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DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE WASHINGTON 25, D. C.

BUREAU OF STATE SERVICES

AUG 18 1959

Refer to: DRH:SP

Mr. Harold L. Price, Director
Division of Licensing and Regulation
Atomic Energy Commission
Washington 25, D.C.

Dear Mr. Price:

In response to your request of May 26, 1959 relative to the Atomic Energy Commission's notice of proposed rule making on site-selection published in the Federal Register on May 23, 1959 and subsequent discussion with Dr. Beck on July 22, 1959, our comments are forwarded in the summary attached.

It is our feeling that the proposed site criteria will primarily serve to acquaint top management personnel in the nuclear industry field with the problems associated with site-selection. It probably will not provide the designers with the specific guidelines they would like to aid them in providing adequate reactor designs to meet the individual site problems. As discussed with Dr. Beck, the establishment of an emergency "design dose" for the population in the vicinity of the reactor, might be helpful.

We appreciate the opportunity to have discussed this subject with Dr. Beck and our detailed comments modified by these discussions is attached.

Sincerely yours,

James G. Terrill, Jr.
James G. Terrill, Jr.
Assistant Chief, Division of Radiological Health

*No copy of Fed. comments
to go to Pub Doc Rm per E.R.P.
Cy sent OGC 8/19/59 J.M.*

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*Legal Part 50
Comments*

COMMENTS PREPARED BY DIVISION OF RADIOLOGICAL HEALTH FOLLOWING PUBLIC HEALTH SERVICE STAFF REVIEW OF AEC "PROPOSED RULE MAKING-SITE CRITERIA" AND AFTER DISCUSSION WITH DR. CLIFFORD K. BECK ON JULY 22, 1959

Section a. General

1. The use of the word "credible accident" is undesirable. No accident to date has been credible. Human errors cannot be evaluated by rule making. The phrase "maximum accident for design purposes" is suggested.
2. The use of the phrase "undue hazard" is not appropriate. Emergency plans should be prepared and essential service agencies should be briefed on the possibilities of a reactor incident occurring and the effect on their activities.
3. The notice fails to mention the possibility of the allocation of target goals as established by 10 CFR20 for each of a number of facilities discharging to a common environment.
4. The notice omits any reference to the public relations aspects of site selection. Keep the public informed as plans for siting develop.
5. Sponsors of nuclear energy plants should take into consideration the known plans of a community in their site selection, thereby anticipating as far as possible the future growth of communities adjacent to the proposed reactor site.

Section b. Exclusion Distance Around Power and Test Reactors

6. The exclusion distance for a reactor from a population center must be determined for each case and generalizations may create more problems than they solve. However, a minimum exclusion distance of $\frac{1}{4}$ mile may be used as a guide if with adequate justification a lesser distance may be used.

Section c. Population Density in Surrounding Areas

7. "Environmental utilization" is suggested as the title for this section. This titling would then refer to the character as well as the density of the population. It would require consideration of the problems of siting in agricultural areas and the location of reactors near any essential operation whose shut-down could not be countenanced such as water reservoirs, milk sheds and crop producing areas.

8. Qualitatively consider the population density factor in terms of REM per million population in addition to the maximum exposure per individual for separate reactor proposals for the same area.

Section f. Hydrology and Geology

9. Provisions should be made to prevent "leaks" from entering the environment by interception, holding or diversion.

10. Impermeable soils may not be desirable. In some areas, in Alaska for example, the soil, though impermeable in character, is laid down in such a fashion that contaminants may move long distances underground while hidden from surface inspection.

The specific objective should be to prevent accidentally released fission product waste from reaching the water table.

11. The possibility of flood conditions was not mentioned.

Section g. Interrelation of Factors

12. Add to final paragraph of notice: "Site evaluation should be made on the basis of minimizing the hazard from the reactor."