

DEC 8

Lee V. Gossick, Executive Director for Operations

INDEPENDENT SCIENTIFIC REVIEW OF RESEARCH PROGRAM

Our research program is encountering a number of difficulties. One of them is persuading OMB that the large amount of research resources required is in fact necessary. Another is obtaining adequate consideration of future multimillion dollar facilities for experiments only now being scoped. Another, only beginning to surface, is the potential for disagreement between the user requesting research and the Office of Research. To help solve these difficulties, to enhance the scientific validity and credibility of the research program and to provide the Commission with a high-level scientific audit of proposed and ongoing research, I suggest consideration of a Senior scientific advisory group concerned with the research program.

Historically, the ACRS has played some fraction of this role as regards the reactor safety research program. There is an active safety research subcommittee of the ACRS. Other topical subcommittees review the safety research programs in their areas. ACRS members attend review group meetings. I believe the ACRS could in principle fulfill a substantial fraction of the role I am suggesting, but at present their workload is such that I don't think they could do a very good job of it. Moreover, in safeguards, environmental and other non-reactor areas they are not obviously endowed with the correct expertise.

I therefore recommend the formation of a separate scientific advisory committee. The members of this committee should be eminent scientists with good judgment. They should understand both research and its application to practical problems, such as the ones required to be solved by NRC. Their expertise should be applicable to one or more of the main branches of the research program, that is to say water reactor safety, fast reactor safety, environmental effects, health effects, safeguards, and fuel cycle. I envision two to four meetings per year of this group, which ought to have somewhere between five and ten members. I would consider including members who are not part of the nuclear club, but who could represent the points of view of the scientific community, for example Hal Lewis.

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The charter of the committee would be to advise the Commission regarding the proposed and ongoing research program with special emphasis on the large programs, on omissions in programs, and on new work being proposed. I would give them a rather broad charter and leave them free to roam. One of the annual meetings should be a full review of the proposed budget, whose results would be part of the Commission's budget review process in this area.

It is not clear to me whether it is a good idea for these people to review technical assistance programs or not. On the one hand, these are not research programs in the classical sense, but rather usually short-term applications of existing techniques to solve specific problems. On the other hand, they show a tendency to turn into research programs. They also eat up a large quantity of resources, which we have a lot of trouble with over at OMB.

The resources required for such a committee would not be negligible. They would require some amount of staff report and in particular they would require a good deal of effort from the RES staff in getting information to them, making presentations, getting up studies of this and that at their request, etc., etc. Such effort on the part of the office staff would, in fact, be the major resource requirement of such a group and would have to be considered quite carefully in view of the limited staffing available in RES. By contrast the remuneration of committee members and the required Federal employee would be negligible.

Original Signed by
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