

December 18, 2019

U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852-2738

Attn: Document Control Desk

Subject: Submission of a Request to Amend the U.S. Nuclear Regulatory Commission
Certificate of Compliance No. 1015 for the NAC-UMS® Cask System

Docket No. 72-1015

- References:
1. U.S. Nuclear Regulatory Commission (NRC) Certificate of Compliance (CoC) No. 1015 for the NAC International Universal Storage System (UMS) Cask System, Amendment No. 7, July 2, 2019
 2. NAC-UMS Cask System Final Safety Analysis Report (FSAR), Revision 14, NAC International, July 2019

NAC International (NAC) hereby submits a request to revise Reference 1, Appendix A and associated bases presented in Reference 2 to included damaged BWR fuel as authorized content. The following summarizes the changes requested to Reference 1:

1. Reference 1, Removed the List of Effective Pages for Appendix A and B
2. Reference 1, A 1.1, added definition of "Damaged BWR Fuel Can"
3. Reference 1, A 1.1, revised definitions of the following to include "BWR Damaged Fuel Can (DFC)":
 - a. DAMAGED FUEL
 - b. FUEL DEBRIS
4. Reference 1, A 1.1, revised the following definitions:
 - a. HIGH BURNUP FUEL
 - b. INITIAL PEAK PLANAR-AVERAGE ENRICHMENT
5. Reference 1, Appendix B, Revisions throughout to include Damaged BWR fuel
6. Reference 2, has been revised throughout to include descriptions and evaluations of Damaged BWR fuel.

Enclosure 1 contains a list of changes to the NAC-UMS FSAR and Enclosure 2 contains a list of changes to the associated license drawings. Enclosure 3 includes proposed changes to the CoC Technical Specifications. Enclosure 4 contains supporting NAC proprietary calculations and Enclosure 5 contains the changed pages to the NAC-UMS FSAR. Per Attachment 1 to this letter, NAC requests NAC proprietary information contained in Enclosures 2 and 4 be withheld from public disclosure via 10 CFR 2.390.



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Consistent with NAC administrative practice, this proposed FSAR revision is numbered to uniquely identify the applicable changed pages. Revision bars mark the FSAR text changes on the Revision 19A pages. The included List of Effective Pages identifies the revision level of all pages in the Reference 2 FSAR with Revision 19A pages.

In order to better facilitate the review process, NAC is providing the Revision 19A change pages with appropriate backing pages. In accordance with NAC's administrative practices, upon final acceptance of this application, the 19A changed pages will be reformatted and incorporated into the next revision of the NAC-UMS FSAR.

If you have any comments or questions, please contact me on my direct line at 678-328-1236.

Sincerely,

A handwritten signature in black ink, appearing to read 'Wren Fowler', written over a horizontal line.

Wren Fowler
Director, Licensing
Engineering

Attachment:

Attachment 1 – NAC International Affidavit Pursuant to 10 CFR 2.390

Enclosures:

Enclosure 1 – List of Changes for NAC-UMS FSAR, Amendment 8

Enclosure 2 – List of Drawing Changes for NAC-UMS FSAR, Amendment 8

Enclosure 3 – Proposed Changes for NAC-UMS Technical Specifications, Amendment 8

Enclosure 4 – Supporting Calculations for NAC-UMS FSAR, Amendment 8

Enclosure 5 – FSAR Changed Pages and LOEP for NAC-UMS FSAR, Amendment 8

**NAC INTERNATIONAL
AFFIDAVIT PURSUANT TO 10 CFR 2.390**

George Carver (Affiant), Vice President, Engineering and Licensing, of NAC International, hereinafter referred to as NAC, at 3930 East Jones Bridge Road, Norcross, Georgia 30092, being duly sworn, deposes and says that:

1. Affiant has reviewed the information described in Item 2 and is personally familiar with the trade secrets and privileged information contained therein, and is authorized to request its withholding.
2. The information to be withheld includes the following NAC Proprietary Information that is being provided to support the technical review of NAC's Request for a Certificate of Compliance (CoC) (No. 1015) for the NAC International UMS Cask System.
 - Enclosure 2, List of Drawing Changes, Page 2 of 2
 - Enclosure 4, NAC International Proprietary Calculations
 - EA790-2520, BWR Fuel Assembly Structural Evaluation, R00 (Data Disk 1 of 1)
 - EA790-2521, BWR5 Damaged Fuel Can Structural Analysis, R00
 - EA790-2522, Evaluation of Structural Calculations for the BWR Damaged Fuel Configuration, R00
 - EA790-3007, Enhanced UMS BWR Fuel Region and Fuel Tubes Effective Thermal Properties, R01 (Data Disk 1 of 1)
 - EA790-3312, UMS BWR System Internal Pressure Evaluation for Damaged Fuel and Undamaged 10X10 Assemblies, R00
 - EA790-3507, UMS - BWR Storage Canister Thermal Analysis, R07 (Data Disk 1 of 1)
 - EA790-4601, TRITON-ARP BWR High Burnup Source Term and Minimum Cool Time Generation, R00 (Data Disk 1 of 1)
 - EA790-4602, UMS 56-Assembly BWR Shielding Analysis for High Burnup Undamaged Fuels, R00 (Data Disk 1 of 1)
 - EA790-4603, UMS 56- Assembly BWR Damaged Fuel Shielding Analysis, R00 (Data Disk 1 of 1)
 - EA790-4604, UMS High Burnup BWR Site Dose Calculation, R00 (Data Disk 1 of 1)
 - EA790-4605, UMS BWR High Burnup Occupational Dose-Exposure Analysis, R00 (Data Disk 1 of 1)
 - EA790-5601, UMS BWR Undamaged Fuel Criticality Analysis For Selected Fuel Types and Increased Absorber Credit, R00 (Data Disk 1 of 1)
 - EA790-5602, UMS BWR Damaged Fuel Criticality Analysis for Selected Fuel Types, R00 (Data Disk 1 of 1)
 - Enclosure 5, NAC-UMS FSAR, Revision 19A – Proprietary Version

NAC is the owner of the information contained in the above documents. Thus, all of the above identified information is considered NAC Proprietary Information.

3. NAC makes this application for withholding of proprietary information based upon the exemption from disclosure set forth in: the Freedom of Information Act ("FOIA"); 5 USC Sec. 552(b)(4) and the Trade Secrets Act; 18 USC Sec. 1905; and NRC Regulations 10 CFR Part 9.17(a)(4), 2.390(a)(4), and 2.390(b)(1) for "trade secrets and commercial financial information obtained from a person, and

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2.390(b)(1) for “trade secrets and commercial financial information obtained from a person, and privileged or confidential” (Exemption 4). The information for which exemption from disclosure is herein sought is all “confidential commercial information,” and some portions may also qualify under the narrower definition of “trade secret,” within the meanings assigned to those terms for purposes of FOIA Exemption 4.

4. Examples of categories of information that fit into the definition of proprietary information are:
 - a. Information that discloses a process, method, or apparatus, including supporting data and analyses, where prevention of its use by competitors of NAC, without license from NAC, constitutes a competitive economic advantage over other companies.
 - b. Information that, if used by a competitor, would reduce their expenditure of resources or improve their competitive position in the design, manufacture, shipment, installation, assurance of quality or licensing of a similar product.
 - c. Information that reveals cost or price information, production capacities, budget levels or commercial strategies of NAC, its customers, or its suppliers.
 - d. Information that reveals aspects of past, present or future NAC customer-funded development plans and programs of potential commercial value to NAC.
 - e. Information that discloses patentable subject matter for which it may be desirable to obtain patent protection.

The information that is sought to be withheld is considered to be proprietary for the reasons set forth in Items 4.a, 4.b, and 4.d.

5. The information to be withheld is being transmitted to the NRC in confidence.
6. The information sought to be withheld, including that compiled from many sources, is of a sort customarily held in confidence by NAC, and is, in fact, so held. This information has, to the best of my knowledge and belief, consistently been held in confidence by NAC. No public disclosure has been made, and it is not available in public sources. All disclosures to third parties, including any required transmittals to the NRC, have been made, or must be made, pursuant to regulatory provisions or proprietary agreements, which provide for maintenance of the information in confidence. Its initial designation as proprietary information and the subsequent steps taken to prevent its unauthorized disclosure are as set forth in Items 7 and 8 following.
7. Initial approval of proprietary treatment of a document/information is made by the Vice President, Engineering, the Project Manager, the Licensing Specialist, or the Director, Licensing – the persons most likely to know the value and sensitivity of the information in relation to industry knowledge. Access to proprietary documents within NAC is limited via “controlled distribution” to individuals on a “need to know” basis. The procedure for external release of NAC proprietary documents typically requires the approval of the Project Manager based on a review of the documents for technical content, competitive effect and accuracy of the proprietary designation. Disclosures of proprietary documents outside of NAC are limited to regulatory agencies, customers and potential customers and their agents, suppliers, licensees and contractors with a legitimate need for the information, and then only in accordance with appropriate regulatory provisions or proprietary agreements.

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8. NAC has invested a significant amount of time and money in the research, development, engineering and analytical costs to develop the information that is sought to be withheld as proprietary. This information is considered to be proprietary because it contains detailed descriptions of analytical approaches, methodologies, technical data and/or evaluation results not available elsewhere. The precise value of the expertise required to develop the proprietary information is difficult to quantify, but it is clearly substantial.
9. Public disclosure of the information to be withheld is likely to cause substantial harm to the competitive position of NAC, as the owner of the information, and reduce or eliminate the availability of profit-making opportunities. The proprietary information is part of NAC's comprehensive spent fuel storage and transport technology base, and its commercial value extends beyond the original development cost to include the development of the expertise to determine and apply the appropriate evaluation process. The value of this proprietary information and the competitive advantage that it provides to NAC would be lost if the information were disclosed to the public. Making such information available to other parties, including competitors, without their having to make similar investments of time, labor and money would provide competitors with an unfair advantage and deprive NAC of the opportunity to seek an adequate return on its large investment.

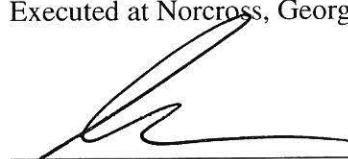
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STATE OF GEORGIA, COUNTY OF GWINNETT

Mr. George Carver, being duly sworn, deposes and says:

That he has read the foregoing affidavit and the matters stated herein are true and correct to the best of his knowledge, information and belief.

Executed at Norcross, Georgia, this 18th day of December, 2019.



George Carver
Vice President, Engineering and Licensing
NAC International

Subscribed and sworn before me this 18th day of December, 2019.


Notary Public

