

NUCLEAR REGULATORY COMMISSION

10 CFR Part 72

RIN 3150-AG34

List of Approved Spent Fuel Storage Casks: Standardized  
NUHOMS®-24P and NUHOMS®-52B Revision

AGENCY: Nuclear Regulatory Commission.

ACTION: Direct final rule.

SUMMARY: The Nuclear Regulatory Commission (NRC) is amending its regulations revising the Transnuclear West (TN West), Inc., Standardized NUHOMS®-24P and NUHOMS®-52B cask system (NUHOMS® storage system) listing within the “List of approved spent fuel storage casks” to include Amendment No. 2 to Certificate of Compliance (CoC) No. 1004. Amendment No. 2 makes two main changes: it updates the Technical Specifications’ fuel qualification tables to reflect additional fuel parameters; and it allows storage of burnable poison rod assemblies (BPRAs) in model 24P of the NUHOMS® storage system, along with spent fuel. Amendment No. 2 also revises and renumbers several of the conditions in the CoC to reflect the NRC’s new standard format for CoCs. However, no technical changes to the CoC’s conditions are made by this amendment. This amendment will allow holders of power reactor operating licenses to store spent fuel in the TN West NUHOMS® storage system, as amended, under a general license.

DATES: The final rule is effective **[insert date 75 days after publication in the Federal Register]**, unless significant adverse comments are received by **[insert date 30 days after publication in the Federal Register]**. If significant adverse comments are received, a timely withdrawal notice will be published in the Federal Register informing the public that the rule will

not take effect. If this direct final rule is withdrawn, the NRC will address the comments received as comments on the proposed rule published in the proposed rules section of this Federal Register and will subsequently issue a final rule.

ADDRESSES: Submit comments to: Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attn: Rulemakings and Adjudications Staff. Deliver comments to 11555 Rockville Pike, Rockville, MD, between 7:30 am and 4:15 pm on Federal workdays.

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

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

Documents created or received at the NRC after April 1, 2000 are also available electronically at the NRC Public Electronic Reading Room on the Internet at <http://www.nrc.gov/NRC/ADAMS/index.html>. From this site, the public can gain entry into the NRC's Agency wide Document Access and Management System (ADAMS), which provides text and image files of NRC's public documents. For more information, contact the NRC's Public Document Room reference staff at (202) 634-3273 or toll free at 1-800-397-4209, or by e-mail at [pdr@nrc.gov](mailto:pdr@nrc.gov).

FOR FURTHER INFORMATION CONTACT: Stephanie P. Bush-Goddard, Ph. D., telephone (301) 415-6257, e-mail, SPB@nrc.gov, of the Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

#### SUPPLEMENTARY INFORMATION:

##### Background

Section 218(a) of the Nuclear Waste Policy Act of 1982, as amended (NWPA), requires that "[t]he Secretary [of the Department of Energy (DOE)] shall establish a demonstration program, in cooperation with the private sector, for the dry storage of spent nuclear fuel at civilian nuclear power reactor sites, with the objective of establishing one or more technologies that the [Nuclear Regulatory] Commission may, by rule, approve for use at the sites of civilian nuclear power reactors without, to the maximum extent practicable, the need for additional site-specific approvals by the Commission." Section 133 of the NWPA states, in part, that "[t]he Commission shall, by rule, establish procedures for the licensing of any technology approved by the Commission under Section 218(a) for use at the site of any civilian nuclear power reactor."

To implement this mandate, the NRC approved dry storage of spent nuclear fuel in NRC-approved casks under a general license, publishing a final rule in 10 CFR Part 72 entitled, "General License for Storage of Spent Fuel at Power Reactor Sites" (55 FR 29181; July 18, 1990). This rule also established a new Subpart L within 10 CFR Part 72 entitled, "Approval of Spent Fuel Storage Casks," containing procedures and criteria for obtaining NRC approval of dry storage cask designs.

The NRC subsequently issued a final rule on December 22, 1994 (59 FR 65898) that approved the Standardized NUHOMS® storage system and added it to the list of NRC-approved

cask designs in § 72.214, as CoC No. 1004. Amendment No. 1 to CoC No. 1004 was issued on March 28, 2000 (65 FR 16299).

## Discussion

The certificate holder (Transnuclear West, Inc.) submitted an application to the NRC on February 16, 1996, supplemented on November 15, 1996, October 9, 1998, and February 10, 1999, to amend CoC No. 1004 to include a new fuel specification and on July 26, 1999, to amend CoC No. 1004 to permit a Part 72 licensee to store BPRAs.

The first change permits a Part 72 licensee to store spent fuel in the NUHOMS® storage system using the new fuel qualification tables. The particular changes are incorporated into Section 1.2.1 of the Technical Specifications for CoC No. 1004. The changes will incorporate new fuel qualification tables for both pressurized water reactor (PWR) and boiling water reactor (BWR) fuel. The tables present the minimum required cooling time for fuel as a function of the initial fuel enrichment and fuel burnup. The use of the tables provides a simplified approach for users of the NUHOMS® storage system to select fuel for storage without calculating specific fuel assembly decay heat and radiation source terms.

The NRC agrees that this direct final rule provides a more simplified, accurate, and straightforward method for qualifying fuel to be stored in the NUHOMS® storage system and has documented its review and evaluation in a Safety Evaluation Report (SER) regarding use of new fuel qualification tables.

The second change permits a Part 72 licensee to store BPRAs with Babcock & Wilcox (B&W) 15 x 15 spent fuel assemblies in the NUHOMS® storage system model 24P. A BPRA is a reactor core component that is inserted inside a fuel assembly. BPRAs provide a means of controlling reactor power distribution and do not contain fissile material. No other changes to the

TN-West system design were requested in this application. The NRC staff performed a safety evaluation of this proposed CoC amendment request and found that the addition of the BPRAs to the B&W 15 x 15 fuel does not reduce the TN-West safety margin. In addition, the NRC staff has determined that the storage of BPRAs in the TN-West does not pose any increased risk to public health and safety. This is documented in a SER concerning the BPRA change.

The amended TN-West cask system, when used in accordance with the conditions specified in the CoC, the Technical Specifications, and NRC regulations, will meet the requirements of Part 72; thus, adequate protection of public health and safety will continue to be ensured. Currently, the CoC is approved only for storage of spent fuel assemblies.

Amendment No. 2 to CoC No. 1004, the revised Technical Specifications, the underlying Safety Evaluation Reports (SERs) for the amendment and the Environmental Assessment, are available for inspection at the NRC Public Document Room, 2120 L Street, NW. (Lower Level), Washington, DC. Single copies of the CoC and SERs may be obtained from Stephanie P. Bush-Goddard, Ph. D., Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone (301) 415-6257, email SPB@nrc.gov.

#### Discussion of Amendments by Section

§ 72.214 List of approved spent fuel storage casks.

Certificate No. 1004 will be revised indicating the addition of Amendment No. 2 with an effective date of **[insert date 75 days after publication in the Federal Register]**.

## Procedural Background

This rule is limited to the changes contained in Amendment No. 2 to CoC No. 1004 and does not include other aspects of the Standardized NUHOMS®-24P and NUHOMS®-52B cask system design. Because NRC considers this amendment to its rules to be noncontroversial and routine, the NRC is using the direct final rule procedure for this rule. The amendment to the rules will become effective on **[insert date 75 days after publication in the Federal Register]**. However, if the NRC receives significant adverse comments on the associated proposed rule published concurrently in the proposed rules section of this Federal Register by **[insert date 30 days after publication in the Federal Register]**, then the NRC will publish a notice that withdraws this action and will address the comments received in response to the proposed amendments. These comments will be addressed in a subsequent final rule. Absent significant modifications to the proposed changes requiring republication, the NRC will not initiate a second comment period on this action.

## Agreement State Compatibility

Under the “Policy Statement on Adequacy and Compatibility of Agreement State Programs” approved by the Commission on June 30, 1997, and published in the Federal Register on September 3, 1997 (62 FR 46517), this rule is classified as compatibility Category “NRC.” Compatibility is not required for Category “NRC” regulations. The NRC program elements in this category are those that relate directly to areas of regulation reserved to the NRC by the Atomic Energy Act of 1954, as amended (AEA), or the provisions of Title 10 of the Code of Federal Regulations. Although an Agreement State may not adopt program elements

reserved to NRC, it may wish to inform its licensees of certain requirements via a mechanism that is consistent with the particular State's administrative procedure laws, but does not confer regulatory authority on the State.

### Plain Language

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

### Finding of No Significant Environmental Impact: Availability

Under the National Environmental Policy Act of 1969, as amended, and the NRC regulations in Subpart A of 10 CFR Part 51, the NRC has determined that this rule is not a major Federal action significantly affecting the quality of the human environment and, therefore, an environmental impact statement is not required. The rule will amend the CoC for the NUHOMS® storage system within the list of approved spent fuel storage casks that power reactor licensees can use to store spent fuel at reactor sites under a general license. The amendment will add new fuel qualification tables to the technical specifications and add BPRAs to the authorized contents of the NUHOMS® system model 24P. The environmental assessment and finding of no significant impact on which this determination is based are available for inspection at the NRC Public Document Room, 2120 L Street NW. (Lower Level), Washington, DC. Single copies of the environmental assessment and finding of no significant impact are available from Stephanie

P. Bush-Goddard, Ph. D., Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone (301) 415-6257, email SPB@nrc.gov.

#### Paperwork Reduction Act Statement

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

#### Public Protection Notification

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

#### Voluntary Consensus Standards

The National Technology Transfer Act of 1995 (Pub. L. 104-113) requires that Federal agencies use technical standards that are developed or adopted by voluntary consensus standards bodies unless the use of such a standard is inconsistent with applicable law or otherwise impractical. In this direct final rule, the NRC would revise the Transnuclear West, Inc., Standardized NUHOMS® cask system listing within the list of NRC approved casks for spent fuel



storage in § 72.214. This action does not constitute the establishment of a standard that establishes generally-applicable requirements.

### 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 system designs approved by the NRC. Any nuclear power reactor licensee can use NRC-certified casks to store spent nuclear fuel if it notifies the NRC in advance, spent fuel is stored under the conditions specified in the cask's CoC, and the conditions of the general license are met. 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 Part 72 that approved the Standardized NUHOMS® storage system designs by adding them to the list of NRC-approved cask designs in § 72.214. The NRC subsequently issued Amendment No. 1 to CoC No. 1004 on March 28, 2000 (65 FR 16299). The certificate holder (Transnuclear West, Inc.) submitted an application to the NRC on February 16, 1996, supplemented on November 15, 1996, October 9, 1998, February 10, 1999 and July 26, 1999 to amend CoC No. 1004 to include new fuel specification tables and to add BPRAs to the authorized contents of the NUHOMS® storage system. The proposed new fuel specification tables in Amendment No. 2 provides a simplified method for determining acceptable spent fuel to be stored in the NUHOMS® storage system and will add BPRAs as authorized contents of the NUHOMS® storage system model 24P that are currently only for storage of spent fuel assemblies.

The alternative to Amendment 2 is to withhold approval of this amended cask system design. This alternative would require users of the NUHOMS® storage system to use a less efficient method for selecting fuel for storage and would also require users to bear the additional

costs of disassembling BPRA's from the spent fuel assemblies and of storing them as low-level waste.

Approval of the direct final rule will eliminate the problems described above and is consistent with previous Commission actions. Further, the direct final rule will have no adverse effect on public health and safety. This direct final rule has no significant identifiable impact or benefit on other Government agencies.

Based on the above discussion of the benefits and impacts of the alternatives, the NRC concludes that the requirements of the 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 thus, this action is recommended.

#### Small Business Regulatory Enforcement Fairness Act

In accordance with the Small Business Regulatory Enforcement Fairness Act of 1996, the NRC has determined that this action is not a major rule and has verified this determination with the Office of Information and Regulatory Affairs, Office of Management and Budget.

#### Regulatory Flexibility Certification

In accordance with the Regulatory Flexibility Act of 1980 (5 U.S.C. 605(b)), the NRC certifies that this rule will not, if promulgated, have a significant economic impact on a substantial number of small entities. This direct final rule affects only the operation of nuclear power plants, independent spent fuel storage facilities, and TN-West. The companies that own these plants do not fall within the scope of the definition of "small entities" set forth in the Regulatory

Flexibility Act or the Small Business Size Standards set out in regulations issued by the Small Business Administration at 13 CFR Part 121.

### Backfit Analysis

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

### List of Subjects In 10 CFR Part 72

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

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

## PART 72--LICENSING REQUIREMENTS FOR THE INDEPENDENT STORAGE OF SPENT NUCLEAR FUEL AND HIGH-LEVEL RADIOACTIVE WASTE

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

AUTHORITY: Secs. 51, 53, 57, 62, 63, 65, 69, 81, 161, 182, 183, 184, 186, 187, 189, 68 Stat. 929, 930, 932, 933, 934, 935, 948, 953, 954, 955, as amended, sec. 234, 83 Stat. 444, as

amended (42 U.S.C. 2071, 2073, 2077, 2092, 2093, 2095, 2099, 2111, 2201, 2232, 2233, 2234, 2236, 2237, 2238, 2282); sec. 274, Pub. L. 86-373, 73 Stat. 688, as amended (42 U.S.C. 2021); sec. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846); Pub. L. 95-601, sec. 10, 92 Stat. 2951 as amended by Pub. L. 10d - 48b, sec. 7902, 10b Stat. 31b3 (42 U.S.C. 5851); sec. 102, Pub. L. 91-190, 83 Stat. 853 (42 U.S.C. 4332); secs. 131, 132, 133, 135, 137, 141, Pub. L. 97-425, 96 Stat. 2229, 2230, 2232, 2241, sec. 148, Pub. L. 100-203, 101 Stat. 1330-235 (42 U.S.C. 10151, 10152, 10153, 10155, 10157, 10161, 10168).

Section 72.44(g) also issued under secs. 142(b) and 148(c), (d), Pub. L. 100-203, 101 Stat. 1330-232, 1330-236 (42 U.S.C. 10162(b), 10168(c),(d)). Section 72.46 also issued under sec. 189, 68 Stat. 955 (42 U.S.C. 2239); sec. 134, Pub. L. 97-425, 96 Stat. 2230 (42 U.S.C. 10154). Section 72.96(d) also issued under sec. 145(g), Pub. L. 100-203, 101 Stat. 1330-235 (42 U.S.C. 10165(g)). Subpart J also issued under secs. 2(2), 2(15), 2(19), 117(a), 141(h), Pub. L. 97-425, 96 Stat. 2202, 2203, 2204, 2222, 2244, (42 U.S.C. 10101, 10137(a), 10161(h)). Subparts K and L are also issued under sec. 133, 98 Stat. 2230 (42 U.S.C. 10153) and sec. 218(a), 96 Stat. 2252 (42 U.S.C. 10198).

2. In § 72.214, Certificate of Compliance (CoC) 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

Amendment No. 1 Effective Date: April 27, 2000

Amendment No. 2 Effective Date: **[insert date 75 days after publication in the Federal Register]**

SAR Submitted by: Transnuclear West, Inc.

SAR Title: Transnuclear West, Inc., "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

Model Number: Standardized NUHOMS®-24P and NUHOMS®-52B

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Dated at Rockville, Maryland, this 25th day of May, 2000.

For the Nuclear Regulatory Commission.

**/RA/**

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William D. Travers,  
Executive Director for Operations.

Amendment No. 2 Effective Date: [insert date 75 days after publication in the Federal Register]

SAR Submitted by: Transnuclear West, Inc.

SAR Title: Transnuclear West, Inc., "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

Model Number: Standardized NUHOMS®-24P and NUHOMS®-52B

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Dated at Rockville, Maryland, this 25th day of May, 2000.

For the Nuclear Regulatory Commission.

/RA/

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William D. Travers,  
Executive Director for Operations.

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