



71-4986

## Global Nuclear Fuel

A Joint Venture of GE, Toshiba, & Hitachi

December 19, 2002

Mr. E. William Brach, Director  
Spent Fuel Project Office, M/S O-13D13  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

Subject: Request for Renewal of Certificate of Compliance USA/4986/AF

References: (1) Docket 71-4986  
(2) COC USA/4986/AF

Pursuant to 10CFR71.38, Global Nuclear Fuel – Americas, L.L.C. (GNF-A) in Wilmington, North Carolina, hereby requests renewal of NRC Certificate of Compliance (COC) USA/4986/AF.

The only change in the existing SAR, that we are requesting, is in Section 6.2.1. The maximum number of rods allowed to be placed in each side of the channel should be changed from 15 to 14, and the total number of rods should be changed from 30 to 28. The COC correctly identifies the number in Condition 5.(b)(2)(iii). As you can see in the current SAR, page 6-3, we missed changing the wording in Section 6.2.1, when we made our 8/14/98 submittal to change the number of rods from 15 to 14. Attached is a replacement page for this correction. The footer date on this page has been changed to 12/19/02, Revision 3, and the lines changed are identified with an asterisk.

Based upon the number of submittals (7) since the last renewal, it does not appear that a consolidated application is needed. Four of the seven dealt with a single provision change involving loose rods. So in effect, there have been only four changes: (1) the K-eff information, (2) the loose rod provision, (3) minor drawing changes to provide added clarity and (4) our company name change. We therefore request renewal based upon the current SAR with the corrected page as described above.

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The following is a summary of the Supplements as they appear in the current COC.

1. 11/20/97 – Included K-eff information as non-proprietary, removed proprietary from the non-proprietary section and corrected editorial and typographical errors.
2. 6/5/98 – Reinstated the loose rod provision, provided drawings with improved detail and removed authorization for an outer container design that is no longer used.
3. 6/25/98 – Provided revisions on one drawing to show more detail.
4. 7/1/98 – Provided calculations to change the N value and Transport Index, and other corrections for loose rods.
5. 7/21/98 – Provided corrections for the loose rod provision and provided changes to tolerance callouts on one drawing, none of which had an effect on structural integrity or the container's safety.
6. 8/14/98 – Requested a correction for the maximum number of loose rods in each side of the inner container from 15 (as identified in the 7/21/98 submittal) to 14. This change was made to use the number of rods modeled (14) instead of the number of rods extrapolated (15) from the chart.
7. 10/14/99 – Requested transfer of COC ownership from General Electric Corporation to Global Nuclear Fuel – Americas, L.L.C.

Please contact me on (910) 675-5656 if you have any questions or would like to discuss the matter further.

Sincerely,

Global Nuclear Fuel – Americas, L.L.C.



Charles M. Vaughan, Manager  
Facility Licensing

cc: CMV-02-066  
MG Crespo – RII, Atlanta  
MA Lamastra – HDQTRS - Washington

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Attachment 1  
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### Replacement Page Number 6-3

The maximum number of rods allowed to be placed in each side of the channel has been changed from 15 to 14, and the total number of rods has been changed from 30 to 28.

The footer date has been changed to 12/19/02, Revision 3, and the lines containing the above changes are identified with an asterisk.

Page 6-3 is provided with page 6-4 (with no changes) on the reverse side for easy replacement into the current SAR book.

6.1.16 Verify loaded RA outer for proper closure and tamper safe seals.

6.1.17 Survey and release loaded RA outer for compliance to DOT shipping regulations.

6.2 Operating Procedures - Loose Rods in Channel or Pipe

The following describes procedures for packing loose rods into the RA-3 inner container as necessary for quality assurance and criticality safety purposes.

6.2.1 A maximum of 14 rods may be placed in each side (channel) of the RA-3 inner container for a total of 28 rods. The rods may be banded together. Banding is not required for criticality safety purposes. \*

6.2.1.1 Sleeve each rod in polyethylene not to exceed a 5 mil maximum thickness. The ends of the sleeve may be closed in a manner such as knotting or taping with the excess trimmed away.

6.2.1.2 Protective pads such as ethafoam are used to protect the rods when the clamps are tightened where banding is used.

6.2.1.3 The loose rods and/or banded rods are securely packed inside the RA side (channel) with packing material to minimize movement during shipment.

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- 6.2.1.4 Section 6.1.9 through 6.1.17 describes activities to be conducted after packing the loose rods into the inner container for closing the RA inner and outer container. \*
- 6.2.2 For loose rods in the five-inch, Schedule 40 Pipe. \*
- 6.2.2.1 Sleeve each fuel rod in polyethylene not to exceed a 5 mil maximum thickness. The ends of the sleeve may be closed in a manner such as knotting or taping with the excess trimmed away. \*
- 6.2.2.2 Ethafoam pads may be placed inside the capped ends to prevent damage to the rods. \*
- 6.2.2.3 Insert sleeved fuel rods into the pipe (product) container. There is no upper or lower limit for the number of fuel rods that may be placed in the pipe container. If dunnage is used to fill the void space, any number of empty metal tubes welded shut with end plugs on both ends may be placed in the pipe container. The empty tubes do not need to have polyethylene sleeving. \*
- 6.2.2.4 Close the pipe by installing the gasket, cover and bolts. \*
- 6.2.2.5 Once placed inside the inner metal RA, ethafoam padding may be placed against the outside of the pipe to provide padding during shipment. \*
- 6.2.2.6 Section 6.1.9 through 6.1.17 describes activities to be conducted after placing the five-inch, Schedule 40 pipe(s) into the RA metal inner. \*

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