

ENVIRONMENTAL ASSESSMENT AND FINDING OF
NO SIGNIFICANT IMPACT
ON
FINAL AMENDMENT TO 10 CFR PART 72
LIST OF APPROVED SPENT FUEL STORAGE CASKS; REVISION, NUHOMS 24-P
AND NUHOMS 52-B

Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
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I. THE PROPOSED ACTION

The proposed action amends 10 CFR Part 72 to revise a spent fuel storage cask design in the "List of Approved Spent Fuel Storage Casks" in 10 CFR 72.214. This action addresses four administrative issues in § 72.214 for CoC No. 1004. These issues include: (1) correcting the expiration date of CoC No. 1004 from the present "(20 years after the final rule effective date)" to "January 23, 2015;" (2) correcting the title and revision number of the standardized NUHOMS SAR to be consistent with the approach the NRC proposed for CoC SARs in a new § 72.248 (see proposed rule in 63 FR 56098; October 21, 1998); (3) revising CoC No. 1004 to reflect the transfer of the CoC from VECTRA Technologies, Inc. to Transnuclear West, Inc., (TN West); and (4) specifying the applicability of Amendment No. 0 and Amendment No. 1 to CoC No. 1004. The final action maintains a wide selection of NRC-approved cask designs for the storage of spent nuclear fuel at commercial nuclear power reactor sites under a Part 72 license without the need for additional site-specific approvals.

II. THE NEED FOR THE PROPOSED ACTION

This rule is needed to revise a listing of a cask design within the "List of Approved Spent Fuel Storage Casks" in § 72.214 to indicate that Amendment No. 1 will be issued to CoC No. 1004.

The NRC is revising information contained in § 72.214 under CoC No. 1004 to address four administrative issues. These issues include: (1) correcting the expiration date of CoC No. 1004 from the present "(20 years after the final rule effective date)" to "January 23, 2015;" (2) correcting the title and revision number of the standardized NUHOMS SAR to be consistent with the approach the NRC final for CoC SARs in a new § 72.248 (see proposed rule in 63 FR 56098; October 21, 1998); (3) revising CoC No. 1004 to reflect the transfer of the CoC from VECTRA Technologies, Inc. to Transnuclear West, Inc., (TN West); and (4) specifying the applicability of Amendment No. 0 and Amendment No. 1 to CoC No. 1004 for Part 72 licensees.

Change 1 keeps the certificate expiration date consistent with the NRC's policy for Part 72 CoCs, which is to use 20 years from the date the final rule is effective. The proposed rule adding CoC No. 1004 to § 72.214 was effective on January 23, 1995; consequently, the expiration date for this CoC is January 23, 2015. Change 2 keeps CoC No. 1004 consistent with other changes to Part 72 (i.e., new § 72.248). The SAR Title will be changed from "Safety Analysis Report for the Standardized NUHOMS Horizontal Modular Storage System for Irradiated Nuclear Fuel, Revision 2" to "Final Safety Analysis Report for the Standardized NUHOMS Horizontal Modular Storage System for Irradiated Nuclear Fuel." In the new § 72.248, a final SAR shall be submitted to the Commission within 90 days after approval of the cask design and then will be updated periodically. Replacement pages will be provided to the Commission in accordance with § 72.248. Change 3 recognizes the transfer of the CoC from VECTRA to TN West, NRC received letters dated December 18, 1997, from both VECTRA and

TN West describing the purchase of VECTRA's intellectual properties and assets associated with NUHOMS technology by TN West. In its December 18, 1997, letter, TN West described that it planned to conduct fabrication activities in accordance with the quality assurance program described in Section 11 of the NUHOMS SAR. TN West further described that it had acquired the composite records of casks manufactured under CoC No. 1004 and that it had records associated with changes to the NUHOMS design implemented after issuance of the CoC. Change 4 describes how Part 72 licensees would continue to use spent fuel storage casks manufactured under CoC No. 1004, Amendment No. 0 (i.e., the initial CoC), if the cask being used was fabricated before the effective date of the final rule. After the effective date of the final rule, casks must be manufactured in accordance with CoC No. 1004, Amendment No. 1.

III. ENVIRONMENTAL IMPACTS OF PROPOSED ACTION

The United States and other countries have over 30 years of experience with dry storage of spent fuel. The environmental impacts associated with storage of light water reactor (LWR) spent fuel (including dry storage technologies) have been previously considered in other NRC rulemakings and licensing actions. In a proceeding entitled "Review and Final Revision of Waste Confidence Decision," published in the Federal Register on September 18, 1990 (55 FR 38474), the NRC found "reasonable assurance that, if necessary, spent fuel generated in any reactor can be stored safely and without significant environmental impacts for at least 30 years beyond the licensed life for operation (which may include the term of a revised or renewed license) of that reactor at its spent fuel storage basin, or at either onsite or offsite independent spent fuel storage installations." The "Environmental Assessment for 10 CFR Part 72 'Licensing Requirements for the Independent Storage of Spent Fuel and

High-Level Radioactive Waste,' " NUREG-1092¹ (August 1984), and the Supplementary Information of a proposed rule published in the Federal Register on May 27, 1986 (51 FR 19106), contain specific analyses showing that the potential environmental impacts from dry storage of spent fuel in NRC-approved cask designs are small. The "Environmental Assessment for Proposed Rule Entitled 'Storage of Spent Nuclear Fuel in NRC-Approved Storage Casks at Nuclear Power Reactor Sites,'" for the proposed rule published in the Federal Register on May 5, 1989 (54 FR 19379), discussed the environmental impact of dry storage cask designs and the finding of no significant impact. The "Environmental Assessment and Finding of No Significant Impact for 'Proposed Amendment to 10 CFR Part 72 List of Approved Spent Fuel Storage Casks: Addition,'" for the proposed rule adding CoC No. 1004 to the list of approved cask designs in § 72.214 was published in the Federal Register on December 22, 1994 (59 FR 65898), also discussed the environmental impact of dry storage cask designs and the finding of no significant impact.

Amendment No. 1 revises and reformats the CoC to be consistent with the NRC's current format and layout for Part 72 certificates. Conditions No. 1 through 8 are renumbered.

Based on the October 1995 and January 1999 safety evaluations, TN West's established fabrication inspection procedures, and proposed Amendment No. 1 to CoC No. 1004, the NRC staff has concluded that the NUHOMS-24P and -52B cask design when used in accordance with the conditions specified in the CoC as amended, and NRC regulations, will meet the requirements of Part 72 and thus ensure adequate protection of the public health and safety.

¹ Copies of NUREG-1092 may be purchased from the Superintendent of Documents, U.S. Government Printing Office, P. O. Box 37082, Washington, DC 20013-7082. Copies are also available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161. A copy is also available for inspection and/or copying at the NRC Local Public Document Room, 2120 L Street, NW. (Lower Level), Washington, DC 20003-1527.

The NRC, through the safety evaluations for the amendment in this rule, has determined that if the conditions specified in the certificate of compliance are met, adequate protection of public health and safety will be maintained. Based on the above assessment, the NRC finds that amending this dry spent fuel storage cask design changing the name of the person who submitted the SAR (i.e., name of the certificate holder), changing the title of the SAR, and changing the certificate expiration date to “January 23, 2015,” will not have an environmental impact.

IV. ALTERNATIVES TO THE PROPOSED ACTION

Because the NRC has determined that there are no environmental impacts associated with this action, any alternative with equal or greater environmental impacts need not be evaluated. The “no action” alternative is unacceptable (none of the changes to the rule language or CoC would be adopted) because taking “no action” would leave incorrect information about CoC 1004 in place.

V. AGENCIES AND PERSONS CONTACTED

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

VI. FINDING OF NO SIGNIFICANT IMPACT

Based on the foregoing environmental assessment, the NRC concludes that this rule entitled, "List of Approved Spent Fuel Storage Casks; Revision, NUHOMS 24-P and NUHOMS 52-B " will not have a significant incremental effect on the quality of the human environment. Therefore, the NRC has determined that an environmental impact statement for this rulemaking is not required.

Certain documents related to this rule, including comments received by the NRC, may be examined at the NRC Public Document Room, 2120 L Street NW. (Lower Level), Washington, DC 20003-1527. These same documents also may be viewed and downloaded electronically via the interactive rulemaking web site established by NRC for this rulemaking.