



# CHEM-NUCLEAR SYSTEMS, LLC

140 Stoneridge Drive • Columbia, South Carolina 29210 • (803) 256-0450

9 November, 2000  
579-220-00

Mr. Timothy J. McGinty, Project Manager  
Addressee Only  
Licensing Section  
Spent Fuel Project Office  
Office of Nuclear Material Safety and Safeguards, NMSS  
U.S. Nuclear Regulatory Commission  
Mail Stop O-13-D-13  
Washington, DC 20555

Subject: Response to Request for Additional Information for Model No. IF-300, CofC No. 9001; Docket 71-9001; TAC Number L22931

Reference: 1) 11 October 2000 letter (579-190-00) from P. Paquin to T. McGinty including a basket plug drawing and revised SAR Section 10  
2) 3 November 2000 Conference Call chaired by T. McGinty including NRC staff and Mark Whittaker, Chem-Nuclear

Dear Mr. McGinty:

In the 3 November 2000 conference call (Reference 2), the NRC staff and Mark Whittaker discussed the basket plug to be used with Group III PWR fuel. The NRC requested additional assembly information on the plug drawing. In the operating procedures, Section 10, describing the use of the plug, the NRC requested an additional verification be added that the center cell does not contain a fuel assembly. The enclosed is provided as a further revision to the previous submittal (Reference 1) to address these requests.

This submittal consists of:

- Attachment 1 –Replacement page 4-22, the revised drawing of a PWR Fuel Basket Center Plug
- Attachment 2 – Replacement page 10-2

Attachments 1 and 2 contain replacement pages for pages previously submitted (Reference 1); please discard the previously submitted pages and replace them with the pages provided in this submittal.

Should you or members of your staff have questions about the responses, please contact Mark Whittaker at (803) 758-1898.

Sincerely,

Patrick L. Paquin  
General Manager – Engineering and Licensing

Attachments: As stated

NMSSO1 Public

ATTACHMENT 1  
REPLACEMENT PAGE  
VOLUME 1, SECTION 4, PAGE 4-22

FIGURE WITHHELD UNDER 10 CFR 2.390

<b>GTS DURATEK</b>			
PWR FUEL BASKET CENTER PLUG FOR IF-300 CASK			
SIZE	DRAWING NUMBER		REV.
B	C-110-B-57915-001		1
SCALE	1/8	WT. N / A	SHEET 1 OF 1

ATTACHMENT 2  
REPLACEMENT PAGE  
VOLUME 1, SECTION 10, PAGE 10-2

October, 2000

- f. The cask is lowered to the basin floor and the yoke is disengaged.
- g. The cask closure head is removed.
- h. The head is raised out of the basin, rinsed, inspected, and stored.
- i. The cask cavity is inspected to verify, for irradiated fuel shipments, that the proper fuel baskets are in place or, for irradiated hardware shipments, that the inner cavity is empty.
- j. If Group III PWR fuel is to be loaded, remove the center spacer from the cask closure head, unless previously removed, and install the plug in the empty center cell of the PWR fuel basket, unless previously installed.

#### 10.1.1.5 Loading Irradiated Fuel into the cask

- a. The list of irradiated fuel bundles, transfer procedure, and cask loading diagrams are obtained. For Group III PWR fuel, since only six (6) bundles will be loaded, verify that the fuel basket center plug is installed in the otherwise empty center cell.
- b. Fuel bundles are grappled one at a time and moved to the appropriate cell in the basket. Fuel assembly seating is verified.
- c. The identification marking is verified for each fuel bundle moved and the records are correspondingly marked. For Group III PWR fuel, verify the center cell does not contain a fuel assembly.
- d. After fuel loading is complete, the fuel basket center plug may be removed.

#### 10.1.1.6 Loading Irradiated Hardware

- a. A cask liner for the hardware to be transported is placed in the loading basin.
- b. The hardware is loaded into the liner using appropriate component spacers to limit the movement of the hardware.
- c. The liner cover is installed and the liner lifted and placed in the IF-300 cask.

#### 10.1.1.7 Installing the Cask Closure Head

- a. The cask closure head is lifted and the gasket and gasket retaining clips are inspected for damage or looseness. If Group III PWR fuel was loaded, verify that the center head spacer is removed.
- b. The head is slowly lowered onto the cask over the guide pins. This operation is closely watched to assure that the head is properly aligned.

#### 10.1.1.8 Returning the Cask to the Preparation Area

- a. The yoke is re-engaged with the cask trunnions.
- b. The connection is visually inspected to verify proper engagement.
- c. The cask is slowly raised (while monitoring radiation levels) until the top of the cask reaches the level of the fuel pool curb.
- d. Four cask closure head sleeve nuts are installed, hand tight.
- e. The cask is removed from the pool (while again monitoring radiation levels), washed, and placed in the preparation area.
- f. The yoke is removed and set aside.