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PROPOSED RULE

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PR - Safety Goals
(Evaluation Plan)
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Dear Sirs:

I am writing in regards to your Proposed Safety Goals for nuclear power plants. My comments center on two points:

- (1) the basic probabilistic approach combined with numerical values for risk of acute accident fatality, risk of latent cancer and frequency of core melt is excellent,
- (2) the specific goals for accident risk (acute and latent cancer) are too tight.

I hold the ScD, MS, and BS degrees in Nuclear Engineering from M. I. T. and currently work for the Fusion Reactor Safety Research Program. Whereas I have background in nuclear engineering, probabilistic risk assessment, and safety analysis, I use it in fusion, rather than fission, work. Looking at the overall risk to man from energy and industrial activities, I know of no better approach to rationally judge the safety of any activity (fission, fusion, coal, etc.) than through the use of probabilistic risk tools. From my perspective, the better such tools are used today for fission, the more useful and more rational will be the safety standards for new, evolving technologies. What you do will be a very important precedent. Your basic approach is right.

The problem I have is with the specific goals you propose for risk. You propose that the risk of acute fatality and latent

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cancer be 0.1% of the accident and cancer risk from all other sources. How can you justify such restrictive values? If you had the power, would you demand that all energy and industrial activities in a given community contribute less than 0.1% to the total risk? I doubt it and there lies the problem. You are asking more of fission nuclear power than society does of other activities. No other industrial activity has the excellent safety record of nuclear power. Nor could any other activity meet the standards you propose to demand of fission. By setting such restrictive values of one energy form, you would make nuclear power more expensive, promote less safe energy forms, and shift society's limited resources from more productive and efficient ways of saving lives. Nuclear power is already too safe in the sense that far more money is spent on nuclear safety per life saved than a whole host of other human activities. Little good your goals would be to all the thousands of people killed by fossil fuel burning resulting from too restrictive nuclear power standards. I strongly urge you to raise your values to 1.0% from 0.1%.

Thank you for your time.



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