

August 7, 2001

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

Attn: Document Control Desk

Subject: Notification of Intent to ASME Code Stamp the NAC-UMS<sup>®</sup> Transportable Storage Canister and the Fuel Basket Assembly for Use at Maine Yankee Atomic Power Station

Docket No. 72-1015

- References:
1. Certificate of Compliance (CoC) for the NAC-UMS<sup>®</sup> Universal Storage System, Certificate No. 1015, Amendment No. 1, Effective Date: 2/20/01, U.S. Nuclear Regulatory Commission (NRC), February 13, 2001
  2. Final Safety Analysis Report for the UMS<sup>®</sup> Universal Storage System, Amendment 1, NAC International (NAC), May 11, 2001
  3. NUREG-1536, "Standard Review Plan for Dry Cask Storage Systems," U.S. Nuclear Regulatory Commission, January 1997
  4. ISG-10, Director's Interim Staff Guidance Document No. 10, Revision 1, "Alternatives to the ASME Code," NRC Spent Fuel Project Office, November 13, 2000
  5. Code Case N-595-2, Requirements for Spent Fuel Storage Canisters, ASME Boiler and Pressure Vessel Code, Section III, Division 1, approved December 8, 2000

In accordance with 10 CFR 72.4, this letter provides notification that NAC International (NAC) intends to Code Stamp the NAC-UMS<sup>®</sup> Transportable Storage Canister (TSC) and Fuel Basket Assembly in accordance with Section III of the ASME Boiler and Pressure Vessel Code (ASME Code), i.e., NPT and N stamped. NAC respectfully requests the timely review and approval of this alternative to the UMS Technical Specifications by the NRC, as loading of spent fuel into UMS<sup>®</sup> systems at Maine Yankee is planned to begin in October 2001.

In accordance with NRC Interim Staff Guidance (ISG) No. 10, Revision 1, "Alternatives to the ASME Code," (Reference 4) and NUREG-1536, "Standard Review Plan for Dry Cask Storage Systems" (Reference 3), Section B 3.3 of Chapter 12 in the Final Safety Analysis Report (FSAR),

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Amendment 1, for the UMS<sup>®</sup> Universal Storage System (Reference 2) documents NAC's commitments to the ASME Code, Section III, as well as the proposed alternatives to the Code, for the UMS<sup>®</sup> Storage System. These NRC staff-approved commitments and alternatives to the Code are included in the UMS<sup>®</sup> CoC and Technical Specifications (Reference 1).

Paragraph 3.6.4 of NAC Document No. 12412-SS-01, "Design Specification for UMS<sup>®</sup> Spent Fuel Transportable Storage Canister (TSC), Internal Fuel Basket Assemblies, and Greater than Class C (GTCC) Waste Canisters for the Maine Yankee Project," states: "... Maine Yankee spent fuel canisters and their internal fuel basket assembly shall be designed, fabricated, inspected and certified in accordance with the ASME Code, Section III, Rules for Class 1 components and Class CS Core Support Structures, respectively, including the requirements of ASME Code Case N-595-2." NAC and Ionics, Incorporated, one of NAC's fabrication partners, with the support of Stone & Webster Engineering Corporation, have implemented the ASME Code requirements for the 60 NAC-UMS<sup>®</sup> TSCs and fuel basket assemblies for the Maine Yankee Atomic Power Station. The Code requirements encompass the analysis, design, material procurement, fabrication and quality assurance processes, so that the TSCs and the fuel basket assemblies can be stamped in accordance with Section III of the ASME Code. Closure welding of the TSCs will be completed by NAC's subcontractor, Welding Services Inc. (WSI), a NPT stamp holder, in accordance with ASME Code, Section III, Subsection NB, Code Case N-595-2 and Section IX.

For reference, Attachment 1 is a sketch titled, "Canister N Stamp Configuration," that shows the typical ASME Code stamping arrangement on the structural lids of the UMS<sup>®</sup> fuel canisters. Attachment 2 is a close-up photograph of the typical Ionics, Incorporated nameplates for the UMS<sup>®</sup> fuel canisters and for the fuel basket assemblies

Although ISG No. 10 does not specifically address implementation of ASME Code stamping, the quality of the NAC-UMS<sup>®</sup> components (TSC and fuel basket assembly) is being upgraded/enhanced by the additional requirements for Code stamping, so application of the ISG is deemed appropriate. ISG-10 states: "In the event that alternatives to codes are required during fabrication and the alternatives do not impact the quality or safety of the component, an alternative to the requirements of the license, certificate of compliance, or technical specification may be granted with approval of the NRC."



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Also, as part of the submittal and in accordance with the Code terminology, the name of Item 20 on the NAC Licensing Drawing 790-585 is changed to "Spacer Ring" (was "Backing Ring"). The ASME Code requires that a "backing ring" be continuous. Since Item 20 in the NAC-UMS<sup>®</sup> design has a gap (to facilitate installation), it cannot be identified as a "backing ring."

If you have any comments or questions, please contact me at (678) 328-1321. NAC will be pleased to provide any further information that may be required.

Sincerely,

A handwritten signature in cursive script that reads 'T. C. Thompson'.

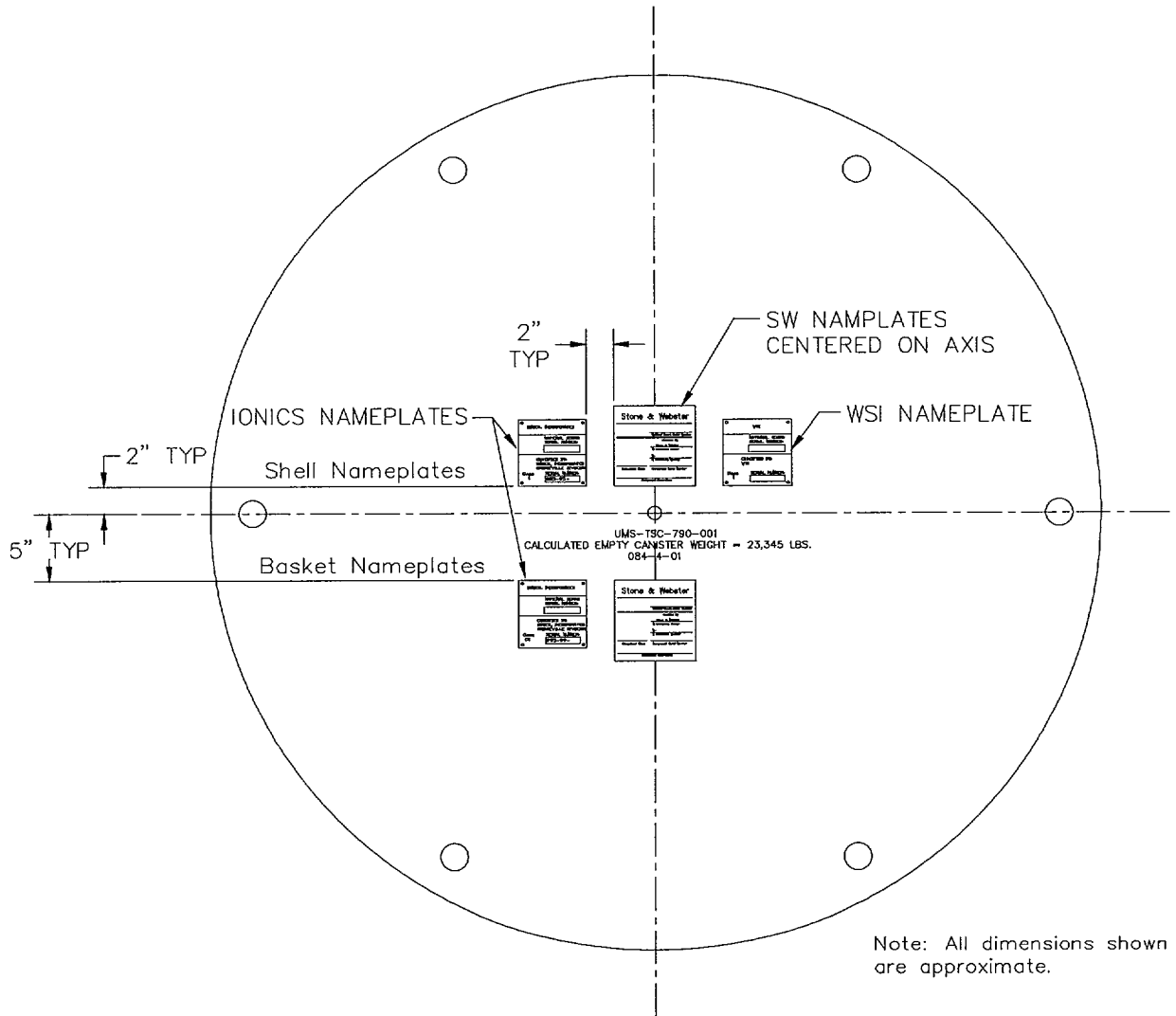
Thomas C. Thompson  
Director, Licensing  
Engineering Services & Product Development

Attachments

cc: Thomas Williamson (MY)  
Paul Plante (MY)  
E. William Brach (NRC)  
Rebecca Karas (NRC)

# Attachment 1

## Canister N Stamp Configuration



Nameplate Arrangement  
On Structural Lid

Attachment 2

IONICS, INCORPORATED

NATIONAL BOARD  
SERIAL NUMBER:

NIR

N  
PT

CERTIFIED BY:  
IONICS, INCORPORATED  
BRIDGEVILLE DIVISION

Class  
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SERIAL NUMBER:

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IONICS, INCORPORATED

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IONICS, INCORPORATED  
BRIDGEVILLE DIVISION

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