



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

February 14, 2020

MEMORANDUM TO: June Cai, Chief
Materials Rulemaking
and Project Management Branch
Division of Rulemaking, Environmental, and Financial Support
Office of Nuclear Material Safety
and Safeguards

FROM: Daniel I. Doyle, Acting Chief */RA/*
Storage and Transportation Licensing Branch
Division of Fuel Management
Office of Nuclear Material Safety
and Safeguards

SUBJECT: USER NEED FOR RULEMAKING FOR THE HOLTEC HI-STORM
FLOOD/WIND MULTIPURPOSE CANISTER STORAGE SYSTEM,
AMENDMENT NO. 5

The purpose of this communication is to request support for rulemaking activities in the Division of Fuel Management (DFM) for the following Title 10 of the *Code of Federal Regulations* (10 CFR) Part 72 licensing action:

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

Certificate Number: 1032.

Initial Certificate Effective Date: June 13, 2011, superseded by Amendment Number 0, Revision 1, on April 25, 2016.

* * *

Amendment Number 5 Effective Date: [insert 75 days from date of *Federal Register* publication].

SARs Submitted by: Holtec International.

SAR Title: Final Safety Analysis Report for the HI-STORM FW System.

Docket Number: 72-1032.

Certificate Expiration Date: June 12, 2031.

Model Numbers: HI-STORM FW MPC-32ML, MPC-37, and MPC-89.

2. By letter dated June 15, 2018, and as supplemented on September 20, 2018, April 1, 2019, April 30, 2019, June 14, 2019, October 4, 2019, October 21, 2019, and December 18, 2019, Holtec International submitted an amendment request to the U.S. Nuclear Regulatory Commission for the HI-STORM Flood/Wind Multipurpose Canister Storage System Certificate of Compliance (CoC) No. 1032. The proposed changes include the following:

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- 1) (a) Add new heat load patterns for the MPC-89 and MPC-37, and (b) revise the minimum required cooling time for fuel to 1 year for MPC-89 and MPC-37.
 - 2) Add four new fuel types to the approved contents listed in CoC Appendix B.
 - 3) Allow an exception to the American Society of Mechanical Engineers Code to use certain duplex stainless steels in the HI-STORM FW system.
 - 4) Use FLUENT to revise the calculation for evaluating effective fuel conductivities.
 - 5) Add the use of damaged fuel isolator in CoC Appendix A.
 - 6) Add two versions of the standard HI-TRAC VW: Version V has a natural circulation feature, and Version V2 has the option for removable neutron shield.
 - 7) Add the option of using cyclic vacuum drying for all MPCs.
 - 8) (a) Add fuel assemblies containing blended low enriched uranium (BLEU) as approved contents, (b) add the definition for BLEU fuel assemblies to final safety analysis report (FSAR) Glossary Section and the definition section in the CoC, and (c) add the required shielding evaluation to FSAR when storing BLEU fuel assemblies in HI-STORM FW system.
 - 9) Additional clarifications and editorial and minor changes.
3. The proposed CoC, CoC Appendix A—Technical Specifications, CoC Appendix B—Approved Contents and Design Features, and preliminary safety evaluation report (SER) have been placed in ADAMS (see references below) and are available for your use in the rulemaking package. DFM will designate these documents as Official Agency Records after the Executive Director for Operations has approved the package (ADAMS Package No. ML20014E616).

The Office of the General Counsel has reviewed this memorandum with its referenced documents and has no legal objection to its contents.

DOCKET No.: 72-1032
CAC No.: 001028
EPID: L-2017-LLA-0031

ADAMS References:

1. Proposed CoC 1032 Amendment No. 5 (ML20014E618)
2. Proposed CoC 1032 Amendment No. 5 Appendix A (ML20014E619)
3. Proposed CoC 1032 Amendment No. 5 Appendix B (ML20014E620)
4. Preliminary CoC 1032 Amendment No. 5 SER (ML20014E621)

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ADAMS Package Accession No.: ML20014E616 (Pkg) ML20014E617 (Memo)

* concur by email

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