

N98. NRC Tightens Radiation Exposure Limits

The U.S. Nuclear Regulatory Commission on December 13, tightened radiation exposure standards for workers at nuclear plants and for people who live near nuclear installations.

One key change will limit exposures to individual members of the public from NRC-licensed nuclear installations to 100 mrem annually, down from 500 mrem. For nuclear plant workers, the NRC set an annual exposure limit of 5 rem (the sum of internal and external doses), down from a current limit of 3 rem per quarter. The new limit can be exceeded only in special cases requiring cleanup work at a plant. In addition, the new regulations reduce limits for pregnant workers to 500 mrem over nine months, if the worker informs her employer about the pregnancy.

Such changes, which will not take effect until 1993, are based on a 1977 recommendation by the International Commission on Radiation Protection (ICRP). NRC data show, however, that nuclear plant workers were exposed, on average to 340 mrem in 1989.

In addition, the new rule requires all NRC licensees to implement programs aimed at keeping radiation exposures "as low as reasonably achievable" -- the ALARA principle. Most licensees implemented the ALARA principle voluntarily under the old rule, but the new rule requires it.

The NRC estimates the new rule will cost licensees \$170 million annually to implement. Most of the higher cost would result from the need to increase monitoring, evaluation, and recording of internal doses.

Taken From: "NRC Tightens Radiation Exposure Limits," in Nuclear Engineering International, p. 6, February 1991.