

ES 003-3



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September 25, 1980

Secretary of the Commission
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attn: Docketing & Service Branch

Dear Sir:

In response to the Advance Notice of Rulemaking: Revisions of Reactor Siting Criteria, and NUREG-0625, I offer the comments presented below. The bases for my comments are my nine years of experience as a Commission employee in which I reviewed and supervised hydrologic and meteorologic aspects of nuclear power plant sites as Chief of the Hydrology-Meteorology Branch. I also note that I participated in the preparation of NUREG-0625 as a member of a working group.

1. With regard to ACRS comments on the Task Force Recommendation 1, Part 3, Item B, Page 15 of the Advance Notice, the subject was of considerable deliberation during work group discussions. In addition, some computer exercises using the simplified and, in my opinion, unrealistic meteorology in the CRAC code were undertaken to identify the range of influence of meteorology in reactor siting. The results confirmed my view that distinct differences in the likelihood of diffusion conditions in different directions around the reactor site, when coupled with population distributions in different directions, can be an important factor. The risk to large population segments located in specific directions from a reactor in which the wind blows more often than others can be significantly greater than the risk to people in other directions. I believe these circumstances should be considered in the siting process, and in a manner that is more realistic than has been done in the past (straight-line, low probability). I recommend that a realistic study of all factors influencing accidental doses be undertaken and summarized for incorporation into Commission Siting Policy in the future. I do not consider past studies adequate in this regard.
2. Standoff distances discussed in ACRS comments in Item C, Task Force Recommendations 2, Page 19, are most appropriate with respect to the rationale and specific suggested numbers. Indeed, during work group deliberations with respect to standoff distances for dams, it was noted that no single number would be an adequate representation of the risk of siting a reactor downstream of a dam. Rather, it was suggested during work group deliberations that a set of criteria be developed that would reflect the flooding risk based on site-specific evaluations. The

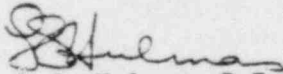
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approach was rejected in favor of selecting a single number as being an adequate representation of risk. It was also concluded that the number would be studied and confirmed prior to implementation, since it was not based upon a detailed review of reactor sites by the Commission staff, but was only an undocumented judgement.

3. In response to Item D, Task Force Recommendations 3, Page 20, I note the subject of groundwater contamination as a result of particulate fallout or rainout has been considered at a number of reactor sites. In all cases, the level of contamination identified by the staff was a very low level. No effort has been made to my knowledge, however, to determine whether there are any siting circumstances in which fallout or rainout would result in unacceptable groundwater contamination as a result of a very severe reactor accident. Before the subject of fallout and rainout is dismissed from consideration in Recommendation 3, I suggest that a low level effort be expended in determining whether there are any siting situations in which such conditions could be an important factor.

Sincerely,



L.G. Hulman, P.E.
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LGH/mc

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