

November 3, 2006

Mr. Peter J. Vescovi
Westinghouse Electric Company, LLC
Columbia Fuel Site
P.O. Drawer R
Columbia, South Carolina 29250

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION - CERTIFICATE OF
COMPLIANCE NO. 9239 FOR MODEL NUMBERS MCC-3, MCC-4, AND MCC-5
PACKAGING (TAC NO. L24012)

Dear Mr. Vescovi:

This is in response to your letter dated August 29, 2006. In which you requested U.S. Nuclear Regulatory Commission (NRC) approval of renewal of Certificate of Compliance No. 9239 for Model Nos. MCC-3, MCC-4, and MCC-5 Packages.

During our review of this application we determined that we need the information identified in the enclosure to this letter to complete our review. In order for us to complete our review of this application on a schedule necessary to support your needs, we are requesting that you provide this information within 15 days from the date of this letter.

Should you have any questions regarding this matter, please do not hesitate to contact me at (301) 415-8531.

Sincerely,

/RA/

Stewart Brown, Senior Project Manager
Licensing Branch
Division of Spent Fuel Storage and Transportation
Office of Nuclear Material Safety
and Safeguards

Docket No. 71-9239

Enclosure: Request for Additional Information

Mr. Peter J. Vescovi
 Westinghouse Electric Company, LLC
 Columbia Fuel Site
 P.O. Drawer R
 Columbia, South Carolina 29250

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION - CERTIFICATE OF COMPLIANCE NO. 9239 FOR MODEL NUMBERS MCC-3, MCC-4, AND MCC-5 PACKAGING (TAC NO. L24012)

Dear Mr. Vescovi:

This is in response to your letter dated August 29, 2006. In which you requested U.S. Nuclear Regulatory Commission (NRC) approval of renewal of Certificate of Compliance No. 9239 for Model Nos. MCC-3, MCC-4, and MCC-5 Packages.

During our review of this application we determined that we need the information identified in the enclosure to this letter to complete our review. In order for us to complete our review of this application on a schedule necessary to support your needs, we are requesting that you provide this information within 15 days from the date of this letter.

Should you have any questions regarding this matter, please do not hesitate to contact me at (301) 415-8531.

Sincerely,
/RA/
 Stewart Brown, Senior Project Manager
 Licensing Branch
 Division of Spent Fuel Storage and Transportation
 Office of Nuclear Material Safety
 and Safeguards

Docket No. 71-9239

Enclosure: Request for Additional Information

DISTRIBUTION:
 PUBLIC NRC File Center Docket File 71-9239 BWhite
 C:\FileNet\ML063070544.wpd

OFC	SFST	E	SFST	C	SFST		SFST		SFST
NAME	SBrown		MDeBose		CWhitee		LCampbell		RNelson
DATE	11/03/06		11/ 02 /06		11/02/06		11/ /06		11/ /06

C = COVER E = COVER & ENCLOSURE N = NO COPY

OFFICIAL RECORD COPY

Request for Additional Information
Model Nos. MCC-3, MCC-4, and MCC-5
Docket No. 71-9239

The following requests for additional information are needed to determine compliance with 10 CFR 71.55 and 71.59.

Criticality Evaluation

1. Provide a criticality analysis for BW 15x15 fuel assemblies transported in the MCC shipping package for enrichments up to 5.0 wt% in ^{235}U .

A related request made in a letter dated September 15, 2004, was for a one time shipment of four fuel assemblies with a maximum enrichment of 3.5 wt% and the limited authorization to ship was made on that basis. The renewal application contains a request for a permanent change in the guide/instrument tube loading pattern of the BW 15x15 in the Certificate of Compliance which covers enrichments up to 5.0 wt%.

The information provided should address the two ranges of fuel enrichment allowed in the certificate, i.e., 1) enrichments of 4.65 wt% or less and 2) enrichments over 4.65 wt% up to 5.0 wt% when additional poison plates are installed in the shipping package. Analyses for the BW 15x15 fuel are needed because Table 4 provided in the September 15, 2004, letter indicates that the 17x17OFA fuel is not bounding for all cases. Example data input files for the two categories should be provided. The information provided should cover both solid pellet and annular pellet options, if part of this request, and show that the length of the annular pellet region used in the calculational model provides a bounding result for the 8-inch length specified in Table 1-5.2 of the SAR.

2. Justify the information supplied in the MORE DATA section of the sample input deck in Table 6 of the enclosure to the request dated September 15, 2004.

The cylinder dimension and Dancoff correction factors given in the two MORE DATA cards are not consistent with the rest of the data in the input file. Provide a copy of the unit cell cards used to generate the Dancoff factors. Revised results should be provided for any supporting calculations which were performed with incorrect data.

3. Provide a criticality analysis for VVER-1000 fuel assemblies transported in the MCC-5 shipping package for enrichments up to 5.0 wt%.

A related request made in a letter dated January 5, 2005, was for a one time shipment of six VVER-1000 fuel assemblies with annular pellets and a maximum enrichment of 3.8 wt%. The limited authorization to ship was made on that basis. The renewal application contains a request for permanent change in the VVER-1000 fuel description to specify that the fuel assemblies contain annular pellets.

The information provided should address the two ranges of fuel enrichment allowed in the certificate, i.e., 1) enrichments of 4.8 wt% or less and 2) enrichments over 4.8 wt%

up to 5.0 wt% when additional guided poison plates are required in the MCC-5. Revised analyses are needed because of a potential error in the previous input files as described in item 4 below.

4. Justify the information supplied in the unit cell card for the solid pellet case in the input deck in Enclosure 3 to the request dated January 5, 2005.

The fuel rod pitch given in the triangular pitch unit cell card of the input deck for the solid pellet case is not consistent with the rest of the data in the input file and the information in Table 1-5.5 of the SAR. Revised results should be provided for any supporting calculations which were performed with an incorrect pitch value.