

Return to SGFF/NMSS, MS-881-ss  
Distribution

PDR

Docket File 70-687

Case File

SGFF r/f

NMSS r/f

CNSmith

WBBrown

ESuarez

RGPage/LRouse, FC

LICobb, IE

Regions I, II, III & V

OCT 30 1984

See attached list of addressees.

Gentlemen:

The Division of Safeguards has reviewed its position concerning bias corrections to the reported Inventory Difference (ID) values for special nuclear material (SNM). The NRC policy of "always correct" by utilizing all bias corrections will be continued except for SNM involving uranium with an enrichment less than 6%.

For low enriched uranium of enrichment less than 6% in the isotope U-235, each bias correction greater than its associated uncertainty at the 95% confidence level must be included in the reported ID value. Each such correction shall be considered to be statistically significant and all affected items and associated records shall be corrected. The number of significant figures in each bias correction shall be consistent with the number of significant figures in the original value.

For plutonium and uranium of enrichment 6% or greater in the isotope U-235, all bias corrections must be included in the reported ID value. This includes insignificant bias corrections as well as statistically significant corrections which are to be made to the individual items and associated records. Corrections greater than the associated uncertainty at the 95% confidence level are considered to be statistically significant. It should be noted that the insignificant and significant bias corrections need to be applied to all SNM values, independent of which terms in the ID expression of 10 CFR 70.51(a)(6) that the values fall under; i.e., Beginning Inventory (BI), Ending Inventory, Additions to Inventory, and Removals. This implies that bias correction information from prior periods must be maintained and accurately tracked so that it can be properly applied to SNM which is listed under terms of the ID expression, such as BI. It is our understanding that some licensees have not been properly handling and applying insignificant bias corrections with respect to the BI term. The effects of rounding, proper number of significant figures, and the use of de minimis values need to be considered when making bias corrections. The NRC Licensing Staff believes these aspects should be evaluated on a case-by-case basis.

OFFICE							
SURNAME							
DATE							

We request that you examine your bias correction procedures as well as appropriate sections of your Fundamental Nuclear Material Control Plan. You should be prepared to discuss any deviations from the above stated positions by December 3, 1984. Licensing staff is in the process of reviewing and evaluating your bias correction methodology and will contact you during the first week in December 1984.

Sincerely,

Original signed by Willard B. Brown

Willard B. Brown, Chief  
Fuel Facility Safeguards  
Licensing Branch  
Division of Safeguards, NMSS

OFFICE	SGFF	SGFF					
SURNAME	CNSmith	WBBrown					
DATE	10/24/84	10/16/84					

List of Addressees

Babcock and Wilcox Company  
Naval Nuclear Fuel Division  
ATTN: Mr. N. Regan, Nuclear Safety  
and Licensing Officer  
P. O. Box 785  
Lynchburg, VA 24505

Babcock and Wilcox Company  
Commercial Nuclear Fuel Plant  
ATTN: Mr. J. T. Ford, Manager  
Materials Control  
P. O. Box 800  
Lynchburg, VA 24505

Combustion Engineering, Inc.  
ATTN: Mr. H. Eskridge, Supervisor  
Nuclear Licensing Safety  
and Accountability  
Route 21-A  
Hematite, MO 63047

Combustion Engineering, Inc.  
Nuclear Power Systems  
ATTN: Mr. H. B. Lichtenberger  
Vice President - Manufacturing  
1000 Prospect Hill Road  
Windsor, CT 06095

Exxon Nuclear Company, Inc.  
ATTN: Mr. R. A. Schneider  
Staff Specialist, Safeguards  
2101 Horn Rapids Road  
P. O. Box 130  
Richland, WA 99352

GA Technologies  
Nuclear Materials Control Division  
ATTN: Mr. William R. Mowry  
Licensing Administrator  
P. O. Box 85608  
San Diego, CA 92138

General Electric Company  
ATTN: Mr. C. Vaughan, Manager  
Licensing and Nuclear  
Materials Management  
Mail Stop J-26  
P. O. Box 780  
Wilmington, NC 28402

Nuclear Fuel Services, Inc.  
ATTN: Mr. K. D. Hensley, Manager  
Licensing and Safeguards  
Erwin, TN 37650

Rockwell International  
Energy Systems Group  
ATTN: Dr. E. Remley, Manager  
Health, Safety and Radiation  
Services  
8900 DeSoto Avenue  
Canoga Park, CA 91304

United Nuclear Corporation  
ATTN: Mr. William F. Kirk, Manager  
Nuclear and Industrial Safety  
67 Sandy Desert Road  
Uncasville, CT 06382

Union Carbide Subsidiary B. Inc.  
(Company B)  
Sterling Forest Research Center  
ATTN: Mr. J. J. McGovern  
Business Manager, Radiochemicals  
P. O. Box 324  
Tuxedo, NY 10987

Westinghouse Electric Corporation  
Nuclear Fuel Division  
ATTN: Mr. C. F. Sanders, Manager  
Nuclear Materials Management  
Drawer R  
Columbia, SC 29250