CFR 72.240. This section of NRC spent fuel storage regulations authorizes the NRC staff to include any additional certificate conditions it deems necessary to ensure that the cask system’s SSCs continue to perform their intended safety functions during the certificates’ renewal period. The NRC staff has included additional conditions in the renewed certificates. These conditions do not revise the authorized contents of any existing or planned NUHOMS® System. The changes require, among other things, that all future amendments and revisions to this CoC include evaluations of the impacts to aging management activities (i.e., time-limited aging analyses and AMPs) to ensure that they remain adequate for any changes to spent fuel storage cask SSCs within the scope of the renewal. Each general licensee using a NUHOMS® System at a reactor site must have a program to establish, implement, and maintain written procedures for each AMP described in the AREVA UFSAR. The program must include provisions for changing AMP elements, as necessary, and within the limitations of the approved licensing bases, to address new information on aging effects based on inspection findings

and/or industry operating experience during the renewal period. Another CoC change would extend these requirements to NUHOMS® System users at new reactors licensed under the NRC's regulations.

As documented in its Safety Evaluation Report (SER), the NRC staff performed a detailed safety evaluation of the proposed CoC renewal request. There are no significant changes to cask design requirements in the proposed CoC renewal. Considering the specific design requirements for each accident or sabotage condition, the design of the cask would prevent loss of containment, shielding, and criticality control in the event of an accident or sabotage. This renewal does not reflect a significant change in design or fabrication of the cask. In addition, any resulting occupational exposure or offsite dose rates from the implementation of the renewal of the initial certificate and these amendments would remain well within the NRC's 10 CFR part 20 limits on doses to workers and members of the public. 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.

This direct final rule revises the NUHOMS® System listing in 10 CFR 72.214 by renewing for an additional 40-year period the initial certificate and Amendment Nos. 1 through 11, 13, and 14 of CoC No. 1004. The renewal consists of the changes previously described, as set forth in the renewed CoC and TSs. The revised TSs are identified in the SER.

The NRC has determined that the NUHOMS® System cask design, when used under the conditions specified in the renewed CoC, renewed TSs, 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 ensured. When this direct final rule becomes effective, persons who hold a general license under 10 CFR 72.210 may load spent nuclear fuel into NUHOMS® System casks that meet the criteria of the renewed initial certificate and Amendment Nos. 1 through 11, 13, and 14 of CoC No. 1004 under 10 CFR 72.212.

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 will revise the NUHOMS® System 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 “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, or the provisions of 10 CFR. 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 31883).

VIII. Environmental Assessment and Finding of No Significant Environmental Impact

A. The Action

The action is to amend 10 CFR 72.214 to revise the NUHOMS® System listing within the “List of approved spent fuel storage casks” to renew, for an additional 40-year period, the initial certificate and Amendment Nos. 1 through 11, 13, and 14 of CoC No. 1004. This action does not revise the authorized contents of existing or planned NUHOMS® Systems. Specifically, these changes require, among other things, that all future amendments and revisions to this CoC include evaluations of the impacts on aging management activities (i.e., time-limited aging analyses and AMPs) to ensure that they remain adequate for any changes to spent fuel storage cask SSCs within the scope of the renewal. Each general licensee using a NUHOMS® System at a reactor site must have a program to establish, implement, and maintain written procedures for each AMP described in the AREVA UFSAR. The program must include provisions for changing AMP elements, as necessary, and, within the limitations of the approved licensing bases, to address new information on aging effects based on inspection findings and/or industry operating experience during the renewal period. Another CoC change would extend these requirements to NUHOMS® System users at new reactors licensed under 10 CFR part 52.

B. The Need for the Action

This direct final rule is necessary to authorize the continued use of the NUHOMS[®] System design by power reactor licensees for dry spent fuel storage at reactor sites. Specifically, this rule extends the expiration date for the NUHOMS[®] System certificates for an additional 40 years, allowing a reactor licensee to continue using them under general license provisions in an independent spent fuel storage installation (ISFSI), the facility at which a holder of a power reactor operating license stores spent fuel in dry casks in accordance with 10 CFR part 72.

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 initially analyzed in the environmental assessment (EA) for the 1990 final rule. The EA for these renewals tiers off of the EA for the July 18, 1990, final rule. Tiering on past EAs is a standard process under the National Environmental Policy Act of 1969, as amended (NEPA).

The NRC staff has determined that the environmental impacts of renewing the NUHOMS[®] System certificates for an additional 40 years remain bounded by the EA for the 1990 final rule. As required by 10 CFR 72.240, applications for renewal of a spent fuel storage CoC design are required to demonstrate, in time-limited aging analyses and a description of an AMP, that SSCs important to safety will continue to perform their intended function for the requested renewal term. As discussed in the NRC staff's SER for the renewal of the NUHOMS[®] System certificates, the NRC staff has approved conditions in the renewed CoCs requiring the general licensee to implement the AMPs described in the renewal application and incorporated into the storage system's UFSAR. These conditions ensure that NUHOMS[®] Systems will

continue to perform their intended safety functions and provide adequate protection of public health and safety throughout the renewal period.

Incremental impacts from continued use of NUHOMS® Systems under a general license for an additional 40 years are not considered significant. When the general licensee follows all procedures and administrative controls, including the conditions established as a result of the renewals, no effluents are expected from the sealed dry storage cask systems. Activities associated with cask loading and decontamination may result in some small incremental liquid and gaseous effluents, but these activities will be conducted under 10 CFR parts 50 or 52 reactor operating licenses, and effluents will be controlled within existing reactor site technical specifications. Because reactor sites are relatively large, any incremental offsite doses due to direct radiation exposure from the spent fuel storage casks are expected to be small, and when combined with the contribution from reactor operations, well within the annual dose equivalent of 0.25 mSv (25 mrem) limit to the whole body specified in 10 CFR 72.104. Incremental impacts on collective occupational exposures due to dry cask spent fuel storage are expected to be only a small fraction of the exposures from operation of the nuclear power station.

The NUHOMS® Systems are also 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 ISFSI 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.

During the promulgation of the amendments that added subpart K to 10 CFR part 72 (55 FR 29181; July 18, 1990), the NRC staff assessed the public health consequences of dry cask system storage accidents and sabotage events. In the supporting analyses for these amendments, the NRC staff determined that a release from a dry cask storage system would be comparable in magnitude to a release from the same quantity of fuel in a spent fuel storage

pool. As a result of these evaluations, the NRC staff determined that, because of the physical characteristics of the storage casks and conditions of storage that include specific security provisions, the potential risk to public health and safety due to accidents or sabotage is very small.

Considering the specific design requirements for each accident or sabotage condition, the design of the cask would prevent loss of confinement, shielding, and criticality control. If there is no loss of confinement, shielding, or criticality control, the environmental impacts would be insignificant.

There are no changes to cask design or fabrication requirements in the renewed initial certificate or the renewed Amendment Nos. 1 through 11, 13, and 14 that would result in an increase in occupational exposure or offsite dose rates from the implementation of the renewal of the initial certificate and amendments. Therefore, the occupational exposure or offsite dose rates would remain well within applicable 10 CFR part 20 limits.

Decommissioning of dry cask spent fuel storage systems under a general license would be carried out as part of a power reactor's site decommissioning plan. In general, decommissioning would consist of removing the spent fuel from the site, decontaminating cask surfaces, and decontaminating and dismantling the ISFSI where the casks were deployed. Under normal and off-normal operating conditions, no residual contamination is expected to be left behind on supporting structures. The incremental impacts associated with decommissioning dry cask storage installations are expected to represent a small fraction of the impacts of decommissioning an entire nuclear power station.

In summary, the proposed CoC changes will not result in any radiological or non-radiological environmental impacts that differ significantly from the environmental impacts evaluated in the EA supporting the July 18, 1990, final rule. Compliance with the requirements of 10 CFR parts 20 and 72 would ensure that adequate protection of public health and safety will continue. The NRC, in its SER for the renewal of the NUHOMS® System, has determined

that if the conditions specified in the CoC to implement these regulations are met, adequate protection of public health and safety will be maintained.

Based on the previously stated assessments and its SER for the requested renewal of the NUHOMS® System certificates, the NRC has determined that the expiration date of this system in 10 CFR 72.214 can be safely extended for an additional 40 years, and that commercial nuclear power reactor licensees can continue using the system during this period under a general license without significant impacts on the human environment.

D. Alternative to the Action

The alternative to this action is to deny approval of these renewals and end the direct final rule. Under this alternative, the NRC would either: 1) require general licensees using NUHOMS® Systems to unload the spent fuel from these systems and either return it to a spent fuel pool or re-load it into a different NRC-approved dry storage cask system listed in 10 CFR 72.214; or 2) require that users of existing NUHOMS® Systems request site-specific licensing proceedings to continue storage in these systems.

The environmental impacts of requiring the licensee to unload the spent fuel and either return it to the spent fuel pool or re-load it into another NRC-approved dry storage cask system would result in increased radiological doses to workers. These increased doses would be due primarily to direct radiation from the casks while the workers unloaded, transferred, and re-loaded the spent fuel. These activities would consist of transferring the dry storage canisters to a cask handling building, opening the canister lid welds, returning the canister to a spent fuel pool or dry transfer facility, removing the fuel assemblies, and re-loading them, either into a spent fuel pool storage rack or another NRC-approved dry storage cask system. In addition to the increased occupational doses to workers, these activities may also result in additional liquid or gaseous effluents.

Alternatively, users of the dry cask storage system would need to apply for a site-specific license. Under this option for implementing the no-action alternative, interested licensees would have to prepare, and the NRC would have to review, each separate license application, thereby increasing the administrative burden upon the NRC and the costs to each licensee.

In summary, the no-action alternative would entail either more environmental impacts from transferring the spent fuel now in NUHOMS® Systems, or impacts from multiple licensing actions that, in the aggregate, are likely to be less than spent fuel transfer activities but the same as, or more likely greater than, the preferred action.

E. Alternative Use of Resources

Approval of the renewals of the initial certificate and Amendment Nos. 1 through 11, 13, and 14 of CoC No. 1004 would result in no irreversible commitments of resources.

F. Agencies and Persons Contacted

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

G. Finding of No Significant Impact

The environmental impacts of the action have been reviewed under the requirements of NEPA, 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 EA, 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, Renewal of Initial Certificate and Amendment Nos. 1 through 11, 13, Revision 1, and 14," 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 (OMB), 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.

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 (10 CFR 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 notifies the NRC in advance, the 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 January 22, 1994 (59 FR 65898), the NRC issued a final rule that approved the NUHOMS® System design and added it to the list of NRC-approved cask designs in 10 CFR 72.214 as CoC No. 1004.

On November 4, 2014, AREVA submitted a renewal application for the initial certificate and Amendment Nos. 1 through 11, 13, and 14 for the Standardized NUHOMS® Horizontal Modular Storage System, CoC No. 1004, for a period of 40 years beyond the initial certificate term. AREVA supplemented its request on October 16, 2015, June 6, 2016, and September 29, 2016. These requests are described in Section IV of this document, "Discussion of Changes." Because AREVA filed its renewal application at least 30 days before the certificate expiration date of January 23, 2015, pursuant to the timely renewal provisions in 10 CFR 72.240(b), the initial certificate and Amendment Nos. 1 through 11, 13, and 14 of CoC No. 1004 did not expire.

The alternative to this action is to deny approval of the renewal of the initial certificate and Amendment Nos. 1 through 11, 13, and 14 of CoC No. 1004 and end this direct final rule. Under this alternative, the NRC would either: 1) require general licensees using NUHOMS® Systems to unload spent fuel from these systems and return it to a spent fuel pool or re-load it into a different NRC-approved dry storage cask system listed in 10 CFR 72.214; or 2) require that users of existing NUHOMS® Systems request site-specific licensing proceedings to continue storage in these systems. Therefore, the no-action alternative would result in a significant burden on licensees and an additional inspection or licensing caseload on the NRC.

In addition, the no action alternative would entail either more environmental impacts from transferring the spent fuel now in NUHOMS® Systems, or impacts from multiple licensing actions that, in the aggregate, are likely to be less than spent fuel transfer activities but the same as, or more likely greater than, the preferred action.

Approval of this direct final rule is consistent with previous NRC actions. Further, as documented in the SER and the EA, 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, and therefore, this action is recommended.

XII. Backfitting and Issue Finality

The NRC has determined that the actions in this direct final rule do not require a backfit analysis because they either do not fall within the definition of backfitting under 10 CFR 72.62 or 10 CFR 50.109(a)(1), or they do not impact any general licensees currently using these systems. Additionally, the actions in this direct final rule do not impact issue finality provisions applicable to combined licenses under 10 CFR part 52.

This direct final rule renews CoC No. 1004 for the NUHOMS® System, as currently listed in 10 CFR 72.214, "List of approved spent fuel storage casks," to extend the expiration date of the initial certificate and Amendment Nos. 1 through 11, 13, and 14 by 40 years. The renewed certificates would require implementation of an AMP for the 40 years after the storage cask system's initial 20-year service period.

Renewing these certificates does not fall within the definition of backfit under 10 CFR 72.62 or 10 CFR 50.109, or otherwise represent an inconsistency with the issue finality

provisions applicable to combined licenses in 10 CFR part 52. Extending the certificates' effective dates for 40 more years and requiring the implementation of AMPs does not impose any modification or addition to the design of an SSC of a cask system, or to the procedures or organization required to operate the system during the initial 20-year storage period of the system, as authorized by the current certificate.

General licensees that have loaded these casks, or that load these casks in the future under the specifications of the applicable certificate, may continue to store spent fuel in these systems for the initial 20-year storage period authorized by the original certificate. The AMPs required to be implemented by this renewal are only required to be implemented after the storage cask system's initial 20-year service period ends. As explained in the 2011 final rule that amended 10 CFR part 72 (76 FR 8872, Question I; February 16, 2011), the general licensee's authority to use a particular storage cask design under an approved CoC terminates 20 years after the date that the general licensee first loads the particular cask with spent fuel, unless the cask's CoC is renewed. Because this rulemaking renews the certificates, and renewal is a separate NRC licensing action voluntarily implemented by vendors, the renewal of these CoCs is not an imposition of new or changed requirements from which these licensees would otherwise be protected by the backfitting provisions in 10 CFR 72.62 or 10 CFR 50.109.

Even if renewal of this CoC system could be considered a backfit, TN Americas LLC, as the holder of the CoC and vendor of the casks, is not protected by the backfitting provisions in 10 CFR 72.62.

Unlike a vendor, general licensees using the existing systems subject to these renewals would be protected by the backfitting provisions in 10 CFR 72.62 and 10 CFR 50.109 if the renewals constituted new or changed requirements. But as previously explained, renewal of the certificates for these systems does not impose such requirements. The general licensees using these CoCs may continue storing material in their respective cask systems for the initial 20-year storage period identified in the applicable certificate or amendment with no changes. If general

licensees choose to continue to store spent fuel in NUHOMS® Systems after the initial 20-year period, these general licensees will be required to implement AMPs for any cask systems subject to a renewed CoC, but such continued use is voluntary.

For these reasons, renewing the initial certificate and Amendment Nos. 1 through 11, 13, and 14 of CoC No. 1004 does not constitute backfitting under 10 CFR 72.62 or 10 CFR 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 staff 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 (5 U.S.C. §§ 801-808).

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
Final Rule: "General License for Storage of Spent Fuel at Power Reactor Sites"	55 FR 29181
Final Rule: List of Approved Spent Fuel Storage Casks: Addition	59 FR 65898
AREVA, Inc. - Renewal Application for the Standardized NUHOMS® System - CoC 1004	ML14309A341
AREVA, Inc. - Revision 1 to Renewal Application for the Standardized NUHOMS® System – CoC 1004, Response to First Request for Additional Information	ML15295A354

AREVA, Inc., Second Response to NRC RAI Re: Renewal Application for the Standardized NUHOMS® System - CoC 1004	ML16169A025
AREVA, Inc., Regarding Response to Re-Issue of Second Request for Additional Information – AREVA, Inc. Renewal Application for the Standardized NUHOMS® System - CoC 1004	ML16279A368
AREVA, Inc., AREVA Internal Reorganization - Effect on Certificate of Compliance Ownership	ML16327A011
Submittal of NUH-003, "Updated Final Safety Analysis Report (UFSAR) for the Standardized NUHOMS® Horizontal Modular Storage System For Irradiated Nuclear Fuel," Revision 14	ML14255A191
Preliminary Certificate of Compliance and Preliminary Technical Specifications for CoC No. 1004, Renewed Amendment Nos. 1-11, Revision 1, and Amendment Nos. 13-14, Revision 1	ML17131A006 (package)
TN Americas LLC, Standardized NUHOMS® Horizontal Modular Storage System - Draft SER [Safety Evaluation Report] for Renewed CoC 1004, Amendment Nos. 1-11, 13 and 14	ML17131A121

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-2017-0138. 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-2017-0138); 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, Criminal penalties, Hazardous waste, Indians, Intergovernmental relations, Manpower training programs, Nuclear energy, 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; 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 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.

Initial Certificate, Revision 1, Effective Date: April 25, 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.

Amendment Number 1, Revision 1, Effective Date: April 25, 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.

Amendment Number 2, Revision 1, Effective Date: April 25, 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.

Amendment Number 3, Revision 1, Effective Date: April 25, 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.

Amendment Number 4, Revision 1, Effective Date: April 25, 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.

Amendment Number 5, Revision 1, Effective Date: April 25, 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.

Amendment Number 6, Revision 1, Effective Date: April 25, 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.

Amendment Number 7, Revision 1, Effective Date: April 25, 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

Amendment Number 8, Revision 1, Effective Date: April 25, 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.

Amendment Number 9, Revision 1, Effective Date: April 25, 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.

Amendment Number 10, Revision 1, Effective Date: April 25, 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.

Amendment Number 11, Revision 1, Effective Date: April 25, 2017.

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

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.

Amendment Number 13, Revision 1, Effective Date: April 25, 2017.

Renewed Amendment Number 13, Revision 1, Effective Date: December 11, 2017.

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.

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.

* * * * *

Dated at Rockville, Maryland, this 18th day of September, 2017.

For the Nuclear Regulatory Commission.

/RA/

Frederick D. Brown,
Acting Executive Director of Operations.