72-1015



February 4, 2000

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

Attn: Document Control Desk

Subject: Docket No. 72-1015

> Submittal of Responses to the Request for Additional Information (RAI-1) for the UMS® Universal Storage System Amendment for Maine Yankee Atomic Power Company Site Specific Spent Fuel (TAC No. L22979)

- **References:** Submittal of Changed Pages Incorporating Maine Yankee Site Specific Fuel 1. into the UMS[®] Universal Storage System Safety Analysis Report, Revision UMSS-99MY, NAC International, July 16, 1999 Submittal of UMS[®] Universal Storage System Safety Analysis Report,
 - 2. Revision 1, NAC International, October 1, 1999
 - Submittal of UMS[®] Universal Storage System Safety Analysis Report, 3. Revision UMSS-99D (Maine Yankee Amendment incorporated in Revision 1). NAC International, October 20, 1999
 - Submittal of Revision UMSS-99E Changed Pages for the UMS® Universal 4. MPC System Safety Analysis Report (with the Maine Yankee Amendment incorporated) for the UMS[®] Universal Storage System, NAC International, November 16, 1999
 - Request for Additional Information for the UMS[®] Universal Storage System, 5. U.S. Nuclear Regulatory Commission, December 21, 1999

NAC International (NAC) herewith submits the responses to the Reference 4, U.S. Nuclear Regulatory Commission (NRC) Request for Additional Information (RAI) for the UMS[®] Universal Storage System Amendment for Maine Yankee Atomic Power Company Site Specific Spent Fuel. The RAI was issued by the NRC based on a review of the NAC Application for an Amendment (Reference 1) to the UMS[®] Universal Storage System Certificate of Compliance. That initial application was supplemented by the Reference 3 submittal.

NAC has prepared this submittal to be fully responsive to the Request for Additional Information and in complete accord with all NRC/NAC discussions that have been held since the RAI was issued. These responses have been reviewed by representatives of Stone & Webster Engineering Corporation and Maine Yankee Atomic Power Company. Their comments and suggestions have been incorporated, as appropriate.

Also, included in this submittal are copies of the SAR changed pages, including two revised drawings, which incorporate all of the responses to the RAI. In addition, the SAR changed pages include two other changes in Chapter 12: (1) the Definitions in Section B1.0 are deleted because they

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duplicate those in Section A1.1 and Section B1.0 is [Reserved]; and (2) the <u>OR</u> REQUIRED ACTION, B2.2, in LCO 3.1.6 and BASES 3.1.6 is removed because it is unnecessary, since the thermal analysis documents the performance of the UMS[®] Storage System upon completion of ACTION B.2.1, the CONCRETE CASK Heat Removal System is restored to OPERABLE status. The SAR changed pages are to be inserted into the current revision, UMSS-99E, of the NAC-UMS[®] Safety Analysis Report Amendment for Maine Yankee Atomic Power Company Site Specific Spent Fuel. Please note that for the convenience of double-sided copying, some "front or back" pages that have not changed from the previous revision are included in this submittal.

The revised pages have been prepared in accordance with the following conventions:

- Revision indicators (shading and revision bars) are used to highlight changes. Shading indicates a revision from the Reference 2 submittal; a revision bar indicates a change in the SAR text flow from the Reference 2 submittal or a change from a previous Maine Yankee Amendment revision of the Reference 2 submittal (i.e., all Maine Yankee Amendment revisions are indicated).
- The changed pages for this submittal are designated as Revision UMSS-00A to provide a unique identification of the changed pages.

This submittal includes Proprietary Information as a part of the responses to some of the RAIs. The copies of the volume containing the Proprietary Information Attachments are provided in appropriately marked separate packaging. The executed Proprietary Information Affidavit is enclosed.

The Proprietary Information Attachments included in this submittal are:

- 1. Evaluation of Burnup Extension in Maine Yankee Fuel
- 2. Evaluation of Maine Yankee Fuel Rod Oxide Thickness and Wear Measurements
- 3. Summary Report on Maine Yankee High Burnup Fuel (burnup between 45,000 and 50,000 MWD/MTU)
- 4. VCC Tip-Over Analysis for Maine Yankee (NAC Calculation 12412-2001)

As was discussed during our meeting of January 18, 2000, NAC has included the definition of intact fuel, which was proposed by NEI to the NRC in their draft fuel classification protocol. We acknowledge, based upon the dialog during the meeting, that additional detail will be required regarding the user determinations necessary to support fuel classification (i.e., the "engineering evaluation" methodology). In accordance with that understanding, NAC, Stone & Webster Engineering Corporation, and Maine Yankee are working cooperatively to develop supplemental information on both fuel inspection results and the fuel classification Engineering Evaluation methodology discussed during the meeting.



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Currently, implementation of the UMS[®] Storage System is a critical path item for successful completion of the decommissioning of the Maine Yankee site. Therefore, NAC requests that the NRC continue the technical review on a priority basis for the approval of the Maine Yankee Amendment of the UMS[®] Storage System.

If you have any comments or questions, please contact me at (770) 447-1144.

Sincerely,

J. C. Shompson

Thomas C. Thompson Director, Licensing and Competitive Assessment Engineering & Design Services

Enclosures

Attachments

| cc: | P. Bemis | (SWEC) |
|-----|------------|---------|
| | E. Washer | (SWEC) |
| | M. Meisner | (MY) |
| | G. Zinke | (MY) |
| | D. Jones | (NUTUG) |

AFFIDAVIT

IN SUPPORT OF PROPRIETARY INFORMATION CONTAINED IN THE ATTACHMENT TO THE RESPONSES TO A REQUEST FOR ADDITIONAL INFORMATION FOR THE UMS[®] UNIVERSAL STORAGE SYSTEM AMENDMENT FOR MAINE YANKEE ATOMIC POWER COMPANY SITE SPECIFIC SPENT FUEL

State of Georgia, County of Gwinnett

Willington J. Lee (Affiant), Vice President and Chief Engineer of NAC International, hereinafter referred to as NAC, at 655 Engineering Drive, Norcross, Georgia 30092, being duly sworn, deposes and says that:

- 1. Affiant is personally familiar with the trade secrets and privileged information contained in the Attachment being submitted in conjunction with the Responses to the Request for Additional Information for the UMS[®] Universal Storage System, Amendment for Maine Yankee Atomic Power Company Site Specific Spent Fuel. Affiant requests that the Nuclear Regulatory Commission, pursuant to Chapter 10 of the Code of Federal Regulations, Part 2.790 (10 CFR 2.790) "Public Inspections, Exemptions, Request for Withholding," withhold the information contained within the supplemental information, hereafter referred to as the Proprietary Information, from public disclosure.
- 2. This information has been and is held in confidence by NAC.
- 3. The information contained within the proprietary material is the result of design calculations and components design details and critical dimensions that were developed by NAC or by nuclear fuel vendors. This type of information is held in confidence based on the significant commercial investment of time and money expended in its development.
- 4. The Proprietary material is transmitted to the Nuclear Regulatory Commission in confidence.
- 5. The information that is being claimed as trade secrets and privileged information has not been and is not available in public sources.

AFFIDAVIT (continued)

6. NAC and the nuclear fuel vendors have invested a considerable amount of time, engineering labor, and money in the development of the information. Public disclosure of this information would cause substantial harm to the competitive position of NAC or the nuclear fuel vendors. Others seeking to develop similar calculations and fuel design details would have to make similar investments to develop the information on their own, as long as the information is not disclosed to the public.

Willingt J. Tree

Willington J. Lee Vice President and Chief Engineer NAC International

Subscribed and sworn to before me this 4th day of February 2000.

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Notary Public in and for the County of <u>Forogeth</u> State of Georgia

My commission expires the 16th day of April 2003

Notary Public, Foreyth County, Georgia My Commission Expires April 16, 2003