

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

John F. Ahearne, Chairman
Victor Gilinsky
Richard T. Kennedy
Joseph M. Hendrie
Peter A. Bradford



In the Matter of

ROCHESTER GAS AND ELECTRIC
CORPORATION, et al.

(Sterling Power Project, Nuclear
Unit No. 1)

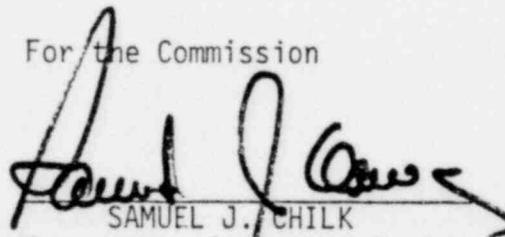
Docket No. STN 50-485

ORDER
CLI-80-23

For the reasons set forth in the opinions of Commissioners Kennedy and Hendrie and of Commissioner Gilinsky, the Commission affirms the Appeal Board's decision in ALAB-502. Chairman Ahearne and Commissioner Bradford dissent from this decision. */

It is so ORDERED.

For the Commission



SAMUEL J. CHILK
Secretary of the Commission

Dated at Washington, D.C.,
this 29th day of May, 1980.

*/ Section 201 of the Energy Reorganization Act, 42 U.S.C. 5841 provides that action of the Commission shall be determined by a "majority vote of the members present." Commissioner Hendrie was not present at the meeting at which this Order was approved. Had he been present at the meeting he would have voted with the majority. To enable the Commission to proceed with this case without delay, Chairman Ahearne who was a member of the minority on the question up for decision, did not participate in the formal vote. Accordingly, the formal vote of the Commission was 2-1 in favor of the Order.

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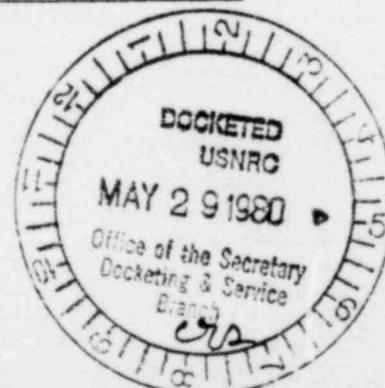
SEPARATE VIEWS OF COMMISSIONERS KENNEDY AND HENDRIE

In ALAB-502, 8 NRC 383 (1978), the Atomic Safety and Licensing Appeal Board partially affirmed the Atomic Safety and Licensing Board's initial decision authorizing issuance of a construction permit for the Sterling Power Project, Nuclear Unit No. 1, 1/ and made a significant interpretation of the Commission's "obviously superior" standard 2/ (Standard) for choosing among alternative sites. The Appeal Board reformulated the Standard to require a Licensing Board to reject an applicant's choice of site only if an alternative site was "clearly and substantially" superior. 3/ Intervenor Ecology Action of Oswego, New York (Ecology Action) challenged this interpretation, as well as several other aspects of ALAB-502. The NRC staff and applicant Rochester Gas and Electric both opposed review. On March 8, 1979, the Commission partially granted Ecology Action's petition for review to consider "whether in the factual circumstances presented by this proceeding, the Appeal Board correctly interpreted the Commission's 'obviously superior' standard for rejecting the Applicant's proposed site because of the existence of a preferable alternative." The Commission received initial

1/ The Appeal Board retained jurisdiction over the issues of need for power and the environmental impact of radon releases arising from the mining and milling of uranium to fuel the plant. Construction of this facility has not been initiated. On January 23, 1980, the New York State Board on Electric Generation Siting and Environment rescinded the applicant's certificate of environmental compatibility and public need. However, by letter of January 30, 1980, the applicant indicated that it would make no final decision regarding this proceeding until the State Board issues a final opinion and the applicant has had a chance to review that opinion.

2/ Public Service Company of New Hampshire, (Seabrook Station, Units 1 and 2), CLI 77-8, 5 NRC 503, 526-30 (1977), aff'd New England Coalition on Nuclear Pollution v. NRC, 582 F.2d 87 (1st Cir. 1978).

3/ ALAB-502, 8 NRC 383, 397-98 (1978).



briefs from all parties, and reply briefs from the applicant and intervenor. The Commission has determined that these briefs fully present the issues and that oral argument would not aid our deliberations.

The controversy over site selection in this proceeding centers on two sites: Rochester Gas and Electric's proposed virgin site at Sterling and its site at Ginna which already contains a 490 MWe nuclear power plant. After extensively comparing the two sites, the Licensing Board found that "a small advantage must be accorded the Ginna site on environmental considerations." 4/ In addition, the Board expressed concern over the possibility of unnecessarily committing a partially forested, partially cultivated lake-front site. 5/ However, after factoring in delay costs which would result from transferring the project to Ginna, the Licensing Board sustained the applicant's choice of the Sterling site.

The Appeal Board found that delay costs should have been considered only if the Licensing Board had first found that the alternative site was obviously superior to the applicant's choice. Because the Licensing Board did not explicitly determine whether Ginna was obviously superior to Sterling, the Appeal Board performed its own comparison of the environmental impacts of the sites. The Appeal Board affirmed the Licensing Board's approval of the Sterling site because, after its own application of the Standard, which it interpreted to mean "clearly and substantially superior," it found the Ginna site was not obviously superior. 6/ The Appeal Board derived this interpretation from the rationale developed in the Seabrook decision which discussed the effects of the inherent imprecision in cost/benefit analysis on comparing alternative sites.

4/ 6 NRC 350, 416 (1977).

5/ Id. at 418.

6/ 8 NRC 397-398.

Ecology Action contends that the Appeal Board's interpretation of the Standard is contrary to the National Environmental Policy Act (NEPA) because the interpretation prevents the required "hard look" at alternative sites, gives undue advantage to the Applicant's proposed site by requiring an alternative to be substantially better, and permits the choice of a site which is not environmentally the best. Ecology Action also contends that the Appeal Board's interpretation of the Standard is more rigorous than is necessary to compensate for the uncertainties of cost/benefit analysis. In its view, a Licensing Board could have the requisite confidence for rejecting a proposed site if an alternative is "clearly" better without also being "substantially" better. In support of its proposal to interpret the Standard to mean "clearly better," Ecology Action notes that the environmental comparison of alternative sites is less inexact in this proceeding because the alternative site at Ginna has been extensively studied so that any disadvantages at Ginna are now known. Finally, Ecology Action contends that because the Appeal Board "applied its own dogmatic definition" of the Standard it erroneously contradicted the Licensing Board's implicit finding that the alternative site at Ginna was obviously superior to the site at Sterling.

Rochester Gas and Electric contends that the Commission's use of the "obviously superior" test to evaluate alternative sites under NEPA has been affirmed by the United States Court of Appeals for the First Circuit, 7/ that the Appeal Board scrupulously applied the Standard, that the facts support the Appeal Board's conclusion that Ginna is not obviously superior, and that this conclusion is consistent with the Licensing Board's findings on this issue.

7/ New England Coalition on Nuclear Pollution v. U.S. Nuclear Regulatory Commission, 582 F.2d 87, 95-96 (1st Cir. 1978).

Accordingly, in applicant's view, the Appeal Board's interpretation of the Standard did not affect the correctness of its finding that Ginna is not obviously superior. Applicant does not however explicitly support the interpretation given to the Standard by the Appeal Board.

Staff also contends that the facts support the Appeal Board's conclusion that Ginna is not obviously superior, and that this conclusion is consistent with the Licensing Board's findings on this issue. Moreover, Staff contends that the Appeal Board's interpretation is adequately supported by the Commission's concerns about the imprecision of cost/benefit analysis and the wide margin of uncertainty inherent in site evaluation. In Staff's view, these factors prevent the Commission from having the requisite substantial confidence in the apparent superiority of an alternative site unless that site is substantially better. Consequently, staff believes that the Appeal Board's formulation is a reasonable interpretation of the Standard even where there is no reliance on a possible disparity of information between the alternative sites. In the alternative, staff suggests that even if the Commission were to disapprove the Appeal Board's interpretation of the Standard, the conclusion that Ginna is not obviously superior should be affirmed on the facts.

In its reply brief, Ecology Action contends that Rochester Gas and Electric misrepresented the Licensing Board's finding on the alternative site issue by focusing on its statement that the environmental advantage at Ginna is small while ignoring its concern regarding the use of a virgin site. In Ecology Action's view, the Licensing Board found that the disadvantage of using the Sterling site was so great that it would have rejected the site had it not considered delay costs. Ecology Action also contends that where the alternative site is clearly better, any formulation of the Standard based on the degree

of superiority of the alternative site violates NEPA by putting an unfair burden on the alternative.

Rochester Gas and Electric's reply brief suggests that the Commission dismiss the petition for review as improvidently granted because this proceeding does not present difficult questions regarding application of the Standard. In addition, applicant contends that petitioner Ecology Action has not pursued the issue for review, but instead, has challenged the Standard as contrary to NEPA, and the factual finding that Ginna is not obviously superior to Sterling.

At the outset, we must reject Ecology Action's contentions that the Appeal Board's interpretation of the Standard violates NEPA by preventing the required "hard look" at alternative sites, and by permitting the choice of a site which is not environmentally the best.

The contention regarding the absence of the required "hard look" at alternatives sites is contrary to both our clear instructions in Seabrook and to the facts in this proceeding. In Seabrook, the Commission stated that the Standard in no way affected the Staff's obligation to perform the requisite NEPA analysis of alternative sites. Staff was instructed that its preliminary analysis of alternative sites must be "thorough and even-handed." 8/ Thus, no interpretation of the Standard should affect the Staff's obligation to take a "hard look" at alternatives. Moreover, there is no question that the "hard look" was in fact taken in this proceeding, especially for the alternative site at Ginna. The applicant provided information on alternative sites in its environmental report and at the hearing, and staff analyzed this information as well as site data of its own. 9/ Finally, we note that in its filings before us, Ecology Action has argued that the Ginna site was extensively investigated as an alternative to

8/ 5 NRC at 530, n. 30.

9/ 8 NRC at 390-391.

the site at Sterling. 10/ Consequently, we see no merit in this contention.

Ecology Action's contention that NEPA requires the NRC to choose the environmentally best site is also without merit. It is now well-established that NEPA is primarily a procedural statute which requires the NRC to take a "hard look" at alternatives sites, but which does not determine the result of the site comparison. Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc., 435 U.S. 519 (1978). Thus, NEPA does not require that a plant be built on the single best site for environmental purposes. The ultimate decision on siting is left to the NRC's discretion. Recently, the United States Court of Appeals for the First Circuit held that on its face, the Standard is a reasonable exercise of NRC discretion because inherent limits on the NEPA process support the NRC's insistence on a high degree of assurance that the extreme action of denying an application is appropriate. 11/ This recognition of the NRC's need for assurance regarding the apparent superiority of alternative sites also contradicts Ecology Action's contention that NEPA is violated by any formulation of the Standard which incorporates an element of degree of superiority.

Finally, we do not agree with Ecology Action's contention that the Appeal Board's interpretation of the Standard violates NEPA by giving undue advantage to the Applicant's proposed site. The Appeal Board's interpretation of the Standard provides general criteria for determining when an alternative site is obviously superior to a proposed site. We believe that these general criteria will be helpful to licensing boards and to all participants in the licensing process. Moreover, we find that these criteria are fully consistent with and

10/ Pet. Br. at 4.

11/ NECNP v. NRC, 582 F.2d at 95.

properly interpret the Standard established in Seabrook and affirmed by the Court.

In Seabrook, the Commission stated that the purpose of the Standard is to assure that a Licensing Board has the requisite degree of confidence to take the drastic action of rejecting an applicant's proposed site in spite of the inherent uncertainties in cost/benefit analysis and the probability that alternative sites have not been explored as fully as the proposed site. In addition, the Commission stated that because the data to be compared for alternative sites necessarily present a wide margin of uncertainty, an alternative site must appear to be substantially "better." ^{12/} Ecology Action suggests that where, as here, an alternative site has been extensively investigated, the Licensing Board could have the requisite degree of confidence to reject the proposed site if the alternative is "clearly better." We believe that this suggestion is incompatible with the usual realities of site comparison.

For a Board to have confidence on the basis of a determination that one site is clearly better than another, the Board must be able to make a fairly precise estimate of environmental impacts associated with each site. Experience and the record in this proceeding show that only a few of the environmental impacts are readily quantifiable, and that the majority of the environmental impacts can only be estimated qualitatively. Because the assessment of qualitative impacts introduces an inherent wide margin of uncertainty in cost/benefit analysis, a standard formulated in terms of "clearly better" can not be expected to provide a Board with substantial confidence that an alternative site is obviously superior.

^{12/} 5 NRC 503, at 528.

Our rejection of Ecology Action's proposed interpretation does not mean we consider unimportant the fact that an alternative site here has been more extensively studied than the usual virgin alternative. A Board's confidence in its site comparison depends on the factual circumstances peculiar to each proceeding. Besides the specific characteristics of the sites involved, these circumstances include the comparability and completeness of the environmental data for all sites considered, as well as the margins of uncertainty in that data. In Seabrook, the Commission stated that the usual disparate level of information between the proposed and alternative sites strengthens the conclusion that one site must appear to be substantially better to give a Board confidence that the site is obviously superior. ^{13/} On the other hand, in situations for which the environmental data for an alternative site are more complete than for the usual virgin site, a Board may properly have the confidence to find that an alternative site is obviously superior on the basis of a margin of superiority which would not have supported that finding in the typical situation. But the fact that an alternative site is better known than the usual virgin alternative does not reduce the inherent uncertainties in the underlying cost/benefit data, especially for qualitative impacts. Thus, even if an alternative site has been investigated to the same degree as the applicant's proposed site, a Board could not find an alternative site to be obviously superior unless that site is better by a margin substantial enough to compensate for inherent uncertainties.

The record in this proceeding does not indicate the exact degree of comparability of the site investigations for Ginna and Sterling. However, the record clearly demonstrates that even if the two sites had been studied to an identical degree, the Ginna site is not obviously superior to the site at Sterling.

^{13/} 5 NRC at 529.

The Licensing Board found that only a "small advantage" must be accorded the Ginna site on environmental consideration. ^{14/} The Appeal Board, on the basis of its independent comparison of the terrestrial impacts at the two sites, found that Ginna is not obviously superior. The Appeal Board found, as had the Licensing Board, that the differences in aesthetic impacts would be slight, that the trees which would be removed at Sterling are similar to many others in the area, and that the applicant's mitigative measures would adequately protect the swamp at Sterling. Moreover, because the applicant already owns the Sterling site and can exclude the public from it at any time, the Appeal Board found that the public use factor did not weight heavily against the Sterling site. Finally, the Appeal Board noted that on the basis of the record before it, the task of choosing the environmentally best site would be most difficult. ^{15/} The consistent factual findings of the Boards below clearly show that the small differences in environmental impact at the two sites are not substantial and do not overcome the wide margin of uncertainty inherent in many of the factors considered in striking the cost/benefit balance in this proceeding. Thus, on the basis of the record before us, we find that the Appeal Board's application of the Standard is consistent with Seabrook and does not give undue advantage to the Applicant's proposed site. Accordingly, we would affirm the Appeal Board's decision.

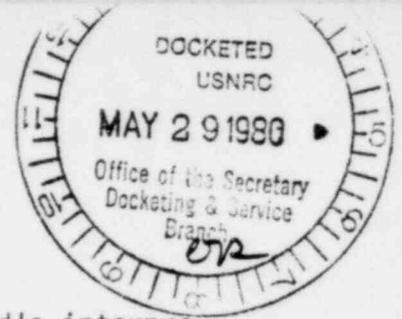
^{14/} While the Licensing Board expressed concern over the possible unnecessary commitment of the virgin site at Sterling, it found that this factor could not be quantified. This expression of concern could hardly be taken as clenching the obvious superiority of the Ginna site.

^{15/} 8 NRC at 395-398.

SEPARATE VIEWS OF COMMISSIONER GILINSKY

I agree with the Appeal Board's interpretation of the "obviously superior" standard. In the typical case, where the information concerning the alternate site is limited, forcing the applicant to change sites requires one to have substantial confidence that the alternate site is in fact superior. Such confidence can, as a practical matter, only exist if the alternate site is substantially better than the proposed site. Even in the atypical case, such as this one, where relatively more is known about the alternative site than would be normal, it is desirable to require a showing that some significant difference exists between the two sites. In this case, both the Licensing and the Appeal Board have concluded that, although the alternate site is somewhat preferable on environmental grounds, the difference does not justify requiring the applicant to change sites. I would affirm.





DISSENTING VIEWS OF CHAIRMAN AHEARNE

I believe the Commission position adopting the Appeal Board's interpretation of the "obviously superior" standard as "clearly and substantially" superior goes beyond a natural reading of the Standard. It is difficult to define precisely what is meant by these general terms. However, if the Appeal Board meant to say a Board must be confident that a second site is considerably better than the proposed site, this overstates the requirement.

As the Commission stated in Seabrook, "To reject an application--the only means available for indicating the preferability of an alternate site--at this late stage in the licensing process requires substantial confidence that one's judgment is correct--a confidence that can only arise where an alternate site is obviously superior."* It is necessary that the Board be confident the alternate site is superior. As a practical matter this may require substantial superiority because of the uncertainties inherent in the cost/benefit balancing. However, this does not require confidence in the size of the margin. In other words, a Board must be confident that a site is better (which may mean the site is in reality substantially better), but the Standard on its face would not require a Board to be confident that a site is better by a large margin.

Consequently, I would have rejected the Appeal Board's interpretation and--in light of the closeness of the original decision, the time that has passed, and the possibility that relevant circumstances may have changed**--remanded the alternative sites issue to the Licensing Board for further consideration.

Commissioner Bradford concurs in the Chairman's dissenting views.

* 5 NRC at 529-30.

** In particular, the Board stated "If, however, a delay of two or more years were to occur in the beginning of construction of Sterling, then a reevaluation of site selection must be given serious consideration" 6 NRC at 419.