

February 28, 1994

PROPOSED RULE 20  
(59 FR 4868)

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COMMENTS OF OHIO CITIZENS FOR RESPONSIBLE ENERGY, INC. ("OCRE")  
ON "STAFF DRAFT RADIOLOGICAL CRITERIA FOR DECOMMISSIONING," 59  
FED. REG. 4868, FEBRUARY 2, 1994

OCRE is generally pleased with the draft proposed rule. OCRE feels that it is responsive to the range of public comments received in the enhanced participatory process. OCRE is especially pleased with the opportunities for public participation which are built into the proposed rule, such as the Site Specific Advisory Board which would be established in those instances when a site is proposed not to be released for unrestricted use. OCRE also believes that the provisions which will require licensees to minimize contamination of their sites and minimize radioactive waste generation are highly appropriate and serve as a proactive, preventative approach which will avoid the repetition of the actions which have led to contaminated sites.

OCRE does have concerns and comments on two issues: the 15 mrem/year TEDE limit for release of the site, and the concept of "the average member of the critical group."

1. 15 mrem/year TEDE limit

OCRE questions why this limit is proposed to be set at 15 mrem/year, when the "Below Regulatory Concern" ("BRC") Policy Statement had set an individual dose limit of 10 mrem/year. Since one of the intended applications of the BRC Policy Statement was the establishment of residual radioactivity standards for decommissioning, it is not clear why the NRC would choose to exceed that limit now. Given the widespread public criticism of the BRC Policy Statement as proposing dose levels that were too high, it is not credible for the NRC to now propose a dose limit even higher.

2. Average Member of the Critical Group

OCRE believes that this concept may not adequately protect the public, and is ambiguous and subject to interpretation. OCRE would suggest that this concept be replaced with the protection of the hypothetical maximally exposed individual.

As an example of the imprecise nature of this concept, consider the word "average." Does "average" mean a person of average height, weight, and health? If so, this neglects the segments of the population most vulnerable to ionizing radiation: children and the fetus. Or, does "average" mean a statistical average, such as average dose? However, the term "average" is not statistically precise, as there are several methods of determining central tendencies in data: the arithmetic mean, the geometric mean, the median, or the mode. Which is it?

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Furthermore, protection of an "average" member implies that some persons will receive higher doses. But, if the dose limits are applied so as to protect the hypothetical maximally exposed individual, then all other members of the population are protected. OCRE believes that this concept will be far more acceptable to the public than the "average member" concept.

OCRE does not believe that the explanation for the use of the "critical group" concept given on pp. 41-42 of the draft sufficiently warrants the use of the concept. It is stated that licensed activities are carefully prescribed and controlled, as compared with decommissioning, where there will be no ongoing mechanisms for control. However, these facts suggest a need for greater conservatism by postulating the dose to a maximally exposed individual.

Once radioactivity is released into the environment, whether from currently licensed activities or from decommissioned activities, control is lost, and similar analytical models must be employed to estimate doses to the public. Such analytical models postulate the doses to hypothetical individuals, e.g., a person assumed to be stationed at the LPZ boundary with an assumed breathing rate, for nuclear power plant design basis accidents, or an individual consuming contaminated water or foodstuffs grown from a garden planted on a LLRW site. Current practice is "to speculate on which specific individual may be expected to receive the highest dose," and to model the doses to that hypothetical person using analytical methods. If we do this for licensed activities, then why not do the same for decommissioning?

Respectfully submitted,



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