

In addition SIE collects for other purposes work in progress descriptions covering a considerable fraction of federally supported R&D. While at the present time coverage is incomplete, it is likely to be improved in the next few years and as this occurs SIE will be more able, in response to inquiries, to supplement general laboratory information with more specific information collected for other purposes.

*Question 2. What is the policy of your agency respecting appraisal of the performance and the condition of your laboratories? How does this compare with your policy for appraising the performance of your research and development contractors. What procedures and standards do you have for such appraisals? Please illustrate your reply with copies of agency publications.*

Answer. I am enclosing, as Attachment I, AEC Manual Chapter 0701 which sets forth procedures for appraisal of contractor performance. You will find those sections directly relevant to appraisal of multiprogram laboratory contractors underlined; you will also note that Part I of Appendix 0701 includes general appraisal guides used by AEC staff in evaluating contractor performance.

A large part of AEC's appraisal of the technical performance of major laboratories is done through AEC's evaluation of individual projects and programs. Procedures and standards for such reviews vary significantly from program to program. There is relatively greater and closer surveillance and evaluation by AEC staff in the more applied and developmental areas such as reactor and isotopes development where milestones, schedules and specific objectives are prevalent. There is considerably less surveillance and evaluation of details in the more basic areas of physical research, biology and medicine, basic weapons research, etc. Nevertheless, AEC staff appraises technical performance at the program level in all cases. It also evaluates overall laboratory performance in administrative and managerial matters. Regular reviews of this sort cover Health & Safety, Reactor Safety, Materials Management, Classification, Construction and numerous other financial and administrative activities. AEC expects its laboratory directors and contractor-sponsored review committees to make evaluations of overall performance, objectives and condition of its major laboratories, and, in fact, they do.

In addition, the AEC utilizes ad hoc panels for review of special topics involving generally more than one laboratory. Furthermore, the AEC's General Advisory Committee holds every other meeting at one of its major laboratories, and as part of its service it reviews one or more of these laboratory programs, consults with the directors and advises the Commission.

The procedures which AEC uses in its review of individual projects at its major laboratories differ from those it uses in the case of other contractors such as individual projects and programs at universities, industry, and not-for-profit laboratories. As a matter of policy, AEC generally calls upon experts from outside the agency to assist in the review and evaluation of individual projects and programs conducted by such contractors, particularly in the more fundamental areas of science. Since a continuing daily management is not present for university contracts, a closer examination of initial proposals and an evaluation of the competence available is made by the AEC staff. Any subsequent renewal is given the same close attention.

The directors of AEC's major laboratories have flexibility, which varies significantly from program to program, to set project priorities within overall program budget levels, established on the basis of individual project reviews conducted by AEC staff. There is less flexibility in the case of contractors conducting one or a limited number of projects.

*Question 3. In your testimony you mentioned locating Government laboratories together at a common site. What significant advantages are there to co-location in your opinion? How do you balance these advantages with the increase in geographic concentration of Federal research and development that logically would follow?*

Answer. As described in my testimony I believe potential significant advantages of co-location are the common use of specialized and expensive facilities, and the opportunity for beneficial scientific exchanges among staff members who taken together represent a broader spectrum of scientific talent than would otherwise be possible. It is also recognized that some economies can result through more effective use of land, services, and general administration. On the other hand, increased local geographic concentration of Federal R&D may be a consequence of co-location, and this would not assist a policy of getting government laboratories and other Federal R&D support into areas where no such support exists today. However, it could strengthen existing modest centers in