

3/24/96

FAX TO: John Larkins

CC TO: ACRS/ACNW Joint Subcommittee Members (JTL - please provide
copies of this memo to the members)

Roxanne Summers

FROM: JCC

SUBJECT: 3/26/96 ACRS/ACNW Joint Subcommittee Meeting

Because of another commitment, I have decided to conserve your budget by not attending the 3/26/96 ACRS/ACNW Joint Subcommittee Meeting. Additionally, as a short timer on ACRS (my term ends on 5/30/96), I won't be around to participate in the on-going deliberations of low-level radiation health effects, a subject dear to my heart. I have full confidence that the members of the Joint Subcommittee will come to an appropriate position on this issue without my presence at the meeting.

I have reviewed the impressive stack of paper on low-level radiation health effects that Roxanne put together for the meeting. I believe now, as I have believed for the 40+ years that I have been associated with the nuclear power industry, that the nuclear establishment has created an unwarranted fear of man-made ionizing radiation on the part of the general public with the "linear, no threshold" effects/dose hypothesis. This has resulted in a tremendous financial and health effects cost to society, not only with respect to the utilization of nuclear power, but in the use of all forms of nuclear technology.

There appears to be considerable technical bases for the March, 1996 Health Physics Society's recommendation " ... against quantitative estimation of health risk below an individual dose of 5 rem in one year or a lifetime ~~dose~~ of 10 rem in addition to background radiation." However, the proponents of this position were given a number of clearly valid challenges by W.K. Sinclair (See p.5 of Attachment 15 to Roxanne's memo). Of his several questions, I was particularly intrigued by his question regarding the usefulness of a threshold of a very low value of dose in actual radiation protection practice. I believe that we have an answer to this challenge as it concerns the regulation of nuclear power plants.

The last ¶ of Marv Goldman's comments (see Attachment 18 to Roxanne's memo) seem to me to be an especially cogent summary of where we are and where we should be going:

"Let's stop debating what we believe and hope for, and put the linear, no-threshold hypothesis to sound, solid scientific scrutiny and objective testing. It's time for innovative research ! We need to do a complete review of the available data, and as well employ our newer molecular tools in unique research to better understand the radiation carcinogenesis process"

I don't believe that the NRC can change its regulatory approach (at least politically if not legally) until the NCRP (and the ICRP?) changes its radiation protection philosophy with respect to low doses of radiation. Attachment 24 to Roxanne's memo is a proposal to the NRC from the NCRP dated 2/10/95 (over a year ago) to produce a report entitled "Critical Evaluation of the Linear-No threshold Assumptions." The estimated cost of this three year study is \$225k, a drop in the bucket relative to the RES budget. We need to know what action has been taken by the staff with regard to this proposal. It seems to me that this is an obvious first step in dealing with this issue, although I can imagine that there are staff people that might see this as a threat to their empires.

Finally, I believe that the Committees, either individually or jointly, should recommend to the Commission that the agency develop a proactive strategy to settle the question of the health effects of low level radiation exposure. This would be wholly consistent with this Commission's stated policy that NRC regulations should be risk informed.

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