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Secretary
Nuclear Regulatory Commission
Docketing and Service Branch
Washington, DC 20555

DOCKET NUMBER
PROPOSED RULE PR 19,20
(59FR 5132)

Dear Sirs,

I have reviewed the proposed rule changes to 10 CFR 19,20 published in the February 3, Federal Register. The changes are of interest to me because I frequently work in the radiation protection department of reactor licensees and my responsibilities have included implementing the revised regulations. I have worked in the nuclear industry for fifteen years and I am a certified health physicist.

The primary problems I see with the proposed changes to the revised regulations and the current regulations are that they are to prescriptive in nature and are impossible/impractical to implement. The NRC has been criticized in this regard in the past and has been encouraged to make the regulation more performance based.

The amount of time that licensees and the NRC has spent interpreting and answering questions on the new regulations is enormous. The fact that six sets of questions and answers on the regulations had to be prepared and in some cases corrected after issuing, shows the problems associated with prescriptive regulations.

I believe one of the biggest questions regarding the new regulations will be when is a person a Member Of the Public (MOP) and/or what are "Assigned Duties".

In the Background section of the proposed rule two cases were given. The first case involved a person making deliveries in the restricted area. It was implied that this individual was a member of the public because his duties were not assigned by the licensee (what does this mean?).

The individual has been instructed and authorized by the licensee to enter the restricted area. He receives exposure from radiation and radioactive material while performing the work required/requested by the licensee (the amount of exposure is of no consequence since the regulations do not state when exposures are below regulatory concern or are trivial in nature). Additionally, he ultimately receives money from the licensee when his company pays him for doing the work (delivery) which the licensee required to be performed.

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Using the logic implied in the NRC's example; a MOP is a person who's duties were not assigned by the iicensee, there seems to be no difference between this individual and (1) a NRC inspector, (2) an INPO inspector, (3) a state regulator, (4) a visitor from another licensee who wishes to see how work is performed at a similar facility in a high radiation area, or (5) a NVLAP inspector (i.e. some are unpaid/unemployed) who wishes to view the licensees Personnel Dosimetry irradiation facilities. In fact these persons may even better fit the definition of MOPs since they are not doing work requested or required by the licensee and in some cases receive no direct or indirect compensation from the licensee.

Also within the background section it was written that "the Commission believes that doses received by individual workers at a rate great than the 100 mrem in a year public dose limit constitute a level of risk which require training...." This is interesting because the proposed changes do not included such a practical cut off for training. Part 19.12 states that workers must be given instructions when there is even only a POTENTIAL for radiation exposure. Given that the individual will be within several miles of the facility the POTENTIAL certainly exists. It is also of interest to note that the current regulations require personnel monitoring devices to be worn by individuals (minors) at one half of this 100 mrem value.

Remove the ambiguity and state what the Commission believes in 19.12 6(b) by adding the line: "No training is required for individuals when the exposure is expected to be less than 100 mrem per year".

Part 19 instructions should only be given when necessary. They are necessary when a significant dose could be received. They are not necessary when there is only the most minuscule potential for radiation exposure (e.g. current regulations, there use to be a "frequenting the restricted area" out that people used). Reword 19/12(a) to read: Occupationally exposed workers will receive instructions when they are likely to receive greater than 100 mrem of exposure.

The change in the public dose limit from 500 mrem to 100 mrem has caused some BWR licensees to enlarge the area they control as a restricted area. While it is/was likely that no individual would receive greater than 100 mrem/yr in these area, it could not be readily proven without providing personnel monitoring devices to all personnel within the restricted area. With the proposed change in the regulation to not call all restricted area dose occupational dose and the lack of definitive guidance on when an individual should be considered a MOP, licensees will be in a worse condition than before the proposed change.

Also of interest in Part 19 is what constitutes a worker. Is the delivery person described in the example a worker? If I am a fisherman and I work two hours a day at the Local Power Plant boat launch taking my boat in and out and the dose rate is 0.2 mR/hr is the licensee required to give me training under Part 19 (i.e. I am working and receiving exposure). Does my working partner, who is a minor, require a personnel monitoring device because he will receive greater than 50 mrem/year. Who provides the training to the minor, the employer or the licensee.

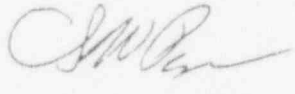
While not addressed in this revision the problem of when personnel monitoring devices are

required needs to be address. The current regulations are unfortunately very prescriptive in this regard, requiring monitoring devices when the annual exposure is 50 mrem for minors or 500 mrem for adults. This requirement has caused problems when personnel who have exceeded this threshold and are receiving or could receive trivial exposure. For example, they are working outside of radiologically controlled areas but could potentially be receiving unrecorded exposures in the tens of mrems per year range. The regulations require that they wear monitoring devices even though it is impractical and unnecessary to do so. The regulations should be modified to remove the prescriptions and put in the performance requirement. For example reword 20.1502(a) to read like 1502(b) When personnel are likely to receive or will receive greater than 10% of the dose limits, monitor the worker. If the NRC determines monitoring is inadequate/inaccurate, give a violation.

I believe the public would be well served by rethinking the way dose limits are assigned and controlled. The purpose of the regulations is radiation protection. The regulations should ensure that the public is protected. Changing the regulations and requirements to be performance based would eliminate the need for such debates and clarifications. A good start would be by determining who is subject to occupational dose limits and who is not and then including this information in the regulation.

The proposed change will not increase the margin of safety or improve radiation protection controls. The rule will be difficult, if not impossible, to implement by licensees. The new rule will be difficult to regulate/interpret, because of the use of ambiguous wording (i.e., POTENTIAL) in the Part 19 change. The ability of licensees to use and work with radioactive material will be diminished, due to the use of the words "assigned duty". This will limit what persons can do work at the facility under occupational exposure limits. The changes are likely to significantly increase the cost of operation.

Sincerely yours



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