

DES



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

JUN 22 1979

SGML:DAH
70-1201

NOTE TO: Jim Partlow
FROM: Harry Bartz
Jim Blaylock
THRU: Ron Brightsen
SUBJECT: VISIT TO B&W COMMERCIAL JUNE 19, 1979

H. Bartz and J. Blaylock visited B&W to:

1. review data required by license conditions on sampling and analytical chemistry bias for possible modifications.
2. review proposed revision of Chapter 5 (physical inventory) of FNMC plan.
3. review implementation dates of measurement control plan.

B&W Commercial conducts a sampling program on incoming UO₂ powder as required by License Condition 4.3, due to possible stratification of material. J. Blaylock reviewed the data collected in response to this program. The intent of the plan was to monitor sampling random error to assure representative random samples.

The data indicated that the analytical random error did not vary significantly from replicate to replicate. However, the sampling random error did vary significantly according to statistical tests. The licensee performed tests on the data to test for pooling. No problems arose on the analytical random error, but liberties were taken with the sampling random error data to allow pooling. J. Blaylock stated that their handling of the sampling error data was incorrect and unacceptable.

To some extent the exercise may now be academic. B&W Apollo changed powder loading procedures to alleviate possible stratification of the UO₂ material. In addition, the effect on the last calculated LEID was examined. By assuming the worst possible random sampling error, the B&W Commercial LEID for the last inventory increased 100 grams.

The 70.57 Criteria allows the licensees to combine the analytical and sampling random errors if only one analysis per sample is run. This is acceptable provided the resulting contribution to the LEID is not significant. In the B&W case, the data indicates non-representativeness of sampling (on material no longer loaded the same way), yet the results of this non-representativeness do not make much difference on LEID. Hence, J. Blaylock recommended that the sampling plan at B&W be reduced with the stipulation that if the combined analytical-sampling random error exceeds some defined amount, the sampling program should be reinstated. To some extent, this could be a generic condition.

580 314 2208030 093 C

A discussion was held between H. Bartz and D. Zeff on questions sent to B&W in our letter dated May 24, 1979. Although B&W did not really express enthusiasm about the NRC request for additional details on inventory verification, they could not find a valid reason to object. Their notes for this meeting did not show sufficient detail for an acceptable revision. Specifically:

DISTRIBUTION
Docket File
MCL r/f
Case File
DCS
JBlaylock
HBartz
RBrightsen

1. Categorization of inventory types and forms - not complete.
2. Tables in present Chapter 3 showed more than one sampling and assay method. Did not indicate criteria for choice between methods for each category of material.
3. For material not tamper-safed, should require 100% weight verification.
4. Present FINMC plan allows statistical sampling and assay for U and U-235. Asked for specific criteria for each type of SNM (oxide, scrap, recycle) etc. Asked for statement on administrative or physical basis for determining that material is not commingled at inventory time.

At the conclusion of discussion, Bartz asked Dave Zeff when revised Chapter 5 would be sent to NRC. Mr. Zeff promised to have revisions in the mail by June 29.

Final item was discussion of B&W letter dated June 12, 1979 regarding implementation of FINMC Plan. Additional time beyond original 30 day was requested for:

1. Selection of Measurement Control Coordinator.
2. Management audit of systems.
3. Procedures for measurement methods.

We advised B&W that it is our opinion that the measurement control coordinator could be selected, indoctrinated and functioning within 60 days. In the interim, or if further time is required, Dave Zeff, Pat Waters, or the QC senior man could fill in. B&W had prior knowledge of the need for this person. Mr. Zeff said they had a previous choice turn down the position and had an offer tendered to a young lady and were waiting for a response.

The management audit would be required within one year of the effective implementation date. No additional time is needed.

B&W stated they had written procedures for all measurements which effect MUF & LEMUF. It was not in bound form, i.e., a manual. Although some changes may be required, we assured them that it was only necessary to have and use acceptable procedures. The NRC does not require a bound volume. We did ask them to review and update present procedures as a priority item.

The meeting closed at 2:45 p.m.

OFFICE	SGML	SGML	15/	SGML	
BY	HBartz:cc	JBlaylock	Harry Bartz	RBrightsen	
DATE	6/1/79	6/22/79	15/	6/22/79	