NAC INTERNATIONAL

Atlanta Corporate Headquarters
3930 East Jones Bridge Road, Suite 200
Norcross, GA 30092
Phone 770-447-1144
Fax 770-447-1797
www.nacintl.com

July 17, 2008

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

Attn: Document Control Desk

Subject: Submittal of Proposed Changes to Certificate of Compliance (CoC) No. 9225, Revision 48 for the NAC-LWT Cask to Incorporate PWR Mixed-Oxide (MOX) Fuel Rods as Authorized Content

Docket No. 71-9225 TAC No. L24181

Reference:
1. Model No. NAC-LWT Package, U.S. Nuclear Regulatory Commission (NRC) Certificate of Compliance (CoC) No. 9225, Revision 48
2. Safety Analysis Report (SAR) for the NAC Legal Weight Truck Cask, Revision 38, NAC International, November 2007
3. Submittal of a Request for an Amendment of Certificate of Compliance (CoC) No. 9225 for the NAC-LWT Cask to Incorporate PWR Mixed-Oxide (MOX) Fuel Rods as Authorized Content, NAC International, January 25, 2008

NAC International (NAC) herewith submits proposed changes to the Certificate of Compliance (CoC) No. 9225, Revision 48, for the NAC-LWT cask to incorporate PWR mixed-oxide (MOX) fuel rods as authorized content as requested by Reference 3.

The proposed changes to the approved content conditions were reviewed and discussed with the NRC Spent Fuel Storage and Transportation staff during the October 17, 2007 meeting in Rockville, MD.

In order to support the shipping schedule described in Reference 3, NAC respectfully requests the NRC's continued attention to this application.

If you have any comments or questions, please contact me on my direct line at 678-328-1274.

Sincerely,

Anthony L. Patko
Director, Licensing
Engineering

Enclosure

ED20080089

NM550I

NM55

Proposed Changes for Revision 49 of

Certificate of Compliance No. 9225

for the NAC-LWT Cask

Proposed Changes for Revision 49 of Certificate of Compliance No. 9225 for the NAC-LWT Cask (changes are highlighted)

Page No.	Description of Change
1-26	CoC heading – 1.b.: Revision Number 49. Remove previous revision bars throughout.
1 of 26	Item 3.b. – Change date of application from January 15, 2008 to January 25, 2008
2 of 26	5.(a)(3) Drawings (i) LWT 315-40-01, Rev. 7 Cask Assembly
3 of 26	5.(a)(3)(ii) Drawings (continued) LWT 315-40-104, Rev. 3 (Sheets 1-2) LWT Cask Assembly, PWR/BWR Rod Transport Canister
16 of 26	5.(b)(1) Type and form of material (continued) Add new item (xvii) as follows: (xvii) PWR MOX (mixed oxide) undamaged fuel rods consisting of uranium and plutonium dioxide pellets within zirconium alloy type cladding. The plutonium enrichment is 7.0 weight percent maximum and 2.0 weight percent minimum, the maximum active fuel rod length is 153.5 inches, and the maximum pellet diameter is 0.3765 inch. The maximum burnup is 62,500 MWd/MTU and the minimum cool time is 90 days.
22 of 26	5.(b)(2) Maximum quantity of material per package (continued) Add new item (xviii) as follows: (xviii) For intact PWR MOX fuel rods as described in Item 5.(b)(1)(xvii): Up to 16 PWR MOX rods or a combination of PWR MOX and high burnup PWR fuel rods as described in Item 5.(b)(1)(viii). Maximum decay heat not to exceed 2.3 kW per package. Individual PWR MOX and PWR UO_2 fuel rods shall be placed in a 5×5 insert loaded into a screened or free flow rod canister in accordance with NAC International Drawing No. 315-40-104, Assembly 97. Up to nine nonstainless burnable poison rods (BPRs) may be loaded in the spare locations in the 5×5 insert. The PWR/BWR fuel rod canister shall be transported in the PWR basket and the PWR insert installed in the cask cavity.

Proposed Changes for Revision 49 of Certificate of Compliance No. 9225 for the NAC-LWT Cask (changes are highlighted) (cont'd)

Page No.	Description of Change
24 of 26	5.(c) Criticality Safety Index Add new item as follows: For PWR MOX rods described in 5.(b)(1)(xvii) and limited by 5.(b)(2)(xviii) 0.0 Item 6 – Delete the last (b) in 5.(b)(2)(viii) ~~(b)~~ Item 8, 2nd sentence – Change "…secure the vent and drain port covers …" to "… secure the alternate vent and drain port covers …" Item 10.(a) – Change "The metallic O-ring seal …" to "The metallic O-ring lid seal …" Item 11 – 1st sentence – Change "When shipping PWR, BWR, MTR, DIDO assemblies, …" to "When shipping PWR, BWR, PWR MOX, MTR, DIDO assemblies, …"
25 of 26	Item 12, 2nd sentence – Change "… high burnup PWR or BWR rods, TPBAR contents, PULSTAR fuel elements, …" to "… high burnup PWR or BWR rods, PWR MOX rods, TPBAR contents, PULSTAR fuel elements, …"
26 of 26	Add new item17 and renumber following items: 17. For the shipment of PWR MOX fuel rods in a free flow or screened PWR/BWR fuel rod canister: (a) The package must be configured as shown in NAC International Drawing No. 315-40-104, Rev. 3; and (b) Prior to each shipment, after loading, each cask containment seal must be tested to show no leakage greater than 2×10^{-7} std-cm^3/s (helium). 18. Transport by air is not authorized. 19. The package authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR 71.17. 20. Revision 48 of this certificate may be used until TBD. 21. Expiration Date: TBD Under REFERENCES, change application date to January 25, 2008. NAC International, Inc., supplements dated: July 17, 2008, _____, _____.