UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20666-0001
February 2, 1994

The Honorable Daniel K. Inouye

The Honorable Daniel K. Inouye United States Senate Washington, DC 20510-1102

Dear Senator Inouye:

I am responding to your letters of November 1, 1993, and January 19, 1994, regarding the concerns of Dr. Don Tolbert about the NRC's radiation protection regulations in 10 CFR Part 20.

NRC published a final rule amending its radiation protection regulations of May 21, 1991 (56 Federal Register 23360). NRC licensees are required to comply with the rule no later than January 1, 1994. However, this rule was proposed for public comment on January 9, 1986 (51 Federal Register 1092). More than 800 sets of comments from organizations and individuals were received during the 296-day comment period.

As Cr. Tolbert said, the new regulations do, in fact, lower the maximum dose that licensed operations may deliver to members of the public. However, contrary to what Dr. Tolbert said, the NRC did consider the impacts, financial and otherwise, of the changes in its radiation protection standards before it adopted them, in keeping with its general policy to estimate the impacts of regulations that it adopts. In addition, in adopting the rule, the NRC followed the recommendations of the National Council on Radiation Protection and Measurements and the International Commission on Radiological Protection. Dr. Tolbert raised two issues that affect the medical community in general and his facility in particular: (1) the release of patients administered iodine—131; and (2) shielding for cancer therapy rooms.

With regard to patient release, the NRC is aware that there appears to be a contradiction between the dose limits in 10 CFR 20.1301(a) and the patient release criteria in 10 CFR 35.75. The medical community has filed rulemaking petitions on this matter. A proposed rulemaking to clarify this matter is being prepared, and should be submitted to the Commission shortly. In the meantime, the NRC staff is mailing an Information Notice to licensees informing them of the staff's view that 10 CFR 35.75 should continue to govern until final action on the above petitions is taken.

With regard to the issue of shielding of cancer therapy rooms, the NRC helieves that the shielding at most facilities can meet the new standards without modification. We believe that an analysis of the actual doses, in most cases, will show that the dose limit of 100 mrem/year is achieved with the existing shielding.

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However, if after consideration of actual measurements of radiation levels at his facility and reexamination of occupancy factors and other factors related to demonstrating compliance with the annual dose limit, Dr. Talbert concludes that the facility's shielding is not asequate to meet the new dose limits, he has several alternatives. Like any licensee, he can seek relief from the 0.1 rem/year dose limit in 10 CFR 20.1301(a) through the provisions of 10 CFR 20.1301(c), which allows doses of up to 0.5 rem/year under some circumstances. The provisions of 10 CFR 20.1301(c) were specifically adopted to address situations such as those in which existing shielding was designed to meet the 0.5 rem/year limit. As noted in response to comments similar to those raised by Dr. Tolbert, the supplementary information in the Federal Register Notice promulgating the final rule states that, "A 0.5-rem value has been retained in order to apply to transient situations and to alleviate the immediate need to redesign or reshield existing facilities that were designed to meet the former 0.5-rem limit." For your information, to date the NRC has not received any exemption requests from medical licensees because of shielding problems.

In conclusion, the NRC believes that the issues Dr. Tolbert raised have been adequately dealt with and we have no plans to delay the implementation date of the revised 10 CFR Part 20. We hope that this response is helpful.

Sincerely,

James M. Taylor Executive Director for Operations