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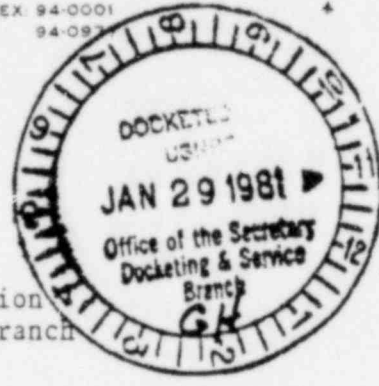
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January 16, 1981

Secretary of the Commission
U.S. Nuclear Regulatory Commission
Attention Docket and Service Branch
Washington, DC 20555

Dear Sir:

DOCKET NUMBER
PROPOSED RULE **PR 50,51,100**
45FR 79820

10CFR50, 51, AND 100
ENVIRONMENTAL IMPACT STATEMENT FOR REACTOR SITING
CRITERIA (45FR79820), DECEMBER 2, 1980

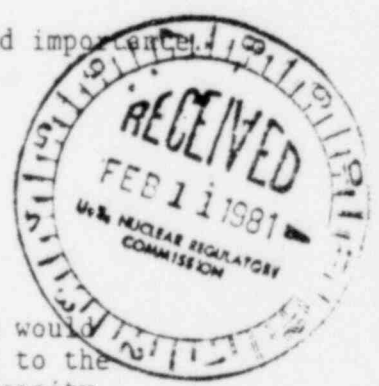
We are pleased to submit our comments on your notice of intent to prepare the above-described document. They are presented first as general observations and suggestions, and then as specific comments related to the detailed items in the notice.

General

The current scoping process leading up to a proposed revision to NRC regulations governing the siting of nuclear power plants is not timely.

The NRC's rule-making procedures are out of order in logic and importance. The order of proceeding in the overall effort should be:

- 1) Develop safety goals
- 2) Degraded core cooling
- 3) Engineered safety feature standards
- 4) Reactor siting criteria
- 5) Emergency planning



This order would provide an objective for risk assessment and would determine an acceptable societal and/or individual risk prior to the evaluation of specific siting parameters such as population density, distribution, dose, etc. It is expected that the degraded core rulemaking proceedings would result in more realistic accident analyses with respect to offsite dose from radioactive iodine, etc. The realistic analysis of the airborne iodine radiological hazard should be performed prior to the siting rulemaking to more appropriately treat the iodine dose parameter.

The above order is logical and would prevent duplicative expenditure of resources. The current order of proceedings is not logical and could well result in an incompatible set of regulatory requirements.

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Approved by card 1/29/81

L-441 P. 50

Hopefully, the goal of these proceedings is to bring order and reason to the regulatory process, not to continue disjointed proceedings that have resulted in confusion, destabilization, and past criticism of the regulatory process. We urge the commission to reconsider the order of procedures currently in progress and to recognize the necessity to establish safety goals as a first priority.

Table 1

"Other nuclear power plants" should not be included relative to minimum standoff distances. If other nuclear power plants are nearby, the overall safety may be improved. Among the major advantages of nuclear parks are the availability of expertly trained people and emergency power at the site.

APPENDIX A

Section II.1 and II.2

Titles of these sections should be changed to "Purpose of Revision of Reactor Siting Criteria" and "Need for New Reactor Siting Criteria," respectively. This will clearly indicate that criteria exist and that "No Action Alternatives" are feasible.

Section III.1.b.1

There is no apparent need to differentiate between the three PWR NSSS designs, or between PWR and BWR designs. It may be more important to differentiate between containment designs, e.g. subatmospheric, atmospheric, pressure suppression, and ice.

Section III.1.b.3

The topic "Consideration of Accidents Beyond the Design Basis" should be resolved prior to the siting rulemaking, thereby changing the section title to indicate the "Design Basis" resulting from the preceding rulemakings.

Section III.1.b.4

"Attainable risks for nuclear compared to risks from other power generation sources" is not a suitable subject to discuss as a part of this rulemaking. It is more controversial than the object of this rulemaking and as such should be examined prior to this rulemaking as the subject of the separate rulemaking on safety goals.

Section III.2.b

Prior to defining a population density limit, there should be convincing evidence that such a limit assures safety to an average member of the population.

Section III.3.a

Risk assessment analysis should determine, on a case by case basis, the standoff distance requirements for hazards. There should be no arbitrary limit on the proximity of other nuclear power plants to the site, or on the number of plants on a single site as long as the safety goals are met.

Section III.6

Earlier nuclear power plants built under the restrictions imposed by arbitrary source terms such as TID-14844, incorporated a distance factor in siting. With the incorporation of engineered safety features, site boundary distances were reduced and public risk decreased. If the rulemaking on degraded core cooling is completed prior to this rulemaking, more will be known about special design features that may be required. If a specific distance criterion is enacted, siting would be decoupled from meteorology and some sites which have favorable meteorology might be eliminated from consideration. The rulemaking should not eliminate the possibility of engineering features such as secondary containments or others which could result in attaining a safety goal in more difficult siting situations.

APPENDIX BIssue I

As mentioned above, realistic analysis of the chemical and physical mechanisms which result in airborne iodine must be made prior to any dose assessment. This analysis should be made in conjunction with the rulemaking on degraded core cooling and prior to this siting rulemaking.

In addition, we strongly urge a redefinition and a new analytical or empirical approach to establishing source terms for the accident analyses. Any consideration of evaluating accident consequences with an updated version of the Reactor Safety Study Consequences Model (CRAC) computer code is premature until source term data contained in TID-14844 have been revised to reflect operating experience. Studies of reactor accidents and reactor accident tests suggest that the source terms initially established in TID-14844 for transport of fission products are overly conservative. With more than twenty years of reactor operating experience, it would appear that empirical data based on real scientific factors could provide the basis for a reassessment.

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The role of societal risks versus individual risks must be carefully developed to show the risk effectiveness of alternatives with respect to cost benefits. Ignoring individual risks could result in backlash organized by a small group of intervenors. It is necessary to compensate individual risks with appropriate benefits.

Issue II

The capability to take protective action at a site requires site specific information pertaining to the existing or projected transportation network, emergency control measures, etc, and cannot adequately be examined on a generic basis.

Issue V

In addition to the economic impacts of increased transmission distances, the adverse non-nuclear safety impacts of increased distances must be evaluated in parallel.

Issue VIII

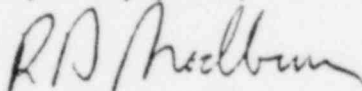
We wholeheartedly support the concept that risks from other energy sources, e.g., hydro and coal-fired plants, are in fact greater than the nuclear option, and therefore strongly recommend that the siting criteria not exclude nuclear power plants from any region of the United States.

Issue XI

The power park approach should be reevaluated considering waste disposal, fuel storage, and emergency response requirements.

We appreciate this opportunity to assist in the improvement of these regulations, and hope that the above comments and those on the Advance Notice of Rulemaking transmitted in our letter of November 17, 1980, will be of use to you in the preparation of your Scoping Summary Report.

Very truly yours,



R. B. Bradbury
Chief Licensing Engineer

DJC:CM