

OH 902-4

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PROPOSED RULE **PR-Misc Notice**
Reg Guide



Mr. A.K. Roecklein
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Roecklein:

I have read the NRC Draft Regulatory Guide and Value/Impact Statement Task OH 902-1, Instruction Concerning the Risk from Occupational Radiation Exposure, and find it interesting and informative. I liked what I saw.

However, I wish you would find a way to incorporate some discussion on public perception of risk. Recently, Dr. Norman C. Rasmussen of M.I.T. gave two different talks in the Cleveland area. The one on the public perception of risk was at Case Western Reserve University. It was an outgrowth of work done by D. Litai, one of his PhD graduate students which was very good. He boiled down the results to nine binary type categories, eight of which I can recall.

Risk Perception Factor

Continuous	vs. Occasional	1	Phenomenon
Man-made	vs. Natural	20	"
Uncontrollable	vs. Controllable	5	"
New	vs. Old	10	"
Immediate	vs. Delayed	30	Effect
*Catastrophic	vs. Ordinary	30	"
Involuntary	vs. Voluntary	100	Participation
Necessity	vs. Luxury	1	"

*Catastrophic is defined as 25 deaths or more per event.

Thus, in the case of nuclear risk, where the efforts are to keep exposure levels low, the public would perceive the risk at 100 to 30,000 or 100,000 times worse than a level they have been taught to mistrust.

Any person needing instruction concerning risk essentially belongs to the body called the uninformed public. Since TMI this person has been encouraged by other uninformed members of the public (media), to perceive nuclear power as new, catastrophic, involuntary, maybe immediate (bomb), or delayed. However, this person's point of reference is the NRC limits. You have already shown this limit of discrimination level to be quite low. So if this person has been taught to mistrust the nuclear community, he perceives the limits as

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needing to be 100 to 30,000 to 100,000 lower than they presently are.

Use of these factors can explain why 50,000 people per year can die on the highways with hardly a ripple; why many people continue to smoke cigarettes; why Mount St. Helens didn't concern people as much as TMI and on and on.

In conclusion, I think it is not enough to treat risk in the manner you have. People need to be shown how they have been guided to perceive nuclear risk as greater than it really is.

Sincerely,

REUTER-STOKES, INC.

C. Hubbard Ford

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