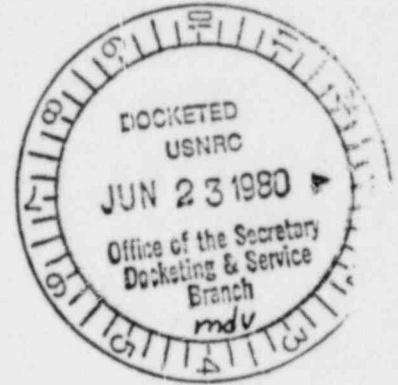


**NIAGARA
MOHAWK**

NIAGARA MOHAWK POWER CORPORATION / 300 ERIE BOULEVARD WEST, SYRACUSE, N. Y. 13202 / TELEPHONE (315) 474-1511

PROJECT NUMBER
PROPOSED RULE PR-20 (62)
(45 FR 18023)

June 17, 1980



Mr. Samuel J. Chilk
Secretary of the Commission
Attn: Docketing and Service Branch
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Mr. Chilk:

Re: Federal Register
Docket 80-8381

On March 20, 1980 the Nuclear Regulatory Commission published in the Federal Register (45 FR 18023) a proposed rulemaking for 10CFR Part 20, the Standard for Protection Against Radiation. Niagara Mohawk has the attached comments with respect to the proposed rulemaking.

Very truly yours,

NIAGARA MOHAWK POWER CORPORATION

D. P. Dise
Vice President - Engineering

MGM:jk
Attachment

L-4-1, Pt 20

Acknowledged by card. 6/23/80. mdu...

NIAGARA MOHAWK POWER CORPORATION

Comments on Proposed 10CFR Part 20 Rulemaking dated March 20, 1980

10CFR Part 20 in its current form requires minor changes to update the scope and specific provisions, but no recent advances in radiation protection knowledge or techniques appear to warrant changing "the basic structure or fundamental approach to radiation protection embodied in the original publication."

Comments by section follow:

Function of Radiation Protection Standards

The proposed Purpose of revised standards appears to emphasize ease of auditing and increased documentation, rather than ALARA concepts such as are included in the current 10CFR Part 20.

This is not an improvement, for it will detract from the time available to power station supervision for on-the-job enforcement of existing essential practices.

Essential Elements of the Radiation Protection Standards

a. Radiological Protection Principles

The basic assumptions are stated in a manner inconsistent with the stated objective that the "standards should be structured in a manner that is easily understood." A clear discussion should be presented, such as is given in the Draft Regulatory Guide, Instruction Concerning Risks from Occupational Radiation Exposure (Division 8, Task OH 902-1), would be much more informative. In particular, delete reference to "stochastic effect," and discuss somatic effects and genetic effects.

The basic radiation protection principles stated include a "positive net benefit." This statement may be interpreted as requiring a cost/benefit evaluation for every operation undertaken. This would be a tremendous waste of manpower with marginal improvement in safety or lowering of exposure.

The principles also refer to informing personnel of "potential risks" of exposure. This subject is covered by 10CFR Part 19.12 and should not be repeated in 10CFR Part 20.

b. Standards for Individual Occupational Exposures

The proposed inclusion of internal dose standards or a combination of internal and external dose will lead to extremely time consuming documentation of employee job history (in order to make calculations) if applied to all personnel. Since derived standards (MPC's) provide adequate control of exposure, only in the event that the intake of radioactive material by any individual exceeds the 40 hour control measure (see existing 10CFR Part 20.103) should a dose calculation be required. We expect to comment further when numerical limits are proposed.

c. Standards for Exposures of the General Public

The proposed ALARA effluent release limits appear to replace the existing 10CFR50 Appendix I limits. Is it proposed that Appendix I be deleted?

d. Requirements for a Radiation Protection Program

Item 6 refers to "personnel dosimetry requirements (for both internal and external exposures)." What dosimetry devices or methods are postulated for determining internal exposure?

e. Record Keeping Requirements

See comments under d. above.

f. Reporting Requirements

See comments under d. above.

Areas in Part 20 that Need Improvement

a. Radiological Protection Principles

The ALARA guidance provided in the previously referenced draft regulatory guide should be taken into account when considering the feasibility of establishing quantitative ALARA guidelines. It should also be noted that a significant portion of occupational exposure received is as a result of NRC mandated inspection programs for which an ALARA cost benefit has not been performed. We propose that the NRC be required not to mandate a practice or operation involving exposure to radiation unless its introduction can be demonstrated to produce a positive net benefit.

b. Standards for Individual Occupational Exposure

There are few people in this country receiving anywhere near 12 rem external radiation exposure. The reduction in radiation exposure which could be obtained by establishing combined internal and external dose limits does not justify the increased cost which would be involved in making internal dose calculations.

c. Standards for Exposure of the General Public

Although alternate methods of control are proposed here, there is no clear advantage to be gained by changing the MPC concept.

d. Reporting Requirements

For the vast majority of individuals, no significant internal exposure is accumulated. Reporting of internal exposure should only be required for situations involving exceeding the 40 hour control measure.

e. Miscellaneous

The adoption of SI units should never be contemplated under any circumstances. There is no justification in replacing one set of arbitrary units with another, and the potential errors (including overexposures) which may result must be balanced against the benefits. There are no demonstrable benefits.

The technical basis for numerical limits should not only be readily identifiable, but should be provided when the limits are proposed to assist in the review of the proposed regulations.