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Wayne Gaul
1350 S. Greenwood
Wichita, KS 67211

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Docketing and Service Branch
Secretary of the Commission
US Nuclear Regulatory Commission
Washington, DC 20555
BRANCH

I would like to take this opportunity to comment on the proposed rule for 10 CFR Part 140 - Criteria for an Extraordinary Nuclear Occurrence. The declaration of an ENO is an occurrence that cannot be taken lightly, especially with the present legal and journalistic bias against anything even remotely associated with the nuclear industry. The industry as a whole is safe and the current methods of determining an ENO are adequate to give individuals more of a chance to make a rational appraisal of the situation instead of going to a "cookbook" type of mechanism that hastily comes to a conclusion. The options proposed do have merit to clean up some of the uncertainties in the determination process but there are deficiencies in the options that I would like to address.

Option 1

This option proposes to change the criteria for determining a substantial discharge of radioactive material or radiation offsite from 20 rem whole body projected radiation dose to one person offsite to 5 rem whole body projected committed dose. This proposal to lower the dose limits are actually lowering the limits below the occupational dose limits already in use since the occupational dose limits are calculated on an annual basis instead of a committed dose basis. The implications of this can become rather severe when long lived nuclides are present or even suspected. The use of committed doses has not been endorsed totally by all professionals in the Health Physics area and the issue is currently highly debated. The use of a dose equivalent calculation method that is contrary to current regulatory practices is harmful, at best. The use of the committed dose as a criteria for waiving of defenses would allow the legal profession to apply these type of criteria to industry workers who have left the industry and attempt to sue at a later date. Maintaining the current offsite dose numbers but changing them to committed dose equivalent would add the long term health risk factor to the determination of the

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public dose.

The dose limit of 20 rem is in the area below any threshold for biological effects to be noticed . A statistically small amount of biological effects might be noticed at the 20 rem level, but only in very extreme cases. Therefore lowering the dose limit to 5 rem would add statistically nothing to the health and safety of the public, which is the main concern being addressed (as opposed to the health of the legal profession).

The change would greatly impact the nuclear industry by having the ENO defense waiver limit actually below the occupational dose limit. The public would suffer from the increased insurance cost and legal council the nuclear industry would suddenly be burdened with and therefore have to pass these costs on to their customers.

The usage of the more appropriate terminology from "That one or more persons offsite were, could have been, or might be exposed ..." to be changed to "... one or more persons offsite were or will probably be exposed ..." is good in that it removes the " might " criteria presently in use that can be used on hypothetical people.

Option 2

This option proposes the usage of committed doses at the same levels as are in option 1 and therefore is opposed for the same reasons. More appropriate terminology is offered here by stating "... a person or persons on or near any site boundary throughout the duration of the accident ...". The criteria for recognizing "substantial injury" is proposed to become a calculated 100,000 person-rem collective dose within a 50 mile radius during the course of the accident. This criteria is not appropriate in the context that 99 people could get 1000 rem (lethal dose) and not trigger the criteria for "substantial injury", yet a large population close to the plant could get less than one rem each and trigger the criteria.

Option 3

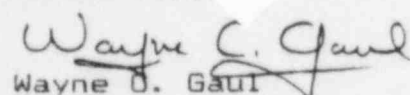
This option takes a "will probably result" approach to determining substantial injury or damage and offers one set of criteria for the magnitude of release and doses. A danger in this simplification is that an ENO could be triggered without having establishing substantial injury or damages. This option would initiate an ENO if real or personal property is rendered unfit for use as a result of

contamination at levels of greater than 10 mrad/hour at one meter. No mention is made to the position of this property in relation to the release but the exposure rates will meet the criteria for an ENO, i.e. if an onsite vehicle was found to have this contamination level an ENO would be declared even if no contamination traveled offsite, defenses would be waived and the defendant would be open to any legal whim.

This option has taken great steps to simplify the procedure for determining an ENO but leaves too much open, especially under circumstances where a hasty decision, based on quick rules can lead to severe problems.

I wish to thank the commission for taking these comments into consideration and am available to answer any questions concerning these comments.

Sincerely,


Wayne O. Gaul