

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



August 6, 2015

MEMORANDUM TO: Anthony H. Hsia, Deputy Director
Division of Spent Fuel Storage and Transportation, NMSS

FROM: Bernard White, Senior Project Manager /RA/ M. Sampson For
Spent Fuel Licensing Branch
Division of Spent Fuel Management, NMSS

SUBJECT: SUMMARY OF JULY 9, 2015, MEETING WITH NAC INTERNATIONAL
TO DISCUSS PROPOSED MAGNASTOR AMENDMENTS (TAC NO.
L25029)

Background

A meeting was held on July 9, 2015, in Rockville, Maryland, between NAC International (NAC) and the U.S. Nuclear Regulatory Commission (NRC) to discuss two proposed amendments to Certificate of Compliance No. 1031 for the Modular Advanced Generation Nuclear All-purpose Storage (MAGNASTOR[®]) Dry Cask Storage System.

The meeting was noticed on June 26, 2015 (see ADAMS Accession No. ML15177A259). The meeting attendance list is provided as Enclosure No. 1.

Discussion

The discussion generally followed the agenda (Enclosure No. 2). The primary reason for the meeting was for NAC to provide NRC with two proposed amendments to the MAGNASTOR[®] storage cask and receive NRC comments.

In the public portion of the meeting, NAC briefly discussed the proposed MAGNASTOR[®] Amendment Nos. 6 and 7. Amendment No. 6 is to add a passive transfer cask and amendment No. 7 will increase the canister decay heat beyond 35.5 kW. The increased decay heat will be accompanied by laboratory testing to validate the thermal modeling techniques at heat loads above 30 kW. NAC expects to submit Amendment No. 6 in late July or early August and Amendment No. 7 in the October timeframe.

During the closed portion of the meeting, NAC provided more details regarding the passive transfer cask design, proposed technical specification revisions and underlying technical bases for the structural, thermal, and shielding evaluations.

During the discussion of the proposed higher decay heat, NAC discussed the current analytical basis, benchmark models for convective flow, and its proposed thermal testing to benchmark convective flow at higher decay heat loads.

Copies of the presentation slides are provided as Enclosure Nos. 3 (proprietary) and 4 (non-proprietary).

Docket No. 72-1031

TAC No. L25029

Enclosures:

1. Meeting Attendees
2. Agenda
3. Presentation Slides (proprietary)
4. Presentation Slides (non-proprietary)

A. Hsia

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Distribution: NRC Attendees M. Sampson D. Marcano

G:\SFST\Bernie White\Casework\MAGNASTOR\July 9, 2015 public meeting\Summary for 7-9-15 meeting on MAGNASTOR.docx

ADAMS P8 Package No.: ML15223A020 ADAMD P8 Memo No.: ML15223A021

Enclosure 3: ML15223A023 (Proprietary) Enclosure 4: ML15223A024 (Non-Proprietary)

OFC	DSFM	DSFM	DSFM
NAME	BWhite	MDeBose	MSampson
DATE	8/3/15	8/4/15	8/6/15

MEETING ATTENDEES

Meeting Title: Discussion of proposed amendments 6 and 7 to Model No. MAGNASTOR storage system.

Participants: NAC International and the NRC

Date: July 9, 2015, 1:00 – 4:00 p.m.

Location: U.S. NRC Headquarters, 0-9-B04

NAME	AFFILIATION
Bernie White	NRC/NMSS/DSFM
Jeremy Smith	NRC/NMSS/DSFM
Joe Borowsky	NRC/NMSS/DSFM
Michele Sampson	NRC/NMSS/DSFM
JoAnn Ireland	NRC/NMSS/DSFM
Ghani Zigh	NRC/NMSS/DSFM
Christian Araguas	NRC/NMSS/DSFM
Jason Piotter – on phone	NRC/NMSS/DSFM
John Ritchie	NAC International
Mike Yaksh	NAC International
Wren Fowler	NAC International
George Carver	NAC International
Carlyn Green – on phone	Ux Consulting

Agenda
Model No. MAGNASTOR
Partially Closed Meeting
July 9, 2015 1:00 - 4:00 p.m.

Purpose: To discuss two amendments to the MAGNASTOR® storage system to increase the authorized decay head load. An agenda is enclosed.

1:00 – 1:30 pm Open Portion of the Meeting

Amendment 6

- General overview of passive transfer cask and schedule

Amendment 7 – Proposed

- General overview of proposed amendment to increase canister thermal limits, associated thermal analyses, and current Technical Specification requirement for mass flow rate testing of the first canister loaded at or above 30kW

Public Comments

1:30 – 4:00 pm Closed Portion of the Meeting

Amendment 6

- Detailed overview of passive transfer cask
- Structural details
- Thermal details
- Shielding details
- Operational details

Amendment 7

- Thermal details and current modeling methods
- Laboratory approaches for demonstrating thermal modeling for higher heat loads
- Applicability of laboratory testing for satisfying the current Technical Specification requirement for mass flow rate testing of the first canister loaded at or above 30kW