MAR 8 1962

Mr. R. Lowenstein
Director, Division of
Licensing & Regulation
U. S. Atomic Energy Commission
Washington, D. C.

Dear Mr. Lowenstein:

During the latter stages of development of the Technical Information Document (TID), which is to accompany Part 100 "Reactor Site Criteria", the Environmental Subcommittee of the ACRS has been working closely with members of your staff. There have been subcommittee meetings held during which drafts of the document were reviewed and discussed with the authors. Suggestions have been made by the Subcommittee both during these meetings and in informal communications with the staff.

At this time we have a final comment which we would like to make concerning the statement of purpose made in the TID. It is our belief that the purpose as stated on Page 2 of Draft No. 5 should be expanded in order that the document can be put in proper perspective, especially for the benefit of those readers who are without experience in this field. I have, therefore, attached a suggested revision to Page 2 of the TID which states the purpose and use of the document in a form which we believe to be suitable.

This, then, concludes the work of the Subcommittee on the Technical Information Document. The full Committee has already expressed its views on the final draft of the related Part 100-Reactor Site Criteria. At this time, on behalf of the Subcommittee, I would like to commend the authors of the Technical Information Document for the fine work they have done, and the excellent spirit of cooperation which has prevailed throughout the work on both the TID and Part 100.

Sincerely yours,

John C. Geyer, Chairman ACRS Environmental Subcommittee

Attachment: CC: J. Di Nunno w/attachment

office Revised "Purpose and Use"

ACRS

surname : bmd

DATE 3-7-62

PAGE 2

I. PURPOSE AND USE.

It is the intent of this document to provide some preliminary guidance for those whose task it is to evaluate the hazards involved in the operation of a particular reactor in a given place. Title 10 Code of Federal Regulations, Part 100 (10 CFR 100)(1) defines an exclusion area, a low population zone, and a population center distance. It sets forth limiting exposures which may be used as guides in judging whether the boundaries of such areas are sufficiently distant from the proposed reactor in a particular setting.

For any proposed reactor: the performance experience accumulated elsewhere; the engineering safeguards; the inherent stability and safety features; and the quality of design, materials, construction, management and operation are all important factors that must be evaluated when judging the suitability of a site.

For a particular site: size, topography, meteorology, hydrology, ease of warning and removing people in times of emergency, and thoroughness of plans and arrangements for minimizing injuries and interference with offsite activities, all enter an evaluation.

Consideration of these as well as other aspects of hazards evaluation involves so many different situations and such complex technological problems that it would be quite impossible to anticipate and answer all questions that will arise.

This technical document, therefore, sets forth only one method of computing distances and exposures, for one type of reactor, for selected nuclides, and for one dispersion situation. In developing this example conservative assumptions have been intentionally selected.

Designers of reactors are expected to examine all significant aspects of the hazards and safety problem and are encouraged to develop and use assumptions and calculations which they believe are appropriate to the particular situation with which they are dealing. In any case the designer and/or applicant bears the responsibility for justifying all the assumptions and methods of calculation used in a hazards evaluation. The fact that many aspects of the problem are not considered in the example set forth here, does not in any way relieve the designer and/or applicant of the responsibility for carefully examining, in his particular case, every significant facet of the hazards and safety problem.

(1) "Reactor Site Criteria", Title 10, Code of Federal Regulations, Part 100 (10 CFR 100), February 11, 1961.