



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

September 2, 2016

MEMORANDUM TO: Sheena Whaley, Chief  
Rulemaking and Project Management Branch  
Division of Material Safety, State, Tribal  
and Rulemaking Programs, NMSS

FROM: John McKirgan, Chief **/RA/**  
Spent Fuel Licensing Branch  
Division of Spent Fuel Management, NMSS

SUBJECT: USER NEED FOR RULEMAKING FOR AMENDMENT NO. 14 TO  
CERTIFICATE OF COMPLIANCE NO. 1004 FOR THE STANDARDIZED  
NUHOMS® STORAGE SYSTEM

The following information is being provided to request rulemaking support for the following Spent Fuel Management (SFM) 10 CFR Part 72 licensing activity:

1. Changes to 10 CFR 72.214 rule text (changes appear in bold):

Certificate Number: 1004

Initial Certificate Effective Date: January 23, 1995

[...]

**Amendment No. 14 Effective Date: [insert 75 days from date of FR publication]**

SAR Submitted by: AREVA, 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

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

2. Use the following text for the purpose and scope of the amendment:

By letter dated April 16, 2015, as supplemented on November 11, 2015, and March 14, 2016, AREVA TN (AREVA) submitted a request to the U.S. Nuclear Regulatory Commission (NRC) to amend Certificate of Compliance (CoC) No. 1004 for the Standardized NUHOMS® System. The proposed changes include the following:

CONTACT: Jose R. Cuadrado, NMSS/DSFM  
301-415-0606

1. Improvements to the fuel qualification tables for the BWR and PWR dry shielded canisters (DSCs) to allow for the calculation of cooling times for different uranium loading (described in Chapter 13 of this document).
  2. Include new heat load zoning configurations (HLZCs) for the 61BTH, 32PTH1 and 69BTH DSCs.
  3. Authorize storage of up to 61 damaged BWR fuel assemblies in the 61BTH DSC.
  4. Authorize storage of up to sixteen (16) failed fuel cans (FFCs) in the 32PTH1 DSC.
  5. Expansion of the 37PTH criticality analysis to include poison rod assemblies (PRAs).
  6. Evaluation of the horizontal storage module (HSM) model HSM-H for shielding impact of reduced density concrete and gaps during installation.
  7. Clarify and revise various terms and definitions in the Technical Specifications (TSs).
  8. Authorize acceptance testing for neutron absorber content to be performed by either neutron transmission or by B-10 volume density measurement.
  9. Amend the Technical Specifications to remove a requirement to return to a spent fuel pool following a cask drop.
  10. Revise the minimum soluble boron concentration of 2800 ppm for Type A2 poison for Westinghouse (WE) 17x17 fuel design only.
  11. Update the existing Fuel Qualification Table (FQT) for the 32PTH1 Dry Shielded Canister (DSC) with a heat load of 1.2 kW/FA.
  12. Allow for an alternative loading configuration of 16 damaged fuel assemblies in the 32PTH1 DSC.
3. The proposed CoC, Technical Specifications, and preliminary SER have been placed in ADAMS (see references below) and are available for your use in the rulemaking package. The Division of Spent Management will designate these documents as Official Agency Records after the Executive Director for Operations has approved the package (ADAMS Package No. ML16246A154).

Docket No. 72-1004

ADAMS References: 1. Proposed CoC No. 1004, Amendment 14 (ML16246A173)  
2. Proposed TS, Attachment A, Amendment 14 (ML16246A170)  
3. Preliminary SER (ML16246A169)

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  2. Include new heat load zoning configurations (HLZCs) for the 61BTH, 32PTH1 and 69BTH DSCs.
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  5. Expansion of the 37PTH criticality analysis to include poison rod assemblies (PRAs).
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Docket No. 72-1004

ADAMS References: 1. Proposed CoC No. 1004, Amendment 14 (ML16246A173)  
 2. Proposed TS, Attachment A, Amendment 14 (ML16246A170)  
 3. Preliminary SER (ML16246A169)

**ADAMS Package No.:ML16246A154    Memo: ML16246A172**

Distribution: DSFM r/r    NMSS r/f

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<b>OFC</b>	DSFM		DSFM		DSFM		DSFM		OGC-NLO		DSFM
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