November 5, 2010

MEMORANDUM TO: Kevin O'Sullivan, Chief
Rulemaking Branch B
Division of Intergovernmental Liaison and Rulemaking, FSME

FROM: Robert Johnson, Acting Chief **/RA/**
Licensing Branch
Division of Spent Fuel Storage and Transportation, NMSS

SUBJECT: USER NEED FOR RULEMAKING FOR THE HOLTEC HI-STORM FLOOD/WIND SYSTEM (TAC NO. L24321)

The following information is being provided to request rulemaking support for the following Spent Fuel Storage and Transportation (SFST) 10 CFR Part 72 licensing activity:

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

Certificate Number: 1032
Initial Certificate Effective Date: TBD
Amendment No. 0. Effective Date: [insert 75 days from date of FR publication]
SAR Submitted by: Holtec International.
SAR Title: Safety Analysis Report on the HI-STORM FW System
Docket Number: 72-1032
Certificate Expiration Date: TBD
Model Numbers: MPC-37, MPC-89

2. On October 13, 2009, as supplemented on December 18, 2009, April 13, June 4, and August 20, and October 14, 2010, Holtec International, Inc. (Holtec, the applicant) submitted an application to approve the HI-STORM Flood/Wind (FW) system Certificate of Compliance (CoC) - No. 1032 under 10 CFR 72 Subpart K, General License for Storage of Spent Fuel at Power Reactor Sites. The HI-STORM FW system provides:

- The ability to store and transport Boiling Water Reactor (BWR) fuel with high initial enrichment (up to 4.8 wt. % U-235 planer average) without reliance on burn-up or gadolinium credit.

- The ability to load and store spent nuclear fuel from the longest to the shortest currently and expected to be produced in the United States without requiring site crane upgrades.

- A reduction in the 10 CFR 71 burn-up credit requirement for the pressurized water reactor (PWR) basket allowing transportation of 5 wt. % U-235 fuel with moderate burn-up.

- Enlarged storage cell opening sizes in both PWR and BWR multipurpose (MPC) canisters to ensure distorted irradiated fuel will fit without difficulty. The MPC cavities are also sized to permit canisterized fuel to be stored in certain designated locations.

- Greater heat rejection capacity with lower peak fuel cladding temperature than the HI-STORM 100 Cask System, CoC No. – 1014.

- A variable weight (HI-TRAC VW) transfer cask that will allow use of the full capacity of a facility's cask crane.

The HI-STORM FW system consists of the following major components:

- HI-STORM FW Overpack

- PWR MPC-37

- BWR MPC-89

- HI-TRAC VW Transfer Cask

3. The proposed CoC and Technical Specifications (TS), and preliminary Safety Evaluation Report (SER) have been placed in ADAMS (see references below) and are available for your use in the rulemaking package. SFST will designate these documents as Official Agency Records after the Executive Director for Operations has approved the package (ADAMS Package No. ML103020135.)

Docket No. 72-1032

ADAMS References: 1. Proposed CoC No. 1032, (ML103020144)
2. Proposed TS Appendix A (ML103020147)
3. Proposed TS Appendix B (ML103020148)
4. Preliminary SER (ML103020151)

CONTACTS: Daniel Huang, SFST/NMSS/RIOB
(301) 492-3315

John Goshen, SFST/NMSS/LB
(301) 492-3325

- Greater heat rejection capacity with lower peak fuel cladding temperature than the HI-STORM 100 Cask System, CoC No. – 1014.

- A variable weight (HI-TRAC VW) transfer cask that will allow use of the full capacity of a facility's cask crane.

The HI-STORM FW system consists of the following major components:

- HI-STORM FW Overpack

- PWR MPC-37

- BWR MPC-89

- HI-TRAC VW Transfer Cask

4. The proposed CoC and Technical Specifications (TS), and preliminary Safety Evaluation Report (SER) have been placed in ADAMS (see references below) and are available for your use in the rulemaking package. SFST will designate these documents as Official Agency Records after the Executive Director for Operations has approved the package (ADAMS Package No. ML103020135.)

Docket No. 72-1032

ADAMS References: 1. Proposed CoC No. 1032, (ML103020144)
2. Proposed TS Appendix A (ML103020147)
3. Proposed TS Appendix B (ML103020148)
4. Preliminary SER (ML103020151)

CONTACTS: Daniel Huang, SFST/NMSS/RIOB
(301) 492-3315

John Goshen, SFST/NMSS/LB
(301) 492-3325

File Location: G:\SFST\HI-STORM FW\Final\Rulemaking\HI-STORM FW User Need.docx
HS FW Proposed CoC.doc
Proposed TS CoC 1032 App A.doc
Proposed TS CoC 1032 App B.doc
HS FW Preliminary SER.doc

ADAMS Accession No.

OFC	SFST	SFST	SFST	SFST	SFST	SFST
NAME	VWilson	GHornseth	JVera	JSolis	MGordon	JGoshen
DATE	10//20/2010	10/ 20/2010	10/ 20/2010	10/ 20/2010	10/ 20/2010	11/04/2010
OFC	SFST	SFST	SFST	SFST	SFST	SFST
NAME	ASotamayor-Rivera	WWheatley	RTripathi	DJackson	MRahimi	RJohnson
DATE	10/ 20/2010	11/ 04/2010	10/ 28/2010	10/ 28/2010	10/ 26/2010	11/05/2010

OFFICIAL RECORD COPY