

71-9225

July 1, 2008

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

Attn: Document Control Desk

Subject: Request for Authorization to Use Updated License Drawings for TRIGA
Baskets in the NAC-LWT Cask

Docket No. 71-9225

- Reference:
1. Safety Analysis Report (SAR) for the NAC Legal Weight Truck Cask, Revision 38, NAC International, November 2007
 2. Model No. NAC-LWT Package, U.S. Nuclear Regulatory Commission (NRC) Certificate of Compliance (CoC) No. 9225, Revision 47

NAC International (NAC) herewith requests authorization to use TRIGA baskets manufactured in accordance with updated license drawings in the NAC-LWT cask.

During recent manufacturing of TRIGA baskets it was noted that the current license drawings (315-40-070, Rev.3; 315-40-071, Rev.3; and 315-40-072, Rev. 3) as contained in Reference 1 and listed in Reference 2, contain some minor inconsistencies that present a challenge to the fabricator.

In order to eliminate the inconsistencies and clarify the requirements for the manufacturer and QA personnel accepting TRIGA baskets, NAC has revised the following drawings as described below.

315-40-070, Rev. 4 – Weldment, 7 Cell Basket, TRIGA Fuel Base Module

1. Changed Delta Note 2 from “3 sides both ends Item 9” to “Radial inside surface, seal weld plate outer edge both ends Item 9.” This change was made to clarify the weld attachment of Item 9 (guide) to the basket base and support plate. Only two of the four sides of Item 9 are suitable for welding. Item 9 (guide) is a non-structural component of the TRIGA basket with a sole purpose of providing alignment guidance with the drain line as the basket is placed into the cask.
2. Changed Delta Note 4 (Deleted) to state “Item 2 may be fabricated from multiple pieces.” This change is made to clarify that Item 2 (support plate) may be manufactured of more than one piece of 1/2-inch plate. Added Delta Note 4 call out to Zone E-7.



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3. Changed Delta Note 9 to state "PT following load test. Examine per ASME Section V, Article 6, with acceptance per Section III, Article NG-5350." Deleted both Delta Note 9 call outs in Zone B-8 of the drawing. As specified in Reference 1, on page 2.6.12-34, per ASME Code Subsection NG-3352, the calculated stress in the bounding fillet weld geometry between the 11-gauge sheet metal and the divider plates is increased by a factor of $1/0.35 = 2.86$. This weld quality factor permits visual inspection. The Delta Note 9 call out in Zone 3-E remains in effect with the as-modified note for post load test examination.

315-40-071, Rev. 4 - Weldment, 7 Cell Basket, TRIGA Fuel Intermediate Module

1. Changed Delta Note 2 from "3 sides both ends Item 8" to "Radial inside surface, seal weld plate outer edge both ends Item 8." This change was made to clarify the weld attachment of Item 8 (guide) to the basket base and support plate. Only two of the four sides of Item 8 are suitable for welding. Item 8 (guide) is a non-structural component of the TRIGA basket with a sole purpose of providing alignment guidance with the drain line as the basket is placed into the cask.
2. Changed Delta Note 4 (Deleted) to stating "Item 2 may be fabricated from multiple pieces." This change is made to clarify that Item 2 (support plate) may be manufactured of more than one piece of 1/2-inch plate. Added Delta Note 4 call out to Zone E-7.
3. Changed Delta Note 9 to state "PT following load test. Examine per ASME Section V, Article 6, with acceptance per Section III, Article NG-5350." Deleted both Delta Note 9 call outs in Zone B-8 of the drawing. As specified in Reference 1, on page 2.6.12-34, per ASME Code Subsection NG-3352, the calculated stress in the bounding fillet weld geometry between the 11-gauge sheet metal and the divider plates is increased by a factor of $1/0.35 = 2.86$. This weld quality factor permits visual inspection. The Delta Note 9 call out in Zone 3-E remains in effect with the as-modified note for post load test examination.

315-40-072, Rev. 4 - Weldment, 7 Cell Basket, TRIGA Fuel Top Module

1. Changed Delta Note 2 from "3 sides both ends Item 7" to "Radial inside surface, seal weld plate outer edge both ends Item 7." This change was made to clarify the weld attachment of Item 7 (guide) to the basket base and support plates. Only two of the four sides of Item 7 are suitable for welding. Item 7 (guide) is a non-structural component of the TRIGA basket with a sole purpose of providing alignment guidance with the drain line as the basket is placed into the cask.

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2. Changed Delta Note 4 (Deleted) to state "Item 2 and Item 8 may be fabricated from multiple pieces." This change is made to clarify that Items 2 and 8 (support and mid plates) may be manufactured of more than one piece of plate. Added Delta Note 4 call out to Zone E-7.
3. Changed Delta Note 9 to state "PT following load test. Examine per ASME Section V, Article 6, with acceptance per Section III, Article NG-5350." Deleted both Delta Note 9 call outs in Zone B-8 of the drawing. As specified in Reference 1, on page 2.6.12-34, per ASME Code Subsection NG-3352, the calculated stress in the bounding fillet weld geometry between the 11-gauge sheet metal and the divider plates is increased by a factor of $1/0.35 = 2.86$. This weld quality factor permits visual inspection. The Delta Note 9 call out in Zone 3-E remains in effect with the as-modified note for post load test examination.

Enclosed with this request are copies of license drawings Nos. 315-40-070, Rev. 4; 315-40-071, Rev. 4; and 315-40-072, Rev. 4. This revision of the above drawings shows the requested changes. Authorization is requested for a 12 month period to use TRIGA baskets manufactured in accordance with the above drawings in the NAC-LWT cask.

This request for authorization is submitted in support of an ongoing Foreign Research Reactor (FRR) fuel shipment within the U.S. Department of Energy National Nuclear Security Administration FRR fuel acceptance program. Therefore, the Agency's timely response is being requested. NAC will address these drawing changes in its next amendment request for the model NAC-LWT cask.

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

Figure Withheld Under 10 CFR 2.390


			
WELDMENT, 7-CELL BASKET, TRIGA FUEL BASE MODULE			
PROJECT	315-40	DRAWING	070
SCALE	1/3	EST. WT.	197 LBS
		SH	1 OF 1
			REV 4
			11:34AM 7-1-2008

Figure Withheld Under 10 CFR 2.390



			
WELDMENT, 7 CELL BASKET, TRIGA FUEL INTERMEDIATE MODULE			
PROJECT	315-40	DRAWING	071
SCALE	1/3	EST. WT.	187 LBS
		SH	1 OF 1
			11:34AM 7-1-2008

Figure Withheld Under 10 CFR 2.390

			
WELDMENT, 7 CELL BASKET, TRIGA FUEL TOP MODULE			
PROJECT	315-40	DRAWING	072
SCALE	1/3	EST. WT.	275 LBS
		SH	1 OF 1
			11:34AM 7-1-2004