



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

December 22, 2017

Mr. Wren Fowler
Licensing Manager
NAC International
3930 East Jones Bridge Road, Suite 200
Norcross, GA 30092

SUBJECT: APPLICATION FOR AMENDMENT NO. 6 TO THE MODEL NO. NAC-UMS
STORAGE CASK – REQUEST FOR ADDITIONAL INFORMATION

Dear Mr. Fowler:

By letter dated May 23, 2017 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML17179A382), NAC International (NAC) submitted an application in accordance with Title 10 of the *Code of Federal Regulations* Part 72, for an amendment to Certificate of Compliance No. 1015 for the Model No. NAC-UMS storage cask to revise several technical specifications.

In connection with our review, we need the information identified in the enclosure to this letter. Additional information requested by this letter should be submitted in the form of revised safety analysis report pages. Please provide your response within 2 months from the date of this letter.

Please reference Docket No. 72-1015 and Enterprise Project Identifier (EPID) No. L-2017-LLA-0367 (formerly Cost Accounting Code No. L25221) in future correspondence related to this request. The staff is available to meet to discuss your proposed responses. If you have any questions, I may be contacted at (301) 415-6577.

Sincerely,

/RA/

Bernard H. White IV, Senior Project Manager
Spent Fuel Licensing Branch
Division of Spent Fuel Management
Office of Nuclear Material Safety
and Safeguards

Docket No. 72-1015
EPID No. L-2017-LLA-0367

Enclosure:
Request for Additional Information

APPLICATION FOR AMENDMENT NO. 6 TO THE MODEL NO. NAC-UMS STORAGE CASK –
 REQUEST FOR ADDITIONAL INFORMATION, DOCUMENT DATE: December 22, 2017

Electronic Distribution: A. Rigato, A. Sotomayor-Rivera

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ADAMS Accession No.: ML17356A280

OFC	DSFM/SFLB	DSFM/SFLB	DSFM/CSTB
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OFC	DSFM/CSTB	DSFM/SFLB	
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DATE	12/20/17	12/22/17	

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Request for Additional Information
Docket No. 72-1015
Certificate of Compliance No. 1015
Model No. MAGNASTOR Storage System

By application dated May 23, 2017 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML17179A382), NAC International (NAC or the applicant) submitted an application in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) Part 72 for an amendment to Certificate of Compliance No. 1015 for the Model No. NAC-UMS storage system. This request for additional information identifies information needed by the U.S. Nuclear Regulatory Commission staff in connection with its review of the application. The requested information is listed by chapter number and title in the applicant's safety analysis report (SAR). The NRC staff used NUREG-1536, "Standard Review Plan for Spent Fuel Dry Storage Systems at a General License Facility — Final Report," in its review of the application.

Each question describes information needed by the staff for it to complete its review of the application and to determine whether the applicant has demonstrated compliance with regulatory requirements.

Chapter 4 Thermal Evaluation

Provide additional justification to show that Surveillance Requirement (SR) No. SR 3.1.6.2 is bounded by Surveillance Requirement No. SR 3.1.6.1 and clarify how a misload would be detected.

Section A 3.1.6 of the Technical Specifications has two SRs. SR 3.1.6.1 requires the applicant to either "Verify the difference between the [independent spent fuel storage installation] ISFSI ambient temperature and the average outlet air temperature is < 102°F for the [pressurized-water reactor] PWR canister or < 92°F for the [boiling-water-reactor] BWR canister" or "Visually verify all four air inlet and outlet screens are unobstructed" every 24 hours. The current technical specifications also requires SR 3.1.6.2, which is the exact same action as option one under SR 3.1.6.1, to be completed "Once between 5 and 30 days after STORAGE OPERATIONS begin". Final Safety Analysis Report Appendix 12C states that SR 3.1.6.2 is used to establish the initial confirmation of the operability of the cask and following the initial confirmation, the continued operability of the cask shall be confirmed by one of the verification methods specified in SR 3.1.6.1. Appendix 12C states that SR 3.1.6.2 should be performed at the specified frequency to ensure that the cask has reached thermal equilibrium which will allow the temperature measurements to reflect expected temperatures under normal operations. This will ensure operability and no misloading of the cask. Additionally, the NRC safety evaluation report (ADAMS Accession No. ML052860175) for issuance of Amendment No. 4 to the certificate of compliance explicitly states "...the staff did not object to adding the option of performing a visual inspection of the inlet and outlet screens. Acceptance of the visual surveillance was predicated upon initially performing, on a one time basis, a verification of the temperature difference between the ambient and the cask outlets. The staff position is that this initial verification ensures that the cask is loaded within its thermal design basis and has not been inadvertently thermally overloaded."

In this amendment, the applicant proposed to delete SR 3.1.6.2 stating that it is bounded by the surveillance frequency presented in SR 3.1.6.1. The staff understands the frequency is bounded but with the proposed deletion of SR 3.1.6.2 there is a possibility that a cask user would never have to verify the difference between the ISFSI ambient temperature and the

Enclosure

average outlet air temperature since they may choose either of the two actions under SR 3.1.6.1. In addition, the deletion would eliminate the action NRC staff used as safety basis for allowing the second option of Section A of SR 3.1.6.1. The applicant should provide technical justification that the action of SR 3.1.6.2 is bounded by the action of visually verifying all inlet and outlet vents are unobstructed, and clarify how a misload would be detected if the applicant is not required to verify the difference between the ISFSI ambient temperature and the average outlet air temperature under SR 3.1.6.1.

This information is needed to confirm compliance with 10 CFR 72.236(f) and (l).