Mr. Tawfik M. Raby N-17 Secretary Building 235 Room A141 National Institute of Standards and Technology Gaithersburg, Maryland 20899

Dear Mr. Raby:

SUBJECT: ANSI N-17 COMMITTEE BALLOT

Enclosed is my ballot for ANS 6.1.1 - "Neutron and Gamma-Ray Fluence-to-Dose Factors." I have voted "approved with comments" and have included the required comments. Furthermore, I have reviewed the Scope, and have no objections.

Sincerely.

Original signed by:

Seymour H. Weiss, Director
Non-Power Reactor, Decommissioning and
Environmental Project Directorate
Division of Reactor Projects - III,
IV, V and Special Projects
Office of Nuclear Reactor Regulation

Enclosure: As stated

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

October 15, 1990

Mr. Tawfik M. Raby N-17 Secretary Building 235 Room Al41 National Institute of Standards and Technology Gaithersburg, Maryland 20899

Dear Mr. Raby:

SUBJECT: ANSI N-17 COMMITTEE BALLOT

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Sincerely.

Seymour H. Weiss, Director

Non-Power Reactor, Decommissioning and Environmental Project Directorate Division of Reactor Projects - III, IV, V and Special Projects

Office of Nuclear Reactor Regulation

Enclosure: As stated

## ANSI N17 CONDITTES BALLET

DOCUMENT; ANS-6.1.1 "Neutron	and Gamma-Ray Fluence-to-Dose Factors"
BALLOT DUE: October 15, 1990	
	Approved
x	Approved with Comments
	Not Approved
	Not Voting
Comments: (Note - all "Approx must include comme	ved with Comments" and "Not Approved" ballots ents.

The conversion factors and the standard generally seem appropriate. We are concerned with the discussion of the dose equivalent h. The dose equivalent is the quantity of concern for regulatory and radiation protection purposes. It is not closely related to biological effects. There is serious concern in some quarters that the use of the dose equivalent unit will render human data unsuitable for use in epidemiological studies. The dose weighting factors are no more than quasi-scientific guesses. It is noteworthy that the weighting factors are being changed in the next ICRP publication. The significance for the conversion factors is not great but the words should be changed to avoid the implication that there is more to the dose equivalent than a committee consensus.

Return ballot to:

T.M. Raby Chairman, N-17 National Institute of Standards and Technology Building 235, Room A141 Gaithersburg, MD 20899 Ley:wous # Waiss

U.S. Nuclear Regulatory Commission Representing

October 15, 1990