

**ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
UNITED STATES ATOMIC ENERGY COMMISSION  
WASHINGTON 25, D.C.**

December 13, 1960

Honorable John A. McCone  
Chairman  
U. S. Atomic Energy Commission  
Washington, D. C.

Subject: REGULATION AND SAFETY OF NUCLEAR REACTORS

Dear Mr. McCone:

This is in response to a request for any suggestions contained in Commissioner Olson's letter of August 29, 1960.

The Committee believes that there are general principles which can be stated.

I. Responsibility

There should be a separation at the highest level practicable between the responsibility for promotion and the responsibility for regulatory and safety activities. This separation might be obtained by having two separate agencies in the Executive Branch of the Government, but the Advisory Committee on Reactor Safeguards believes that at the present time the two separate groups should exist within the Commission itself. It is the view of the ACRS that a satisfactory solution could be obtained if:

- A) a Commissioner were to concern himself with regulation and safety as his special sphere of interest, and
- B) the line organization to implement safety review, inspection, licensing, and hearings were to be entirely separate from the promotional and development activities of the Commission.

## II. Staff

- A. Adequate review of reactor proposals requires the services of a large technical staff. This technical staff should be composed of highly competent technical persons representing all of the necessary disciplines. For the present it seems certain that the existing staff will have to draw upon consultants in special areas.
- B. This technical staff should have direct access to the information developed by and some influence on the AEC program of research in safety matters. The stature of this group will be enhanced in the atomic energy field by such a close relationship.

## III. Advisory Committee

There is a continuing need for a technical committee, group, or organization free from self-interest and promotional pressure to give advice as to the policies and means by which the public is protected from radiation hazards in connection with reactors or other large nuclear facilities.

This Committee should concern itself with: the critical technical safety features of specific reactors; with safety in chemical nuclear processing plants; with aerospace nuclear problems in which there are significant health and safety problems affecting the public; and technical advice on safety criteria and standards. The Committee should give independent advice. However, in studying the problem, the Committee should work closely with the full-time technical staff mentioned in II above. As time goes on, the staff should gradually assume the responsibility for review of all reactors except new and unique types and the Committee should confine its duties more and more to safety policy matters and to unique nuclear safety problems.

## IV. Improvements in Procedures

- A. The regulatory procedure should be responsive to the technical as well as to the legal requirements. The procedure should be designed to keep its necessary steps to a minimum.
- B. Licenses should be written in sufficiently basic terms so that future amendments refer to major safety problems and not to minor details.

Sincerely yours,

/s/ Leslie Silverman

Leslie Silverman  
Chairman

cc: L. K. Olson, Commissioner  
J. T. Ramey, Exec. Dir., JCAE