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STATE OF ILLINOIS

Illinois Commerce Commission

MICHAEL V. HASTEN
Chairman

527 East Capitol Avenue
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September 26, 1980

Secretary of the Commission
United States Nuclear Regulatory
Commission
Washington, D.C. 20555

Attention: Docketing and Service Branch

RE: Advance Notice of Rulemaking:
Revision of Reactor Siting Criteria

Dear Sir or Madam:

The Illinois Commerce Commission appreciates this opportunity to provide comments on the proposed revisions of the Reactor Siting Criteria. It is our desire to participate in future rulemaking hearings and proceedings to the best of our ability.

The attached comments are addressed only to the specific issues and questions included in the notice of proposed rulemaking.

If there is a need for additional information or clarification, please feel free to contact me.

Sincerely,

Michael V. Hasten

Michael V. Hasten
Chairman

MVH/ch

Attachment

Acknowledged by card. 9/29/80

L-4-4 A.50

Attachment

THE ILLINOIS COMMERCE COMMISSION'S RESPONSE TO THE "REPORT OF THE SITING POLICY TASK FORCE" NUREG-0625, AUGUST 1979 THE US NUCLEAR REGULATORY COMMISSION

ITEM A - The three conceptual goals developed and used by the Task Force in reaching their recommendations.

1. We believe that as a general policy, the Commission (NRC) should not compensate unfavorable site characteristics with plant specific design features and consideration of site approval should be independent of specific plant design.

2. Reactor siting decisions should consider the acceptable risks to the public as well as the risks from other energy sources. Determination of acceptable risk should include both the risk to the maximally exposed individual and the overall risk to the exposed population. We believe that while a balance must be struck between the population as a whole and the individual, primary emphasis should be the consideration of the maximally exposed individual. However, this risk should be evaluated recognizing reasonable evacuation and notification options.

3. For the most part, all site acceptability criteria should be nationally uniform. However, there should be enough flexibility to take into account significant or unique regional differences. We do not have the resources at this time to respond regarding the size or specific boundaries of the regions. We do think that important regional variables should include the need for power and the availability of remote sites.

ITEM B - Provide protection for accidents by incorporating fixed exclusion and protective action distance and population density and distribution criteria.

1. A uniform, minimum exclusion distance, applicable to all reactors should be established. The uniform, minimum exclusion distance should be based on the individual risk from design basis accidents. Its our general position that minimum exclusion distance should be maintained at all times; however, there may be specific case by case situations where a distance could be extended or modified beyond the minimum when good cause is demonstrated for such extension or modification and it is proven that the exception is in the best interest of both the individual and the population as a whole.

2. In general, there should be a single population density/distribution limit which would be applicable to all potential sites. However, this number should not be so high as to eliminate unnecessarily the possibility of siting plants in any specific region. As the situation indicates, the number should be modified on a case by case basis where good cause is shown that neither the individual nor the entire population is adversely affected by such modification. The number of residents who can be protected or evacuated will vary from site to site depending on local geographical characteristics, distribution of population within the area and available transportation and safety resources. The "three-tier" approach would be more appropriate in this situation.

3. The acceptable limit on population densities and distributions should be established based on the projected post-licensing populations. The acceptable population limit should be based on a weighted average of the population projections over the expected operating lifetime of the plant. The weightings should provide for increased emphasis on the first few years of operation and less on the later years of operation. The projections should give appropriate consideration to the effects the existence of the plant will have on population growth in the area.

4. A nationwide "three-tier" approach appears to be reasonable with regard to population density.

5. The "three-tier" approach is preferred (see response to question 6).

6. At this time we are unable to provide specific quantative values to be used in the "three-tier" approach. An investigation should be undertaken to determine the most appropriate numbers to use in this approach. Considerations to be included in this investigation, among others, would be population densities currently known in the area of existing nuclear plants and nuclear plants under construction at the current time, population growth projections, evacuation plan capabilities, sheltering potential for individuals within the area of operating nuclear plants, and existing population densities in "remote" areas of any and all projected regions. The minimum should not be so restrictive as to eliminate unnecessarily the possibility of siting a new nuclear plant in any of the regions.

ITEM C - Consideration of potential hazards posed by man-made activities and natural characteristics of the sites.

1. The "three-tier" approach appears to be the most appropriate for setting threshold values in each category.

2. We do not believe that the distance between a nuclear reactor and the listed categories need be the same for all of the categories; there could be a difference between the specific limits

based on hazards associated with each of the listed items. There should also be a provision which would allow for the consideration of individual situations which might be considered to pose less risk as a part of the threshold guidelines. Items which may be considered for inclusion on the list are predominate weather patterns, petroleum refineries and all forms of transportation methods for the shipment of hazardous materials (railroads, trucks and pipelines, as well as the mentioned navigable water ways). Nuclear facilities should be considered in setting criteria for stand off distances.

3. We do not have the resources which would enable us to provide quantitative measures regarding specific stand-off distances for each of the categories.

ITEM D - Requiring a reasonable assurance that interdictive measures are reasonable to limit groundwater contamination resulting from Class 9 accidents within the immediate vicinity of the site.

We support the Advisory Committee on Reactor Safeguards (ACRS) in their recommendation.

ITEM E - Deferred

ITEM F - Post licensing changes on offsite activities.

We generally agree with all four of the task force recommendations listed under Item F.

1. The NRC should not be given legislative authority to assure population densities or groupings around nuclear plants remain within the acceptable criteria during the operational lifetime of the plant. The installation of facilities or the initiation of new activities that could be hazardous at any time during the life of the plant should be monitored by the NRC. If the NRC finds that future developments represent a significant danger, the NRC should make recommendations to the state and local jurisdictions and the Congress. The responsibility for precluding the installation of facilities or the initiation of new activities should then be the responsibility of the Congress in consultation with the affected jurisdictions.

2. We do think that limited action should be taken by the Commission when the population in the surrounding area no longer satisfies the established density or distribution criteria. This action could include notifying the various state and local governmental authorities. It seems reasonable to assume that individuals moving into the area would and should be informed as to the existance of a nuclear power plant in the vicinity. Based on current information the choice to move there should be an informed decision on the part of the individual. The more important concern would be the effect of population growth on the operation

of safety and evacuation procedures. To the extent any action should be taken to preclude such developments, this concern might be more appropriately addressed through local zoning procedures and other available local authorities.

3. Changes in the operating procedures and/or engineering design should be handled on a case by case basis.

ITEM G - Our position on this item would be to recommend that the two alternatives be compared with other alternative sites. Alternate engineering designs and features should not be completely ruled out in cases where proven design compensation would exceed minimum standards while the use of an alternate site without such provisions would meet only minimum criteria. Our position generally coincides with that of the ACRS as stated in their comments on recommendation 6.

1. A site that has met all the criteria for threshold acceptability should not be automatically accepted from a safety standpoint. Compensating engineering features should be considered in selecting between alternate sites. Again we emphasize that a balancing of these two points could result in the least risk and most acceptable site/plant.

2. If a specific site/plant would otherwise be the prime choice then it appears reasonable to conclude that the uncertainty or inadequate quantitative data might appropriately be given consideration in the approval decision. The impact of the site characteristic should if at all possible have a sensitivity analysis performed so that the Commission, prior to granting its approval, could be informed to the best of its ability regarding the impact on the operation of the plant.

3. Alternative B is more appropriate than the Siting Policy Task Forces Recommendation 6.

ITEM H - Site approval to be established at the earliest decision point in the review process.

1. There are three important decisions that must be made regarding the construction of any power plant. The first, of course, is the need for the power plant. If its shown that a plant is not needed the other two issues are moot. Once the need for the plant has been determined the next steps are to determine the site and the type of technology to be used (large versus small, coal, oil, nuclear, etc.). These decisions should be driven in part by the need forecasts. All three issues should be considered simultaneously. Early site review seems to be appropriate in most cases; however, that earlier site review decision should not be binding on the total project without considering the choices of technology and the need for the project.

2. Once the site has been approved, the question of site acceptability should not be reopened unless there is significant new

information which was not available or not considered during the previous approval process. There should be an attempt to preclude the nuisance value suits pertaining to the reopening of previously approved reactor sites.

ITEM I - Provide that a final decision disapproving the proposed site by a state agency would be a sufficient basis for the NRC to determinate its own review.

1. The Nuclear Regulatory Commission should maintain flexibility in addressing site disapprovals by state agencies on a case by case basis. This flexibitility should be used only when just cause is evident. Should there be substantive disagreement between NRC and state agencies, the matter should be decided by an appropriate third party, e.g. the courts or the Congress.

2. This alternative should apply only to actions taken by specific state agencies which have statutory authority to regulate sites and plant construction.

ITEM J - Deferred.