

FRAMATOME COGEMA FUELS

Mr. Eric Leeds
 Chief, Licensing Section
 Spent Fuel Project Office – NMSS
 U.S. Nuclear Regulatory Commission
 One White Flint North
 1155 Rockville Pike
 Rockville, MD 20852-2738

August 29, 2000

Subject: **Request for Renewal of Certificate of Compliance No. 6206 for the Model B Shipping Package**

Enclosure I Description of Changes
 Enclosure II Changed Pages in Application

Reference: Application for use of the Model B Shipping Container, Docket 71-6206.

Dear Mr. Leeds,

Framatome Cogema Fuels formally requests renewal of the Certificate of Compliance (C of C) for the above referenced shipping package. In accordance with 10 CFR 2.109(a) FCF is requesting this renewal prior to 30 days from expiration of the existing certificate.

Consistent with correspondence from the NRC dated August 7, 2000, FCF has reviewed the sections pertaining to the operating procedures, acceptance tests and maintenance programs. As a result of this review, updated pages for Chapters 7 and 8 of the application for license are included. The changes involve removal of some unnecessary detail in regard to certain non-safety related items and the inclusion of more detail on the loading and unloading process. A description of each of these changes is provided in the attached enclosure, along with the appropriate changed pages in the application.

The requested changes do not reduce the safety of the package, invalidate the original test, or adversely effect the nuclear criticality safety analysis. If you have any questions concerning this submittal, please call me at (804) 832-5268.

Sincerely,



Robert S. Freeman
 Manager, Licensing and NMC&A
 QHSL00/0012



Framatome Cogema Fuels
 P.O. Box 11646, Lynchburg, VA 24506-1646
 Telephone: 804-832-5000 Fax: 804-832-5167

NMSSOIPublic

Enclosure I

Description of Changes To Docket 71-6206

The current descriptions in Sections 7.0 and 7.1 outline a series of individual requirements of the pre-loading inspection process, however they provide little explanation of the loading and unloading procedure related to the use of the package. In addition, many of the individual requirements pertaining to the inspection fall outside the performance criteria of the package and are performed for operational and product protection purposes. Therefore, this section has been updated to generalize the inspection requirements and add more detail to the loading and unloading operation. Each of the operations are performed using approved detailed procedures.

The details concerning the O-ring, rubber pads, shock mounts, greasing of parts, outriggers, humidity indicators, pressurization, tampersealing, surveys, etc, have been removed from the description. The sway indicator rods have been removed from the package and from the license drawings in previous amendments and therefore the requirement to check them has also been removed.

B&W FUEL COMPANY, COMMERCIAL NUCLEAR FUEL PLANT
MODEL B FRESH FUEL SHIPPING CONTAINER
PACKAGE ID USA/6206/AF : Docket 71- 6206
SECTION: SAFETY ANALYSIS REPORT

Enclosure II

**Changed Pages
To Docket 71-6206**

<u>Page</u>	<u>New Revision:</u>	<u>New Date:</u>
14	8-29-00	Rev. 6
15	8-29-00	Rev. 6
16	8-29-00	Rev. 5

B&W FUEL COMPANY, COMMERCIAL NUCLEAR FUEL PLANT
 MODEL B FRESH FUEL SHIPPING CONTAINER
 PACKAGE ID USA/6206/AF : Docket 71- 6206
 SECTION: SAFETY ANALYSIS REPORT

Table 6.3.3. KENO-IV LRC Critical Results Using CSASN 27 Group
 Library For Worst Eight Core Configurations
 (Neutrons per Generation = 2000;
 Number of Active Generations = 847)

Spacing Between Arrays (in.)	Core Number	KENO-IV on IBM 6000 w/CSASN/27Gp (1 σ Unc)	Measured (1 σ Unc)	Calculated Minus Measured (1 σ Unc)
None	I	0.98964 (0.00053)	1.0002 (0.0005)	-0.01056 (0.00073)
0.644	IV	0.98892 (0.00052)	0.9999 (0.0006)	-0.01098 (0.00079)
1.288	V	0.98797 (0.00052)	1.0000 (0.0007)	-0.01203 (0.00087)
	VI	0.99715 (0.00049)	1.0097 (0.0012)	-0.01255 (0.00130)
	XVI	0.98675 (0.00051)	1.0001 (0.0019)	-0.01335 (0.00197)
1.932	VII	0.98689 (0.00050)	0.9998 (0.0009)	-0.01291 (0.00103)
	XXI	0.98896 (0.00050)	0.9997 (0.0015)	-0.01074 (0.00158)
2.576	IX	0.99100 (0.00051)	1.0030 (0.0009)	-0.01200 (0.00103)

7.0 Operating Procedures

Use and maintenance of the Model B fresh fuel shipping package is controlled by formal written procedures approved by appropriate plant management. These procedures specifically describe the sequence of operations for packaging, shipping, labeling, unloading, storing and maintaining the Model B shipping package to ensure it meets the requirements set forth in its Certificate of Compliance.

7.1 Loading Procedure

During the loading process the package is visually inspected for defects in the overall package including key components subject to wear. Specific attention is given to inspection of the container shell, closure bolts and nuts, the strongback assembly, shock mounts, poison plates and bow clamps to verify they are present and in acceptable condition. Non-conforming conditions are identified and corrected, as necessary, before container use is permitted.

The following general steps are performed as part of the fuel assembly loading process:

- 1) If applicable the container should be de-pressurized by either releasing the flange bolts, or releasing the pressure relief valve.
- 2) Using a crane hoist or lifting device the cover is removed.
- 3) The bolts are released to separate the shock mount frame from the strongback
- 4) The bolts are rotated to release clamp bows and open top end gate.

- 5) The strongback is raised to a vertical position.
- 6) The fuel assembly(s) is transferred into container
- 7) All clamp bows are closed – tighten the two end fitting clamp bows located at the top and lower end of the assembly(s)
- 8) The strongback is lowered and fastened to the shock mount frame
- 9) The upper end gate is raised and secured in position
- 10) The remaining clamp bows are tightened and the grid bow clamp side pressure pads are adjusted.
- 11) The frame interlocking toggle clamps releasing the strongback to shock mounts are retracted
- 12) The container cover is replaced and the flange bolts are tightened.

7.2 Unloading Procedure

The procedure for unloading of the shipping package is essentially the reverse of the loading procedure. Following initial visual inspection for external damage that may have occurred during transport or problems with the tamperseals, the package is unloaded. If applicable, the package is depressurized, the lid is removed, the majority of the bow clamps released and the strongback raised. The assemblies are then removed one at a time.

7.3 Records

Records pertaining to the Model B container and shipments as required by 10CFR 71 are retained for a minimum of 3 years.

8.0 Acceptance Tests

Visual inspections shall be performed on all Model-B containers to verify all welds and component dimensions, as identified by the licensing drawings, prior to their first use. Prior to each additional use (after routine maintenance), each container is re-inspected in accordance with approved procedures outlined in section 7.0. Maintenance operations are performed in accordance with criteria outlined in the applicable licensed drawings.

Pressure and leak tests are not applicable to the testing of the Model-B containers. The containers are not subjected to internal pressure since only unirradiated clad fuel is shipped. Component testing is accomplished as part of the normal fuel loading process. Deficiencies or deviations are reported as required by the FCF shipping container Quality Program. Testing of rupture discs and fluid transport devices are not used in the Model B container design. Testing of gasketed surfaces is not required since gaskets are non-safety related and are only intended to maintain product quality. Tests for shielding integrity are not necessary since no shielding is incorporated into the Model B container design. There are no thermal acceptance tests required since there are no heat generating materials authorized for shipment in the Model B containers.