



# B&W FUEL COMPANY

An American Company with Worldwide Resources

# BW

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October 14, 1992

Charles E. MacDonald, Chief  
Transportation Branch  
Division of Safeguards  
and Transportation, NMSS  
United States Nuclear Regulatory  
Commission  
Washington D.C., 20555

Dear Mr. MacDonald:

REFERENCE: Docket 71-6206, USA/6206/AF

On August 25, 1992, B&W Fuel Company's (BWFC) Commercial Nuclear Fuel Plant (CNFP) requested to increase the enrichment to 5.1 wt% for the packaging referenced above. The requested increase would be restricted to allow the transport of one fuel assembly per container with enrichments greater than 4.6%.

The application did not include a list for some of the references used to support the criticality analysis. This supplement includes the reference list as Attachment A. Table T-6 also left out the fuel loading for the Conn-Yankee fuel assembly. Please replace the former table 6 with the corrected one provided. Please accept my apology for any inconvenience that this may have caused you.

Sincerely,

B&W FUEL COMPANY  
COMMERCIAL NUCLEAR FUEL PLANT

*Kathryn S. Knapp*

Kathryn S. Knapp  
Manager, Safety & Licensing

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ATTACHMENT A

References For Codes Used in Analyses, Page 2 of Attachment 1

1. NULIF, Neutron Spectrum Generator, Few-Group Constant Calculator, and Fuel Depletion Code, BAW-10115-A, Babcock & Wilcox, Lynchburg, Virginia, June 1976.
2. NITAWL, Nordheim Integral Treatment and Working Library Production, NPGD-TM-505, Rev. 9, Babcock & Wilcox, Lynchburg, Virginia, January 1992.
3. W. R. Cable, "123 Group Neutron Cross Section Data Generated From ENDF/B-II Data for Use in the XSDRN Discrete Ordinates Spectral Averaging Code," DLC-16, Radiation Shielding Information Center (1971).
4. KENO-IV, An Improved Monte Carlo Criticality Program, NPGD-TM-503, Rev. H, Babcock & Wilcox, Lynchburg, Virginia, January 1992.
5. B&W USNRC License SNM-1168, Docket 70-1201, 4-11-88.
6. Model B Fresh Fuel Shipping Container, Package ID USA/6206/AF, Rev. 12, Docket 71-6206, 10-10-85.
7. M. N. Baldwin, et al., "Critical Experiments Supporting Close Proximity Water Storage of Power Reactor Fuel," BAW-1484-7, Babcock & Wilcox, Lynchburg, Virginia, July 1979.
8. Memo, J. W. Harwell to E. J. Coppola, Nuclear Criticality Safety Evaluation of Mk BW Fuel Assembly at CNFP, JPH 90-01, 01/11/90 - CASE ID "DECNET SCAM4A50 STD," 01/10/90.
9. 86-1212406-00, Maximum E, Mark B Shipping Container, 4/21/92.

Table 6

Fuel Assembly Maximum Uranium-235 Loading

	MkB 15x15	MkB 17x17	MkBW 15x15	MkBW 17x17	Conn Yank 15x15
Maximum U-235 LOADING, KG	24.9	24.4	23.6	23.7	19.32

Parameters Used to Establish Maximum U-235 Loading

Enrichment, E	5.10	5.10	5.10	5.10	5.10
No. fuel rods	208	264	204	264	204
No. lattice cells	225	289	225	289	225
Fuel pellet O.D., in.	0.3686	0.324	0.3625	0.3195	0.361
Pellet density, %TD	96.3	96.3	96.3	96.3	96.3
Active fuel stack length, in.	144	144	144	144	119