12H 905-1

MINISTRY OF CONCERN FOR PUBLIC HEALTH

May 21, 1980

(45 FR 18023)

Secretary of the Commission U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Attention: Docketing & Service Branch

Re: Comments on general content of the Standards for Protection Against Radiation in preparation for the major revision of 10 CFR Part 20 (in response to Federal Register notice, 5/20/80)

Gentlemen:

Relative to the NRC staff statement of the purpose for NRC radiation protection standards, I would suggest provision for debate on the following points:

"NRC standards should be consistent with the applicable Federal radiation protection guidance and include consideration of the work of recognized National and International advisory organizations."

This is well worded, but I would like it to be even more explicit that neither the membership structure nor the actual record of the ICRP qualify it as an independent scientific body concerned with "protection of the health and safety of workers, individual members of the public, and the population in general."

2. The statement, "To insure compliance, implementation of the standards should be amenable to verification by the Commission's inspection programs", seems to imply that standard setting is limited by existing inspection capability. I believe existing inspection capability should be modified to provide adequate safety standards.

Acknowledged by Dard. 6/4/80 .. moly

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Secretary of the Commission Page 2 May 21, 1980

With respect to Essential Elements of the Radiation Protection Standards:

Principles, #1: Develop a definition of "positive net benefit."

Occupational Exposures: Include guidelines to be used in training sessions for radiation workers, informing them of those clinical and cytological indicators of higher than "normal" risk of serious health damage from this exposure. Also inform workers of the possible genetic effects.

Radiation Protection Program: Determine the minimal understanding of radiation hazards needed by all workers in order to guarantee sensible cooperation with protection guidelines. Develop training and testing programs to assure this level of understanding.

Record Keeping: This should include general health records and reproductive history for all radiation workers. Age of occurrence of chronic diseases and mild mutations in offspring are especially important indicators of problems. This recommendation may involve discussion of privacy rights vs. public health rights, and independence of health monitoring from company (or government) control.

I would also recommend re-consideration of the present use of a dose-response mathematics in assessing the effects of ionizing radiation. It is our natural pollutant, therefore at low doses will increase our "natural" problems. The use of aging as a yardstick seems more realistic than the dose-response model for measuring the effect of low-level exposures. This question, as well as the question of cumulative degradation through mild genetic mutations, has been systematically avoided by the standard setting bodies.

Secretary of the Commission Page 3 May 21, 1980

Areas in Part 20 that Need Improvement, Section C., Exposures to the General Public, should include consideration of those characteristics of the general public at risk from a nuclear facility which might be expected to modify generic estimates of risk. These would include previous or concurrent radiation exposures, median age, expected births per year, cancer and birth defect rates, chronic disease profile, etc.

Some provision for a legally viable standardized description of the health characteristics of the population before operation of a nuclear facility should be developed. This gives protection to both the nuclear industry and the public (just as a worker's pre-hiring physical examination does) should a dispute over health effects rise later after the facility becomes operational.

Sincerely,

Rosalie Bertell, PhD, GNSH

Director of Research Ministry of Concern for

Public Health

RB:cw

cc: Robert Minogue

Arlene Violet, R.S.M.