



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
WASHINGTON, D. C. 20555

April 8, 1975

Honorable William A. Anders  
Chairman  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Dear Mr. Anders:

This letter is in response to your request for comments and recommendations regarding the future role of the ACRS and the scope of its activities in providing advice to the NRC.

The ACRS has dealt primarily with problems of radiological safety associated with the operation of power reactors, test and research reactors and fuel reprocessing plants. It has reviewed military reactors and production reactors at the request of the AEC Regulatory Staff. Past experience of the ACRS has indicated that new problems continue to arise in its review of production and utilization facilities, and as these new problems have arisen the Committee has adapted its procedures and responsibilities to deal with many of them. For example the problem of safeguards is relatively new to the Committee, but is now recognized as an important facet of plant security.

The responsibilities of the Nuclear Regulatory Commission extend beyond the past purview of the ACRS. Nevertheless, the Committee has concluded that, upon request of the Commission, it would be possible to extend its areas of activity to others which are of concern to the Commission.

The Committee believes that its role can be expanded in scope to cover some or all of the items noted below, provided the provisions for non-mandatory review as recommended in its letter of January 21, 1975, are implemented. The Committee is already concerned with many of the items listed, but believes additional effort should be given to some of them. Some of the items are not now being given Committee attention.

It is important that the Committee continue to devote a portion of its activities to the review of specific project applications in accordance with Section 29 of the Atomic Energy Act in order that it keep current its knowledge and retain its competence in reactor technology and related problems areas. Indeed, it is this knowledge that provides a sound basis for its advice in connection with the development of safety standards, safety research and other aspects of nuclear safety technology.

Working from this basis the ACRS believes it should continue to take part in the development of proposed safety standards and safety research as they apply to nuclear reactors and fuel processing plants.

Additional areas where the Committee believes it can and should contribute are the following:

Safeguarding Special Nuclear Material - This is an area that is already given some attention in considering the provisions for safeguards against industrial sabotage at nuclear plants and fuel processing plants.

Transportation of Spent Fuel - The Committee has in the past provided advice to the Commission with respect to the design and testing of spent fuel shipping containers and the shipment of plutonium in liquid form. This role could be expanded to include the safeguards considerations during fuel shipment and other matters affecting the public health and safety.

Fuel Fabrication Plants - The Committee could review fuel fabrication plants.

Storage and Disposal of High Level Radwaste - Siting and design of such facilities is an appropriate area for ACRS review.

Use of Nuclear Centers (Parks) - The pros and cons of nuclear parks with regard to public safety could be reviewed by the Committee.

Determining What is an Acceptable Risk for Nuclear Power - A step toward establishing existing risks has been made by the publication of the draft of WASH-1400. Additional work is needed to determine if the risks indicated by this report are representative of various nuclear plant designs proposed and if these risks are acceptable. The Committee believes it can contribute to this question.

Evaluation of Regulatory Review Practices - Safety considerations pertaining to nuclear energy require continuing attention to the safety assessment methodology with respect to technological developments and new safety circumstances. The Committee could provide assistance by evaluating the approaches used by the NRC Staff for safety assessment and by offering recommendations for modification of the review practices.

Review of Operating Experience - As the number of nuclear installations increases and more operating experience is gained there will be a need for independent examination and assessment of cumulative operating experience and unusual operational events. The Committee could serve in this capacity.

The ACRS suggests that, during a trial period of at least a year or so, efforts be made to extend its area of responsibility by specific request of the Commission. This procedure would provide an opportunity for both the Commission and the ACRS to see if the arrangement can work. Specific requests for advice would be handled by the Committee as now constituted. Some areas would probably require the Committee to obtain appropriate consulting assistance in areas not now covered by Committee expertise. The Committee does not believe that the scope of activities noted above would require any abrupt or substantive change in the membership of the Committee.

The Committee is willing to undertake responsibilities outside its areas of previous activity if the Commission so requests. It is the belief of the Committee, however, that a significant portion of its efforts should continue to be applied to detailed technical consideration of safety related problems in order that its advice come from a base of competence that would be of greatest assistance to the Commission.

Sincerely yours,

/s/ W. Kerr

W. Kerr  
Chairman