

# GENERAL ELECTRIC

DOCKETED  
USNRC

NUCLEAR ENERGY  
PRODUCTS DIVISION

CASTLE HAYNE ROAD • P. O. BOX 780 • WILMINGTON, N. C. 28402 • 1919/343-5000

82 AUG 23 P 3:20

WILMINGTON MANUFACTURING  
DEPARTMENT

OFFICE OF SECRETARY  
DOCKETING SERVICE  
BRANCH

August 19, 1982

Secretary of the Commission  
U. S. Nuclear Regulatory Commission  
Docketing and Service Branch  
Washington, D. C. 20555

DOCKET NUMBER  
PROPOSED RULE *PR-Misc. Notice*  
*(Reg Guide)*

Dear Sir:

RE: Proposed Revision 1 to Regulatory Guide 5.21  
"Nondestructive Uranium-235 Enrichment Assay  
by Gamma Ray Spectrometry"

Footnotes 2 and 3: An improvement in continuity would be achieved by dividing these footnotes up into four instead of two. Their subjects would be: 1) Dead-time, 2) Live-time, 3) Macroscopic distances, and 4) Microscopic distances.

Section C.2, paragraph 1, sentence 1: This sentence first implies 185.7 - kev peak can only be used to measure enrichments greater than natural. It then says it can be used to measure depleted uranium. This seems to leave out normal uranium. Why not just say it can be used to measure all enrichments.

Section C.2.b, paragraphs 3 and 5: One does not really measure live-time. If the implication is to only collect data when no dead-time exists, why then talk about mechanisms to correct for dead-time effects. In theory, one can make dead-time corrections even at very low counts. It is more important to limit making measurements where severe counting problems exist.

Section C.3, paragraph 2, sentence 1: This seems to contradict the discussions elsewhere on how to correct counts. I see no problem in correcting counts, in fact it may under many circumstances be good technique.

Section C.3, paragraph 4, sentence 2: This contradicts paragraph 4, sentence 2 of section C.2.b which implies that the background can be measured only above the 185.7 kev peak. I believe it depends on the case, some on one side, some on both sides.

*DS09  
add: Ed Hill  
5650 NL*

8208300247 20819  
PDR REGGD  
05-021 C B PDR

wledged by card... *8/27/82 emp*

Secretary of the Commission  
August 19, 1982  
Page 2

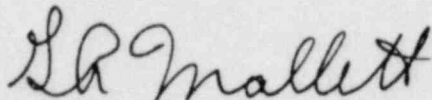
Footnote 4, page 13: This footnote being in the section on the Regulatory Position seems to imply that the Commission is endorsing a piece of equipment. I don't believe the footnote is needed.

Section C.5: This section restricts control to three standard deviations and no other levels. There are times when 2 1/2 or even 2 standard deviation control limits may be desirable. Why not specify no more than three standard deviations.

I appreciate the opportunity to comment on this regulatory guide.

Very truly,

GENERAL ELECTRIC COMPANY



G. R. Mallett  
Senior Engineer  
Measurements & Statistics

GRM/vcs