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NRC CLASS 9 ACCIDENT REVIEWS

AN APPRAISAL OF ALAB-489 (8 NRC 194)

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On August 21, 1978, the Atomic Safety and Licensing Appeal Board issued a decision respecting the analysis of so-called Class 9 accidents[1/] which is of significance to the entire United States nuclear industry even though the decision was confined to a matter in dispute in the Offshore Power Systems Application for a License to Manufacture Floating Nuclear Plants.

The decision, ALAB-489 (8 NRC 194), is the subject of this presentation.

I. PROCEDURAL HISTORY

1. On February 2, 1978, the Applicant ("Offshore Power Systems" or "OPS") filed before the Atomic Safety and Licensing Board ("ASLB") a Motion for Relief. This Motion sought the declaratory powers of the Board to order the NRC Regulatory Staff ("Staff") to publish a Final Environmental Statement ("FES") in the OPS proceeding and further to order the Staff to exclude from that environmental statement a NEPA[2/] cost-benefit assessment of a Class 9 accident.

2. The Staff opposed the Motion for Relief.

1/ "The phrase 'Class 9 accident' is a term of art.

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> "The accidents grouped in Class 9, resulting in the exposure of the radioactive core, are of the most severe kind." (8 NRC 209)

2/ National Environmental Policy Act of 1969, as amended, 42 U.S.C. § 4321 et seq.

3. By Order dated February 23, 1978, the ASLB denied Applicant's Motion for Relief.

4. On March 17, 1978, OPS filed a Motion for Reconsideration and, in the Alternative, Certification, affixing affidavits as to the long delays by the Staff in publishing the FES and again arguing that Class 9 accident assessments should be excluded.

5. By Order dated March 30, 1978, the ASLB denied Applicant's Motion for Reconsideration, et al.

6. However, the Order required publication of the FES on the dates that the Staff had advised the Board the documents would be available.

7. On April 7, 1978, the NRC Staff petitioned the Atomic Safety and Licensing Appeal Board ("ALAB") for certification of the March 30, 1978 Order of the ASLB requiring publication of the FES on a fixed date.

8. On April 17, 1978, OPS opposed the Staff petition for certification to the ALAB on publication of the FES and cross-petitioned the ALAB on the question of inclusion of Class 9 accidents in the NEPA assessment.

9. On April 19, 1978, the ALAB accepted certification of both the Staff question of the authority of the Board to order publication of the FES and the OPS question respecting Class 9 accidents.

10. Oral argument on the certified questions was held in Washington, D. C. on May 25, 1978.

11. The Appeal Board decision including the dissent of Dr. John H. Buck was issued on August 21, 1978, as ALAB-489.

II. THE FES PUBLICATION ISSUE

1. The Appeal Board unanimously found:

> "The Licensing Board may direct the Staff to publish its environmental documents by specific dates if, after affording the parties--including the staff--opportunity to be heard on the matter, it finds that no further delay is justified." (8 NRC 208)

2. However, this finding was not applied to the OPS case apparently because the Licensing Board below had made an insufficient record affixing blame for the delay on the Staff.

3. The Appeal Board further found:

> "One thing the Board may do is ascertain why the staff document in question has not been forthcoming." (8 NRC 207)
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> * * *
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> "If the staff can provide adequate assurance that it is acting as quickly and reasonably as the circumstances permit--and we emphasize the word reasonably--then the Board can ask no more and should reschedule the filing date accordingly.
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> "Where the Board finds, however, that the staff cannot demonstrate a reasonable cause for its delay, the Board may issue a ruling (with appropriate findings supported by the record) noting the staff's unjustified failure to meet a publication schedule. It may then either proceed to hear other matters or, if there be none, suspend the proceedings until the staff files the necessary documents. In either situation the Board, on its own motion or on that of one of the parties, may refer the ruling to us. ... (citation omitted) We would hear such referrals expeditiously; and, were we to agree with the Board, we would certify the matter to the Commission. Its authority to rectify the situation is undoubted." (8 NRC 207)

4. It should be noted that the Appeal Board envisions as a remedy for unreasonable Staff delay a succession of filings before it and before the Commission. Any applicant trying to resolve an issue of Staff delay is faced with the difficult choice in either accepting the delay or in pursuing a remedy that is itself time-consuming. In the case of OPS, our February 2, 1978 Motion for Relief was decided by the Appeal Board on August 21, 1978, almost seven months later.

III. THE CLASS 9 ACCIDENT NEPA ASSESSMENT ISSUE

1. At the heart of ALAB-489 is the Appeal Board's construing of the Annex to former Appendix D of 10 CFR Part 50. The Annex, promulgated in December 1971, is entitled: "DISCUSSION OF ACCIDENTS IN APPLICANTS' ENVIRONMENTAL REPORTS: ASSUMPTIONS". It was issued as interim guidance in order to comply with NEPA.

2. The Staff urged that the Annex was to be taken flexibly. The essential elements of their argument are:

(a) the Annex did not prohibit by its terms analysis of Class 9 accidents;

(b) that the Annex required an assessment of risk which involved both probability and consequences;

(c) that a NEPA assessment of a Class 9 accident in the OPS proceeding was mandated because the consequences were different and NEPA is a full-disclosure law;

(d) the Staff acknowledged to the Appeal Board that the Staff posture in the OPS proceeding "is a departure from Staff review practices of several years ago";

(e) the Staff finally argued with respect to the Annex, that "special circumstances" would dictate the Staff posture with respect to the treatment of Class 9 accidents in their NEPA assessment in other proceedings.

3. To each of these arguments, even the Appeal Board majority essentially rejected the Staff's position:

(a) By reference to the Commission's regulations respecting Table S-3, the Appeal Board found:

> "Like the Annex, that regulation does not forbid consideration of additional matters in so many words. Nonetheless, that is precisely what was intended; it allows no departure from the Table S-3 values by the applicant, the staff, or the adjudicatory boards themselves." (8 NRC 217) (Footnote omitted.)

(b) With respect to the overall risk necessitating consideration of consequences, the Appeal Board found:

> "In the circumstances, a fair reading of the Annex points ineluctably to probability, not consequences, having been selected as the triggering factor by the Commission." (8 NRC 214)

(c) Here the Appeal Board majority found for the Staff:

> "It follows that the staff had to inform itself of the consequences of using this novel siting concept. And NEPA demands--rather than forbids--that the staff publish the results of its study. It is too late in the day to argue that NEPA is

not an environmental full disclosure law.[92/]

[92/] In this connection, our reluctance to extend the coverage of an annex proposed in 1971 is consistent with our understanding of this Commission's policy of frankness and full disclosure. In saying this, we do not mean to disparage our colleague's carefully articulated dissent. Our point is, rather, that in this area it is a mistake to assume too readily that the NRC would automatically extend, sub silentio, policies formulated by the Atomic Energy Commission in a different era." (8 NRC 220)

(d) With respect to the Staff's departure from review practices of several years ago, the Appeal Board majority found:

"The first question likely to be asked by anyone confronted with the concept of an offshore nuclear power plant is 'what will happen in the ocean in the event of a serious accident?' The staff is to be commended, not criticized, for doing precisely what is reasonable--attempting to find out the answer to that question." (8 NRC 220)

(e) With respect to the Staff posture on "special circumstances", the Appeal Board majority found:

"Nothing in the decided cases, however, lends weight to the suggestion that the guidance is flexible enough to let the staff--as distinct from the Commission--make agency policy in this area." (8 NRC 217)

* * *

"Of course the Commission is free to change the policy respecting the proper scope of environmental impact statements. And, to be sure, it may delegate that authority to the staff. It is simply our considered judgment that the Commission has not done so in the case of power reactors covered by the Annex." (8 NRC 218) (Footnotes omitted.)

"The staff is consequently correct in relying upon the principle that the law does not require consistency in treatment of two parties in different circumstances; what is required is a reasoned and reasonable explanation why the differences justify a departure from past agency practice." (8 NRC 222) (Footnote omitted.)

* * *

"Our concern is not about whether Class 9 accidents should or should not be disregarded. That is a policy judgment for the Commission (or, if it has not spoken, initially for the staff)." (8 NRC 224)

4. While the Appeal Board majority generally agreed with the Applicant's construction of the Annex,

"Certainly insofar as land-based reactors are concerned, the applicant reads the Annex correctly." (8 NRC 212)

they found that the Annex was not intended to apply to the floating nuclear plant:

"Accordingly, though read literally the policy guidance in the Annex might apply to offshore plants as well as to those on land, the better construction is that the former were 'not within the intention of the [Commission], and therefore cannot be within the [rule].'" (8 NRC 220-21) (Footnote omitted.)

* * *

"Given the type of nuclear facilities then in use or planned, it is reasonable to accept the staff's assertion that the policy reflected in the Annex had been developed and adopted without any focus on the floating nuclear plant or the discrete problems it presents." (8 NRC 219)

5. Subsequent to a finding that the Annex did not apply to the

floating nuclear plant, the Appeal Board majority disposed of the following arguments raised by OPS:

(a) that the consideration of a Class 9 accident in an individual licensing proceeding violated Commission regulations respecting the Emergency Core Cooling System, 10 CFR 50.46 and Appendix K. The Appeal Board held:

> "The applicant reasons that, by allowing consideration of those accidents, we are entertaining an impermissible challenge to the ECCS regulations.
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> "Applicant's argument carries certain logical strength. Its weakness is that it has been previously rejected by the Commission, and this is fatal." (8 NRC 221) Footnote omitted.)

Then the Appeal Board cites the Commission decision in Vermont Yankee.[3/]

(b) that the imposition of a Class 9 NEPA assessment in an individual license proceeding for the first time ever was a violation of fundamental rights of due process and equal protection. With respect to procedural due process, notice and opportunity, the Appeal Board majority found:

> "... no indication that a nuclear power plant might have to be redesigned to provide additional protection against the consequences of a Class 9 incident. Even cognoscenti would have difficulty divining that possibility." (8 NRC 224) (Footnote omitted.)

The dissent of Dr. Buck, which is treated infra, in commenting

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3/ Vermont Yankee Nuclear Power Corp. (Vermont Yankee Station), ALAB-229, 8 AEC 425, 432, reversed on this point, CLI-74-40, 8 AEC 809, 811-14 (1974).

on this majority finding states in a footnote:

> "This can only be classified as the understatement of the year. In my opinion there is not the slightest hint in the regulatory guides and appendices that Class 9 accidents are to be considered." (8 NRC 232 at FN 20)

With respect to the equal protection argument, the Appeal Board majority stated:

> "For reasons we previously discussed, the situation of a nuclear plant afloat is not the same as that of one on terra firma." (8 NRC 222) (Footnote omitted.)

IV. THE VIGOROUS DISSENT OF DR. JOHN H. BUCK

1. Dr. Buck dissented from the Appeal Board majority of Chairman Salzman and Mr. Farrar in finding that the Annex did not apply to floating nuclear plants on the grounds that such a finding:

> "... (1) it is inconsistent with the Annex, as properly construed, and with a long line of applicable decisional authority; (2) it permits the staff alone to modify existing NRC policy on a question which the Commission itself has under study; and (3) it ignores the very real question whether an applicant is entitled to have the rules under which its application is to be judged clearly spelled out." (8 NRC 225)

2. With respect to the applicability of the Annex, Dr. Buck states:

> "And a careful reading of its terms reveals that it is reactor specific--i.e., it is applicable to pressurized water reactors and boiling water reactors--but not site specific. It applies to those types of reactors wherever they may be located." (8 NRC 228)

3. In addressing the question of the Staff changing policy, Dr. Buck states:

> "It seems strange indeed that the staff should be imposing its risk assessment methodology on the review of FNP's during the very period when the Commission's review committee chartered to study this matter is still in the process of completing work designed to 'assist the Commission in establishing policy regarding the use of risk assessment in the regulatory process' (42 Fed. Reg. 34955)." (8 NRC 231) (Footnote omitted.)
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> * * *
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> "In my view, a fundamental change in Commission policy such as is involved here should not be put into effect without explicit Commission approval." (8 NRC 231)

4. Respecting fair and equitable treatment of OPS, Dr. Buck's dissent states:

> "It is in the application of this longstanding Commission policy where the applicant is being accorded different treatment from other applicants. It is being asked to analyze Class 9 accidents without being afforded any guidance as to the standards for doing so or the circumstances when it must be done--the very evil we criticized in the NEP case, supra." (8 NRC 232)

V. POST DECISIONAL PROCEEDINGS

By Order dated December 8, 1978, the Commission itself accepted Certification of the question of a NEPA assessment of Class 9 accidents in the OPS licensing proceeding. Such Certification had been urged by OPS, the Regulatory Staff and the Appeal Board.