UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of	:	
	:	
OFFSHORE POWER SYSTEMS	:	Docket No. STN 50-437
	:	
(Manufacturing License for Floating Nuclear Power Plants)	:	

REPLY BRIEF OF APPLICANT

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REPLY BRIEF OF APPLICANT

I. INTRODUCTION

The Applicant Direct Brief[1] sets forth in detail the bases for the Applicant position that it is improper and inappropriate in this manufacturing license proceeding to include an analysis of the consequences of Class 9 accidents in the Final Environmental Statement. Applicant in this Reply Brief responds to certain matters raised by the NRC Staff Brief,[2] the NRDC Brief[3] and the State of New Jersey Brief.[4] In addition, Applicant in

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[1]Brief of Applicant in Support of Requested Order on Class 9 Accidents, January 12, 1979 ("Applicant Direct Brief"). Abbreviations used in the Applicant Direct Brief also are used in this Reply Brief.

[2]NRC Staff's Brief in Support of Affirmative Finding on Certified Question, January 12, 1979 ("Staff Brief").

[3]Brief of Natural Resources Defense Council on Certification of the Class 9 Accident Issue, January 12, 1979 ("NRDC Brief").

[4]Brief for the State of New Jersey, January 12, 1979 ("New Jersey Brief").

this Reply Brief comments on the _amicus curiae_ brief of the Union of Concerned Scientists ("UCS")[5] and the comments submitted by the California Energy Resources Conservation and Development Commission ("California Commission").[6]

II. THE ISSUE BEFORE THE COMMISSION DOES NOT INVOLVE NRC DUTIES CONCERNING MATTERS OF PUBLIC HEALTH AND SAFETY BUT RELATES SOLELY TO NEPA

It is important to establish at the outset that the issue as presented to the Commission in this appeal involves a question relating solely to the scope of the Commission responsibility under the National Environmental Policy Act of 1969[7] and the Commission implementation of the NEPA mandate. There is no question here concerning Commission duties or authority with respect to Class 9 accidents under the Atomic Energy Act of 1954, as amended ("AEA").[8] As noted by the Staff in its Brief:

> "The question presented deals only with NRC's duties and authorities under NEPA; the question does not deal with NRC's duties or

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[5]Brief of the Union of Concerned Scientists, Amicus Curiae, January 12, 1979 ("UCS Brief").

[6]Request of the California Energy Resources Conservation and Development Commission on the Issue of Class 9 Accidents, January 12, 1979 ("California Commission Comments").

[7]National Environmental Policy Act of 1969, as amended, 42 U.S.C. § 4321 _et seq_.

[8]Atomic Energy Act of 1954, as amended, 5 U.S.C. § 2011 _et seq_.

authorities to consider Class 9 accidents under the Atomic Energy Act."[9]

Thus, the analysis of Class 9 accident consequences which the Staff is attempting to pursue in this licensing proceeding pertains only to the environmental consequences of such improbable accidents and not to the health and safety of the public. As noted by the Staff in its Brief:

> "the license conditions recommended by the Staff in this proceeding were not recommended because the Staff thought the facility unacceptable as a safety matter . . . . Rather, the Class 9 analysis in the Staff's environmental statement was performed as part of the cost-benefit balancing required under NEPA; . . ."[10]

This statement is consistent with the history of this matter before the Appeal Board and Licensing Board, as well as the results of the Staff safety reviews.

In this regard the NRDC Brief is completely misdirected. Ignoring the Staff acknowledgment that safety issues are not involved, NRDC argues its position based upon the premise that "the issues presented relate to the health and safety of the public."[11] Contrary to the facts, NRDC

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[9]Staff Brief, p. 1, fn. 1.

[10]_Id._, p. 43.

[11]NRDC Brief, p. 1. The argument in the UCS Brief also appears to be based on this erroneous premise. Thus, UCS concludes its argument by discussing this matter as "a

[Footnote continued]

suggests that Applicant is proposing the Commission "approve a reactor design which it [the Staff] believes does not provide adequate protection for the public health."[12] NRDC in its Brief discusses the development of the Staff position on core melt events in their relation to safety issues and concludes its introduction by suggesting that the proposed Class 9 analysis can be argued now before the Commission as being "right and needed for the protection of the public health and safety."[13] Thus, the NRDC argument is based upon a premise which is clearly incorrect.

Applicant has no disagreement with the Staff that the issue in the present case does not involve Commission responsibility relating to the health and safety of the public. Applicant believes, however, that this Staff position must be contrasted with the Staff argument that the consequences of Class 9 accidents are an appropriate subject for consideration in the environmental statement prepared in

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[Footnote continued from previous page]

question vital to the Commission's duty to protect public health and safety" and, contrary to the facts, states that the Staff conclusion requiring the alleged need for additional safeguards was reached in order "to fully protect the public's safety." (UCS Brief, pp. 15-16).

[12] NRDC Brief, p. 2.

[13] _Id._, p. 3.

conjunction with the instant licensing action.[14]

III. THE RECENT DECISION OF THE COURT OF APPEALS AND THE ARGUMENT OF THE COMMISSION IN HODDER V. NRC SUSTAIN THE POSITION OF APPLICANT

Subsequent to the filing of direct briefs in this case on January 12, 1979, Applicant became aware for the first time of an unpublished decision and memorandum opinion of the Court of Appeals for the District of Columbia Circuit which completely rebuts the position argued in the Staff Brief that consideration of both probability and consequences of Class 9 accidents "must have been inherent" in the Commission determination to exclude discussion of the consequences of such accidents from environmental statements.[15] In Hodder v. NRC, No. 76-1709/78-1149 (D.C. Cir., December 26, 1978),[16] the Court of Appeals reviewed and sustained two decisions of the Commission authorizing Florida Power & Light Company to construct a nuclear power station at Hutchinson Island, Florida. The intervenor in

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[14] See Applicant Direct Brief, pp. 8, 82-85.

[15] Staff Brief, pp. 35-36. This argument also was made by the Staff to the Appeal Board which rejected it in favor of Applicant's position that it is probability which forms the underpinning of the Commission policy to exclude discussion of the consequences of Class 9 accidents in environmental statements for light water reactors.

[16] The Hodder case was referenced in the Staff Brief on p. 23, fn. 29.

Hodder had claimed, inter alia, that Commission failure to examine the environmental effects of Class 9 accidents constituted a violation of NEPA. The Court of Appeals rejected this claim. In so doing, the Court stated as follows:

> "Petitioners' claim on the accidents issue has been foreclosed by previous decisions in this court. It is well settled that, because of the extreme improbability of their occurrence, the NRC need not consider the environmental effects of so-called 'Class 9' accidents. Carolina Environmental Study Group v. United States, 510 F.2d 796, 798-800 (D.C. Cir. 1975). It is true that Carolina was decided prior to the publication in final draft of the Reactor Safety Study, WASH-1400 (1975), that found a probability of Class 9 accidents significantly greater than had been indicated by the previous study, WASH-740 (1957). Carolina, however, has been reaffirmed by decisions of this court subsequent to the publication of the 1975 study. Lloyd Harbor Study Group, Inc. v. NRC, No. 73-2266 (D.C. Cir., Nov. 29, 1978); Aeschliman v. NRC, 547 F.2d 622, 632 n.21 (D.C. Cir. 1976), rev'd on other grounds sub nom. Vermont Yankee Nuclear Power Corp. v. NRDC, 435 U.S. 519 (1978). These decisions accord with the reasoned and consistent view of the NRC. Long Island Lighting Co. (Shoreham Nuclear Power Station), ALAB-156, 6 AEC 831 (1973)."[17]

It thus is clear that as recently as December 26, 1978 the Court of Appeals has affirmed Commission policy embodied in the Annex that excludes discussion of Class 9 accident consequences from environmental statements based upon the extremely low probability of occurrence of such accidents.

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[17] Hodder v. NRC, Slip. Op., p. 2

It is noteworthy that the Court of Appeals stated this to be the "reasoned and consistent view of the NRC."

In light of the argument which the Staff made to the Appeal Board below in the instant case and the argument which it now asserts to the Commission, the most remarkable aspect of the Hodder case is the brief filed with the Court of Appeals by the Office of the General Counsel of the Commission.[18] The General Counsel statements to the Court, of course, are the statements of the lawyers of the Commission and reflect current Commission positions.[19] The Commission Brief in Hodder presents a view of Commission policy on Class 9 accidents which is totally at variance with the arguments presented by the Staff in the instant proceeding.

The Commission argument in Hodder begins with the following heading:

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[18]The brief for the Commission in Hodder was signed on behalf of the Commission by Messrs. James L. Kelley, Acting General Counsel, Stephen F. Eilperin, Solicitor, and Stephen S. Ostrach and Mark E. Chopko, attorneys in the Office of the General Counsel, and on behalf of the Department of Justice by Peter R. Steenland, Jr., Chief, Appellate Section, Land and Natural Resources Division, and George R. Hyde, III, Attorney, Appellate Section.

[19]The Commission Brief in the Hodder case was dated June 16, 1978, a month after the May 25, 1978 oral argument before the Appeal Board in the instant proceeding, but prior to the August 21, 1978 decision of the Appeal Board in ALAB-489. Although the Commission Brief was submitted to the Court of Appeals on August 29, 1978, subsequent to the date of ALAB-489, it was before the Court during the pendency of Applicant Motion for Reconsideration and prior to the decision in ALAB-500 on September 29, 1978. The Hodder case was not called to the attention of the Appeal Board in the briefs, after oral argument, or during subsequent disposition of motions below.

> "The Commission is not Required Under NEPA to Make a Detailed Analysis of a Hypothetical Accident Whose Probability is Extremely Remote and Prior Decisions of this Court Foreclose Any Argument to the Contrary."[20]

In responding to an intervenor argument that the Commission was obligated by NEPA to consider a Class 9 accident, the Commission brief first cited that portion of the St. Lucie Final Environmental Statement which, based upon the Annex, dismissed discussion of the consequences of Class 9 accidents by pointing out that the probability of their occurrence is judged so small that their environmental risk is extremely low.[21] Thereafter, the Commission brief in Hodder referenced and quoted from the case of Carolina Environmental Study Group v. United States, 510 F.2d 796 (D.C. Cir. 1975), which Applicant submits is the leading case upholding the Commission exclusion of consideration of the consequences of Class 9 accidents in environmental statements.[22] After noting that the Carolina Environmental Study Group decision has been adhered to consistently by the Court of Appeals for the District of Columbia Circuit and other United States

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[20] Hodder v. NRC, supra, Brief for Respondents United States Nuclear Regulatory Commission and The United States of America, June 1978 ("Hodder Commission Brief"), p. 19.

[21] The Commission brief in its discussion of the "Regulatory Framework" for Class 9 accidents had expressly called the attention of the Court to, and relied upon, the Annex. Hodder Commission Brief, p. 3.

[22] Applicant Direct Brief, pp. 53-56.

Courts of Appeals and after citing such other cases, the Commission brief in Hodder states:

> "Those decisions are still correct and there is no reason to permit petitioners to relitigate the Class 9 question here."[23]

Earlier in its Brief in Hodder the Commission in setting forth the "Regulatory Framework" of its Class 9 accident policy had stated as follows:

> "In Long Island Lighting Company (Shoreham Nuclear Power Station), ALAB-156, 6 AEC 831 (1973), the Appeal Board considered whether the Commission's licensing boards should investigate the risk of Class 9 accidents in the course of individual licensing proceedings. The Board ruled that NEPA does not require an inquiry on every theoretically conceivable event but only those reasonably foreseeable; and that these accidents are 'sufficiently remote in probability that the environmental risk is extremely low.' Id. at 835. Thus, it is Commission practice that a person may litigate a Class 9 contention only if he can show that one is reasonably foreseeable with respect to the particular facility."[24]

Finally, the Commission concludes its Class 9 argument in Hodder as follows:

> "Here Petitioners never made any showing that any particular accident beyond the reactor's design basis was reasonably possible. The Commission made a reasoned assessment of the environmental risk of such an accident, consistent with the treatment given to Class 9 accidents in other proceedings [citations omitted]. The Commission's decision here represents consistent regulatory practice

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[23]Hodder Commission Brief, p. 20.

[24]Id., pp. 4-5; (Footnote omitted).

and should continue to receive deference from this Court."[25]

In light of the position taken by the Commission before the Court in the Hodder case, there are a number of inconsistencies in the Staff representations and arguments in the instant proceeding. First, the argument in the Staff Brief in the present case that past Staff licensing practice has not always been entirely consistent obviously cannot be the position of a Commission which represents to the Court that its "consistent regulatory practice" has been to exclude consideration of the consequences of Class 9 accidents in environmental statements solely because of the extremely low probability of occurrence of such accidents.

Second, the Staff position that consideration of both probability and consequences of Class 9 accidents form the basis for the Commission position in the Annex clearly must be wrong when the Commission lawyers - the Office of the General Counsel - are telling the Court that the Carolina Environmental Study Group case was correct in holding that probability is the underpinning of the Annex. Third, the Commission reaffirmation of the policy of the Annex in its brief in Hodder makes an additional mockery of the repeated reference in the Staff Brief to the "AEC's old Annex" and belies the Appeal Board majority statement in ALAB-489 that

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[25]Hodder Commission Brief, pp. 21-22 (Emphasis supplied).

the Annex "has been allowed to languish" since its 1971 promulgation.[26]

Finally, the inconsistency between the Staff argument in the instant case and the Commission position in Hodder clearly demonstrates that the Staff does not understand current Commission practice with regard to Class 9 accidents. The Staff argued to the Appeal Board in the instant case that decisions of the Appeal Board and the Courts which held that the consequences of Class 9 accidents need not be considered in environmental statements because of the extremely low probability of occurrence of such accidents were wrongly decided and should be reconsidered and reversed.[27] Contemporaneously, the Commission lawyers were telling the Court of Appeals in Hodder that those same decisions are "still correct" and represent "consistent regulatory practice."

IV. THE STAFF ARGUMENTS REGARDING THE ANNEX ARE WITHOUT MERIT

The Staff in its Brief advances two principal arguments in support of its position on Class 9 accidents. First, the Staff attempts to support that portion of the

[26] 8 NRC at 220; Slip Op. at 51. See discussion, infra, p. 12, fn. 28.

[27] App. Tr. 142-43.

Appeal Board majority decision which held that the Annex[28] does not apply to the FNP. Second, the Staff argues that even if the Annex were applicable to the FNP so as to preclude analyses of the consequences of Class 9 accidents, there nonetheless exists in the case of the FNP some type of "special circumstances" which allow the Staff to undertake the otherwise prohibited discussion.

A. The Annex Applies to Floating Nuclear Plants

Applicant in its Direct Brief has demonstrated that the policy of the Commission as expressed in the Annex with regard to Class 9 accidents applies to the FNP. The Applicant position on this point can be summarized as follows:

1. Commission policy as expressed in the Annex provides that discussion of the consequences of Class 9 accidents shall not constitute part of the environmental statement prepared with respect to light water reactors.

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[28]Throughout its Brief, the Staff refers to the Annex as "an old AEC proposed regulation," the "old Annex," and the "AEC's old proposed Annex." See, for example, Staff Brief, pp. 14-19, where such terminology is employed by the Staff at least nine times. By this phraseology the Staff implies that the status of the Annex is diminished by the passage of time and by the fact that it was promulgated by the NRC's predecessor agency. This Staff position appears to be a variation on the Appeal Board majority theme in ALAB-489 that the guidance proposed in the Annex had been "allowed to languish ever since" its 1971 promulgation. 8 NRC at 220; Slip. Op. at 51. As discussed in Applicant's Direct Brief (pp. 33-36) and in this Reply Brief, supra, pp. 10-11, this attempt to denigrate the Annex has no basis, and the Annex has been accorded the same validity and status under the NRC as under the AEC.

2. The sole basis for this policy is the extremely low probability of occurrence of a Class 9 accident hypothesized for light water reactors.

3. The FNP is a light water reactor and the probability of occurrence of a Class 9 accident in an FNP is the same as that for a land-based plant.

4. The reason underlying Commission policy to exclude discussion of the consequences of Class 9 accidents in environmental statements for light water reactors is applicable to FNPs.

In ALAB-489, the Appeal Board majority accepted every major premise upon which the Applicant argument is founded, yet held that the Annex does not apply to the FNP.[29] Although obviously uncomfortable with the Appeal Board majority opinion with which it finds itself saddled, the Staff begins its Brief by attempting to support the Appeal Board majority reasoning. The result of this somewhat quixotic attempt by the Staff is a strained analysis of both the meaning and application of the Annex which ignores both the language of the Annex and the underlying basis of probability upon which the policy of the Annex with respect to Class 9 accidents is based.

In its attempt to support the Appeal Board reasoning, the Staff asserts "[t]he critical question is whether

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[29] 8 NRC at 210-221; Slip Op. at 31-52. The Applicant Direct Brief demonstrates that the rationale used by the Appeal Board majority in its Opinion is faulty and cannot withstand analysis (Applicant Direct Brief, pp. 60-73). That discussion will not be repeated here.

there is anything in the rulemaking record associated with the Annex that indicates that the AEC had FNPs in mind when it considered and issued the Annex."[30] Applicant submits that this focus by the Staff on the subjective state of mind of the Commission at the time the Annex was issued is misdirected.[31] As discussed in the Applicant Direct Brief, the gist of the Appeal Board majority rationale for its agreement with the Staff that the Annex should not be read as extending to the FNP was an erroneous view by the Appeal Board that the FNP was a "concept unknown" when the Annex was first promulgated in December, 1971.[32] Even the Staff recognized that this piece of Appeal Board majority rationale is not supportable by the facts, although the Staff in its Brief attempts to underplay the Commission knowledge in December, 1971 concerning the FNP. Thus, the Staff Brief

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[30]Staff Brief, p. 18.

[31]NRDC apparently does not understand that it is the Staff, and not the Applicant, that insists upon divining the subjective state of mind of the Commission at the time the Annex was issued in order to determine whether the Annex was intended to apply to the FNP, and that it is the Appeal Board majority which uses such analysis as the basis for its holding. 8 NRC at 218-21; Slip Op. at 49-51. Thus, when the NRDC suggests in its Brief (p. 2) that it is the Applicant which has argued the Commission should be limited to "detecting the thought processes behind the original Annex to Appendix D of Part 50," NRDC demonstrates once again a failure to comprehend the issues and the position of the various parties in this case.

[32]Applicant Direct Brief, pp. 65-67.

reluctantly suggests that "[t]o be sure, some AEC contractor personnel and AEC staff members were aware of the floating nuclear power concept back in 1971, . . ."[33] As pointed out in Applicant Direct Brief, the "AEC contractor personnel" referred to were personnel of Oak Ridge National Laboratory, which was issued a contract in 1968 and which presented a study to the Commission in that year on the floating plant concept.[34] The "AEC staff members" referred to included the Director of the Division of Reactor Licensing as well as other senior members of the Regulatory Staff.

Surely, if the Staff is correct that it is important to delve into the mind of the Commission at the time of the rulemaking leading to promulgation of the Annex, and if the Appeal Board is correct that considerations which motivated the Commission in 1971 when it issued the Annex are "peculiarly within the Staff's ken"[35] because of the Staff's close participation in development of rulemaking proposals, then it is not too much to expect that the knowledge of the senior staff members and of the national laboratories are the knowledge of the Commission itself in

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[33]Staff Brief, p. 18.

[34]A Floating Earthquake-Resistant Nuclear Power Station, ORNL Report No. 182-1-1, Daniel, Mann, Johnson and Mendenhall, April 1968.

[35]8 NRC at 219; Slip Op. at 49.

connection with those very rulemaking proposals. The Staff argument in its Brief seems to suggest that knowledge acquired by the Commission through reports requested from its national laboratories and knowledge by senior staff officials somehow does not constitute knowledge of the Commission. Applicant respectfully suggests that such a position is untenable.

After backing away from the Appeal Board majority statement that FNPs were a "concept unknown" in December, 1971 when the Annex was promulgated, the Staff then answers its critical question as to what was in the mind of the Commission when it considered and issued the Annex by stating "there is nothing whatsoever in the rulemaking record that would suggest that the AEC even thought about the floating nuclear power plant concept when it decided to issue the Annex."[36] The Applicant Direct Brief points out that such a position would place the Applicant in a regulatory vacuum since under this Staff reasoning, which was also the reasoning of the Appeal Board majority, no regulation which the Commission adopted during 1971 or prior to the time the FNP became a known concept to the Commissioners themselves would apply to the instant application.[37]

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[36]Staff Brief, p. 19.

[37]Applicant Direct Brief, pp. 67-70.

The Staff attempts to answer the argument that the Commission knew about FNPs when 10 C.F.R. Part 51 was issued in 1974 with the Annex left standing by stating that there is no indication in the public rulemaking record associated with Part 51 that the Commission gave any consideration to accidents at FNPs.[38] The Staff fails to point out that Part 51, which implements NEPA and establishes Commission policy and procedures for preparation of environmental statements in connection with Commission licensing and regulatory activities, makes specific reference to Appendix M to 10 C.F.R. Part 50 and to the license to manufacture. See 10 C.F.R. § 51.5(a)(8) and § 51.52(c)(3).

As is pointed out in the Applicant Direct Brief,[39] Applicant believes that analysis of whether the Annex is applicable to the FNP must be accomplished with reference to the language of the Annex itself and the basis upon which the policy set forth in the Annex was adopted, as well as the interpretation given to the Annex in various Commission proceedings. When such an analysis is performed, it is clear that the position of the Applicant is correct: the Annex applies to all light water reactors, wherever they may be sited.

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[38]Staff Brief, p. 21.

[39]Applicant Direct Brief, pp. 22-60.

B. The Staff Argument on Appendix M Is Erroneous

In an effort to uphold the Appeal Board majority decision, the Staff also makes an attempt in its Brief to rebut the position of Applicant that the issue of what regulations apply to the FNP also must be decided by reference to Appendix M governing manufacturing license applications.[40] The position taken in the Staff Brief in this regard borders on the incredible.

Initially, the Staff states that the only language in Commission regulations even arguably in point is that of the Annex,[41] thereby ignoring the specific regulation adopted by the Commission to govern manufacturing license applications.[42] Thereafter, the Staff resorts to a bootstrap argument. It claims that "[w]here, as here, it has been determined that the Annex to Appendix D did not apply to FNPs, Appendix M gains applicant nothing."[43] The question, of course, is whether the Annex does or does not apply to FNPs and to give the answer that it does not and conclude, therefore, that one does not have to look at Appendix M is to prejudge that question.

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[40]See Applicant Direct Brief, pp. 70-73.

[41]Staff Brief, pp. 15-16, 21.

[42]See Applicant Direct Brief, pp. 70-73.

[43]Staff Brief, p. 19.

The Staff then suggests that the language of Appendix M - which was written by the Staff and promulgated as a regulation by the Commission - is ambiguous. Thus, the Staff argues it is not clear that in referring to 10 C.F.R. Part 50, Appendix D, the Commission in Appendix M intended to include the Annex. The Staff claims in this regard that "[t]here is nothing whatsoever in the public rulemaking record of Appendix M to indicate that the AEC gave any consideration to the scope of the applicant's environmental report or Staff's impact statement as they pertain to accidents at FNPs."[44] The preamble to the adoption of Appendix M makes it clear that platform mounted reactors which might be sited at ocean sites were one of the possible applications of Appendix M.[45] The Staff, in effect, is suggesting that although the Commission contemplated the applicability of Appendix M to FNPs as well as other manufacturing license concepts, the Commission charged with responsibility to comply with NEPA failed to adopt a regulation which considered the environmental effects of postulated accidents. Staff action in this docket belies the Staff argument. The Staff in the present case has used the accident categories of Classes 1 through 8 as promulgated in the Annex in its

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[44]Staff Brief, p. 20.

[45]38 Fed. Reg. 10158 (April 25, 1973).

accident analysis, and repeatedly has referenced the Annex as the basis for such accident analysis. In fact, the Staff relies on the assumptions in the Annex even in its most recent issuance in this docket, the FES III, dated December 29, 1978.[46]

Finally, in discussing Appendix M, the Staff sets up a straw man. In ER-II Supp., docketed by the Commission in July, 1973, Applicant had relied on Commission policy set forth in the Annex and specifically made reference to that policy with respect to Class 9 accidents. Applicant argued to the Appeal Board that since this occurred three months after publication in April, 1973, of the proposed Appendix M, but four months prior to promulgation of Appendix M regulations in final form, the Commission was charged with the knowledge that Applicant understood Commission policy as set forth in the Annex to apply to the FNP.[47] The Staff has twisted the Applicant argument to suggest that Applicant claims the Commission ratified as true everything in the Applicant environmental report when it adopted Appendix M. This is not the Applicant argument. The Staff has argued in connection with the Annex that the issue involved with respect to its applicability to the FNP is a question of

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[46]FES III, § 3.3.1.1, p. 3-3, § 3.3.2.1, p. 3-5.

[47]See Applicant Direct Brief, pp. 71-72.

what the Commission had in its mind and what knowledge it was charged with when it adopted the Annex. If divining Commission knowledge is relevant, as the Staff suggests, then the Commission is charged with knowledge concerning interpretation of the Annex by the fact that the Commission had before it, at the time Appendix M was adopted in final form, an express reliance on the tenets of the Annex by the only applicant ever to have used Appendix M. Contrary to the statement of the Staff, Applicant does not suggest that all factual material contained in the environmental report submitted by the Applicant was ratified by the Commission when it promulgated Appendix M.

C. The Staff Discussion of the Consequences of A Class 9 Accident at an FNP Is Both Factually Erroneous and Legally Irrelevant

1. The Staff Argument Concerning Consequences Is Based Upon a Quotation From the Annex Taken Out of Context and a Reductio Ad Absurdum Argument Which Belies Common Sense

Beginning at page 28 of its Brief, the Staff abandons its attempt to support the reasoning of the Appeal Board majority in ALAB-489 and reverts to a discussion of the theory upon which it asserts that consideration of the consequences of Class 9 accidents is warranted. The Staff theory appears to be that the underpinning of the policy with regard to Class 9 accidents contained in the Annex is not the extremely low probability of occurrence of such accidents but

rather their extremely low risk which is a product of probability and consequence. Thus, the Staff argues that notwithstanding the same probability of occurrence of Class 9 accidents for both FNPs and land-based plants, the Annex should not apply if the consequences of a Class 9 accident are "more severe" for FNPs than for land-based plants.

As noted in the Applicant Direct Brief, it is probability that is the underpinning of the Annex with regard to Class 9 accidents. The Appeal Board in ALAB-489 agreed with this position when it concluded:

> "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."[48]

In an effort to establish its position that even if the probabilities remain the same it nonetheless is permissible to analyze consequences, the Staff in its Brief quotes a portion of the Annex completely out of context so as to create an apparent interpretation of the Annex which is not available if the entire quotation is used. Thus, in arguing that the approach of the Annex to Class 9 accidents is subject to using other accident assumptions more suitable for individual cases, the Staff extracts the following language from a paragraph in the Annex:

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[48] 8 NRC at 214; Slip Op. at 38. See also Applicant Direct Brief, pp. 22-36. The Hodder case makes it clear the Appeal Board was correct in this regard, see, supra, pp. 6-11.

> "[O]ther accident assumptions may be more suitable for individual cases. Where assumptions are not specified, or where those specified are deemed unsuitable, assumptions as realistic as the state of knowledge permits shall be used, taking into account the specific design and operational characteristics of the plant under consideration."[49]

The full paragraph reads as follows:

> "Standardized examples of classes of accidents to be considered by applicants in preparing the section of Environmental Reports dealing with accidents are set out in tabular form below. The spectrum of accidents, from the most trivial to the most severe, is divided into nine classes, some of which have subclasses. The accidents stated in each of the eight classes in tabular form below are representative of the types of accidents that must be analyzed by the applicant in Environmental Reports; however, other accident assumptions may be more suitable for individual cases. Where assumptions are not specified, or where those specified are deemed unsuitable, assumptions as realistic as the state of knowledge permits shall be used, taking into account the specific design and operational characteristics of the plant under consideration."[50]

By omitting the underlined portion of the quotation from the Annex with its reference to Classes 1 through 8, and by dropping the word "however," the Staff makes it appear as though the language which it quotes applies to Class 9 accidents when, in fact, it does not. The omission by the

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[49]Staff Brief, p. 38.

[50]Annex, p. 1; (Emphasis supplied).

Staff of the text immediately preceding the part from which it quoted changes the entire meaning of the passage.

The persistence of the Staff in maintaining that the consequences of a Class 9 accident are relevant to the determination of whether the Annex should be applied in the case of FNPs seems to result, in part, from the continuing fascination of the Staff with its reductio ad absurdum argument. The Staff asserts again in its Brief, as it did before the Appeal Board, that to pre-empt discussion of the consequences of Class 9 accidents in this case "would lead to the result that even if the consequences of such an accident were the destruction of the planet,"[51] the Staff would be foreclosed from looking at them by virtue of the Annex. The Applicant believes that the Appeal Board appropriately rejected the Staff reductio ad absurdum argument, calling it "a paper tiger, a diversion from the real issue of whether the staff is faithfully adhering to policies laid down by the Commission."[52] As noted by the Appeal Board, if a safety concern actually existed, which is not the case, the Commission could take other action independently of the Annex.

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[51]Staff Brief, p. 36.

[52]8 NRC at 216; Slip Op. at 43. The Staff Brief fails to mention the Appeal Board rejection of the Staff reductio ad absurdum argument.

There is no need in this case for the Commission to accept the Staff invitation to fantasize about Jules Verne accident scenarios for the purpose of determining at what hypothetical point, if any, the Staff may depart from the policy of the Annex with respect to Class 9 accidents. The Staff itself has provided the appropriate answer to this invitation. In agreeing that the Class 9 accident analyses with respect to FNPs do not involve a question of the health and safety of the public,[53] the Staff has bounded the relevant range of risks within which the Staff position must be considered. It is simply ludicrous to assert that an argument which postulates the "destruction of the planet" has any relevance here where the Staff acknowledges that the matter here at issue does not involve a question of the health and safety of the public.

The Staff concludes its reductio ad absurdum argument by maintaining that "[c]ommon sense dictates that there must be a point beyond which the consequences of a Class 9 accident become susceptible to candid evaluation in an environmental impact statement. And it should not matter whether the reactor in question is a land-based plant or an FNP."[54]

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[53]See discussion, supra, pp. 2-5.

[54]Staff Brief, p. 37.

The Staff would have the point be determined by reference to the comparative severity of the consequences of a Class 9 accident, so that consequences which are "severe" need not be susceptible to evaluation, but consequences which are "so severe" would be subject to evaluation.[55] Applicant suggests, to the contrary, that Commission policy as approved by the Courts requires a showing that the probability of occurrence of a Class 9 accident is substantially and materially greater than the extremely low probability of occurrence which forms the underpinning of the Annex in order to reach the point where it may be appropriate to consider Class 9 accidents. This point has been recognized by the Appeal Board in Long Island Lighting Co. (Shoreham Nuclear Power Station), ALAB-156, 6 AEC 831, 835 (1973) - the case specifically relied upon by the Commission in its brief to the Court of Appeals in Hodder.[56]

2. Nothing in the Staff Brief Suggests That The Consequences of a Class 9 Accident at An FNP Are Beyond Those Considered by the Commission When It Adopted the Annex

The Staff argues that the Annex does not apply to an FNP because the consequences of a Class 9 accident are greater for the FNP than for land-based plants. Even if it

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[55]App. Tr. 139-42; see Applicant Direct Brief, pp. 93-98.

[56]Supra, p. 9; see discussion in Applicant Direct Brief at p. 37, and fn. 57 and accompanying text.

is assumed, contrary to the Appeal Board finding, that consequences rather than probability are the underpinning of the Annex, then in order to determine whether the Annex is applicable to the FNP, it is necessary to compare the consequences of Class 9 accidents for an FNP with the consequences of Class 9 accidents which were before the Commission with respect to other light water reactors at the time the Commission promulgated the Annex in December, 1971.

The analysis of core melt consequences for the FNP in an estuary or river is admitted by the Staff on page 31 of its Brief to be based upon highly conservative assumptions. Despite this, it is clear that the consequences of a core melt accident for an FNP, as discussed in FES III, are far less severe than the consequences of such an accident for light water reactors of which the Commission was aware when it promulgated the Annex. The latter consequences were those set forth in WASH-740, where it was estimated that for a reactor one-seventh the size of an FNP, the consequences would include up to 3,400 deaths, 43,000 injuries and $7 billion of property damage. Despite these consequences, which the Court of Appeals in the Carolina Environmental Study Group referred to as "horrible,"[57] the Commission concluded that the probability of occurrence of a Class 9

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[57] Carolina Environmental Study Group v. United States, supra, at 799.

accident was so low as not to warrant discussion of its consequences in environmental statements. By comparison, the consequences of a Class 9 accident from an FNP, even on the Staff conservative assumptions, are far, far less.[58] Accordingly, there is no support for the Staff position that, based on consequence discussion, the FNP is outside the policy of the Annex.

V. THE UNUSUAL STAFF STATEMENT WITH RESPECT TO THE CURRENT STAFF INFORMAL LICENSING REVIEW PRACTICE IS INCOMPLETE AND INACCURATE

The Staff, in its Brief, presents a discussion of what it claims to be its current informal licensing review practice in an effort to show that the Applicant is not being subjected to unequal and unlawful treatment. That discussion is both startling in its admissions and inaccurate in its conclusions. The obvious intent of the Staff in presenting its discussion is to leave the impression that the Applicant is not alone in being required to analyze the consequences of Class 9 accidents. That implication is totally untrue. The instant proceeding involves the only case where the Staff in

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[58]For example, the LPGS concludes, inter alia: "Releases of radioactivity to the liquid pathway from a core-melt accident are not expected to result in acute fatalities, whether interdiction takes place or not, for either type [FNP or land-based] of plant." LPGS, p. vii.

connection with a licensing of a light water reactor has included in an environmental statement an analysis of the consequences of Class 9 accidents.

The Staff begins the discussion in its Brief of its current informal licensing review practice by admitting that "Appeal Board decisions construing the old Annex as focusing on accident probability as the determining factor were in accord with the Staff's positions in those cases."[59] The Staff also admits that the "Class 9 accident evaluation that has been conducted in this case _is_ a departure from the informal Staff licensing review practice of several years ago."[60] The Staff then states that past Staff licensing practice "has not always been entirely consistent."[61] Even assuming, contrary to the fact, that the licensing proceedings thereafter cited by the Staff show that past Staff licensing practice sometimes involved consideration of Class 9 accidents in environmental statements for land-based light water reactors, it is difficult to understand how an argument which has as its premise that Staff licensing practice has not been entirely consistent can conclude that continuing the inconsistency does not subject this Applicant to unequal and

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[59] Staff Brief, p. 44.

[60] _Id._; (Emphasis in original).

[61] _Id._

unlawful treatment.[62]

The Staff cites only three cases allegedly involving its own inconsistent informal licensing review practice - Newbold Island, Clinch River Breeder Reactor and Perryman.[63] In discussing Newbold Island, the Staff suggests that its position that the site was unacceptable in that case was due to concerns regarding the impact of Class 9 accidents on nearby high population areas. The reader of the Staff Brief is left to infer that a Class 9 accident consequence analysis thus was included in the environmental statement for that application. The facts are to the contrary. The Newbold Island site indeed was rejected by the Staff on the basis, inter alia, of population distribution near the proposed site.[64] However, in the letter communicating the Staff decision to the utility there involved, no mention is made of any Class 9 accident consequence evaluation allegedly per-

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[62]As noted, supra, pp. 6-11, the Commission in the Hodder case recently has represented to the Court of Appeals that Commission policy to assess the environmental risk of Class 9 accidents solely by reference to their extremely low probability of occurrence is in accord with consistent Commission regulatory practice. For purposes of determining whether Applicant has been subject to unequal treatment, it is the policy of the Commission, of course, which is relevant and not the alleged inconsistent policy of the Staff.

[63]Staff Brief, pp. 44-47.

[64]Letter from L. Manning Muntzing, Director of Regulation, to Robert I. Smith, President, Public Service Electric and Gas Co. of New Jersey, October 5, 1973.

formed by the Staff. Moreover, in the Draft Environmental Statement for the proposed <u>Newbold Island</u> reactor, the Staff does not discuss or analyze the consequences of Class 9 accidents, but instead relies on the position of the Annex that the extremely low probability associated with the occurrence of Class 9 accidents makes it unnecessary to discuss their consequences. In so doing, the Staff uses almost word-for-word the Commission language in the Annex. Thus, the Staff suggestion that its treatment of <u>Newbold Island</u> represented departure from the Annex and an inconsistency in Staff licensing practice is inaccurate.

The second case to which the Staff refers in arguing its own inconsistency is the <u>Clinch River Breeder Reactor</u>. The short answer to this reliance is that the <u>Clinch River</u> breeder reactor is not a light water reactor and that licensing proceeding cannot stand as a precedent applicable to light water reactor applications.

The final case cited by the Staff with respect to its past inconsistent licensing practice is the <u>Perryman</u> Early Site Review.[65] The <u>Perryman</u> Early Site Review resulted in a Staff report presenting the Staff evaluation of alternative sites for the <u>Perryman</u> application.[66]

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[65]Staff Brief, p. 46.

[66]"Evaluation of Alternative Sites - Perryman Early Site Review," Office of Nuclear Reactor Regulation (November, 1977).

That Staff report contained the determination and recommendation, together with a detailed analysis which served as a basis for such determination. In discussing the Perryman case, the Staff references a summary report on: "Metropolitan Siting - A Historical Perspective," NUREG-0478 (October 1978). That document states that the Staff considered, in connection with its Perryman site suitability review, Class 9 accident consequences.[67] However, the document actually promulgated by the Staff as its report on the Perryman Early Site Review does not contain any such discussion of Class 9 accident consequences. Further, no environmental statement was published by the Staff in connection with the Perryman Early Site Review. Thus, the Staff inclusion of an environmental assessment of the consequences of Class 9 accidents in the FES in the instant proceeding is totally at odds with the Staff action in the Perryman case.

Applicant in its Direct Brief discusses why inclusion of analysis of the consequences of Class 9 accidents in the FES in this docket constitutes a denial of fair and equitable treatment under the law. The discussion in the

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[67]In NUREG-0478 in a footnote on p. 14, the Staff states: "Preliminary staff analyses indicated that residual accident risks, including Class 9 risks, were not a major environmental impact. A recent ruling by the Atomic Safety and Licensing Appeal Board [ALAB-489], in connection with an unrelated case, can be interpreted to reverse the staff's position on Perryman. However, this case is still under review." (References omitted).

Staff Brief does not rebut the Applicant argument in this regard. Not only is the Class 9 accident evaluation conducted in this case a departure from Staff licensing review practice of several years ago, but such evaluation also is a departure from current Staff practice with respect to the NEPA review process conducted by the Staff. The Staff has not, and indeed cannot, cite a single example of a light water reactor licensing proceeding where an evaluation of the consequences of a Class 9 accident has been included in the environmental statement, nor will the Staff admission that its licensing practice has not always been consistent serve to provide a basis for applying unequal treatment to the Applicant in this case.[68]

The Staff concludes its discussion of its current licensing practice and unequal treatment by admitting that adoption of the Staff position "_may_ result in some theoretical inconsistency between FNP's and some hypothetical _future_ land-based plants presenting similar accident risks."[69] The Staff suggests that such inconsistency is permissible,

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[68]Similarly, the statement in the Staff Brief, at p. 46, that the Staff is recommending a rulemaking proceeding be commenced to incorporate the informal criteria of the Staff Regulatory Guide and Standard Review Plan into the Commission NEPA regulations does not rescue the Staff from its current unlawful attempt to treat this Applicant in a discriminatory manner.

[69]Staff Brief, p. 50; (Emphasis in original).

citing a passage in the treatise of Professor Davis on Administrative Law. As noted in the cases discussed in the Applicant Direct Brief, an agency has a duty to apply its policies in a responsible and evenhanded way. The law does not allow an agency to issue inconsistent administrative rulings or adopt different st ndards for similar situations.[70]

Further, the theoretical inconsistency referred to by the Staff between FNPs and some "hypothetical future land-based plants" is in reality an inconsistency here and now between the treatment of the FNP and the treatment of existing land-based reactors. The Staff was careful in the FES III to emphasize that it was comparing the FNP with "typical" land-based reactors currently licensed and not with "all" land-based reactors. The reason for this care was that the overall risk associated with Class 9 accidents for an ocean-sited FNP falls within the upper range of the risks for land-based plants. Hence, the theoretical future inconsistency touted by the Staff is in reality an existing inconsistency.

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[70]See Applicant Direct Brief, pp. 85-92.

VI. THE STAFF FAILS TO REFUTE APPLICANT ARGUMENT THAT INCLUSION OF ANALYSIS OF THE CONSEQUENCES OF A CLASS 9 ACCIDENT CONSTITUTES A CHALLENGE TO THE ECCS FINAL ACCEPTANCE CRITERIA

Applicant in its Direct Brief demonstrates why inclusion of analysis of the consequences of a Class 9 accident resulting in a core melt would constitute a direct challenge to the Final Acceptance Criteria for Emergency Core Cooling Systems for Light Water Nuclear Power Reactors established in 10 C.F.R. § 50.46 and Appendix K, and as such would violate Commission regulations.[71] Included in the Applicant analysis is a review of the decision of the Commission in the Vermont Yankee case[72] which was erroneously relied upon by the Appeal Board majority, without analysis, as the basis for its rejection of the Applicant argument. The Staff in its Brief also refers to the Vermont Yankee case and, as the Appeal Board did, the Staff suggests that in Vermont Yankee the Commission specifically held "that the ECCS could be assumed not to function properly because different accident assumptions may be postulated for different design purposes."[73] The Staff Brief contains no analysis of the Vermont Yankee decision and, in particular,

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[71] Applicant Direct Brief, pp. 74-85.

[72] Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), CLI-74-40, 8 AEC 809 (1974), rev'g ALAB-229, 8 AEC 425 (1974).

[73] Staff Brief, p. 42.

of that portion of the decision in which the Commission defined "degraded emergency core cooling functioning" as meaning emergency core cooling functioning "degraded beyond the requirements of the acceptance criteria, though not to the point of ECCS failure."[74]

Applicant does not here repeat its argument regarding the challenge to the ECCS Acceptance Criteria and its analysis of the _Vermont Yankee_ holding. However, since the preparation and filing of the Applicant Direct Brief on January 12, 1979, the attention of Applicant has been drawn to a recent Commission regulation promulgated on October 27, 1978, concerning standards for combustible gas control systems.[75] In that promulgation, which arose in the aftermath of the _Vermont Yankee_ decision, the Commission amended its regulations to clarify the Commission position on the General Design Criteria regarding the containment design basis. In so doing, the Commission amended, _inter alia_, Criterion 50 of 10 C.F.R. Part 50, Appendix A - the General Design Criterion invoked by the Staff in the _Vermont Yankee_ case as justification supporting the Staff Safety Guide 7 (now Regulatory Guide 1.7) allowing degraded emergency core cooling functioning. The new regulation contains a definition of degradation which

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[74]8 AEC at 812.

[75]Standards for Combustible Gas Control Systems, 43 Fed. Reg. 50162 (October 27, 1978).

obviously is derived from the definition given that term by the Commission in Vermont Yankee, and which reinforces the Applicant analysis of the meaning of that decision. The definition in the new regulation is as follows:

> "Degradation, but not total failure, of emergency core cooling functioning means that the performance of the emergency core cooling system is postulated, for purposes of design of the combustible gas control system, not to meet the acceptance criteria in § 50.46 and that there could be localized clad melting and metal-water reaction to the extent postulated in paragraph (d) of this section. The degree of performance degradation is not postulated to be sufficient to cause core meltdown."[76]

Thus, the Commission has recognized in its most recent regulation on this subject that while it is permissible to make assumptions inconsistent with the ECCS regulations, including the assumption of degraded emergency core cooling functioning, the degree of performance degradation is not to be postulated such as to cause a core meltdown. Here again, the Commission for purposes of safety analysis specifically has precluded an assumption of core melt, while the Staff in the instant case argues such an assumption should be permitted for environmental review purposes.[77]

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[76] 43 Fed. Reg. at 50164 (Emphasis supplied).

[77] The comment in the Annex with regard to Class 8 accidents is equally applicable here:

> "The highly conservative assumptions and

[Footnote continued]

VII. THE STAFF BRIEF CONTAINS SIGNIFICANT CONTRADICTIONS AND INACCURACIES

Because the Staff relies so heavily in its Brief on the results of its FES III Class 9 consequence evaluation, it is important to call attention to some of the contradictory or inaccurate passages in the Staff Brief with respect to such results. Applicant does not wish to extend unduly this Brief with a page-by-page analysis pointing out the inaccuracies and contradictions of the Staff arguments. The following examples, however, in addition to those already mentioned in this Brief and in the Applicant's Direct Brief, suffice to alert the Commission that the Staff arguments must be viewed with considerable caution.

1. Within ten pages, the Staff Brief makes diametrically opposing statements concerning where the risks of a core melt accident for an FNP fall with respect to the range of risks associated with typical land-based reactors. Thus, the Staff on pages 30-31 of its Brief, referencing the LPGS and the FES III, states:

[Footnote continued from previous page]

> calculations used in AEC safety evaluations are not suitable for environmental risk evaluation, because their use would result in a substantial overestimate of the environmental risk. For this reason, Class 8 events shall be evaluated realistically."

> "the liquid pathway core-melt risks do indeed place an ocean sited FNP in the upper range of the risks associated with typical land-based nuclear power reactors."

However, on pages 40-41 the Staff says exactly the opposite:

> "that for ocean sites the liquid pathway core-melt risks place the FNP outside the risk envelope for typical existing land-based reactors."

There is no way that both Staff statements quoted above can be true and only the first one is supported by the LPGS and the FES III. A reader of the Staff Brief, at the very least, would be confused and misled by the second quotation.

2. At page 31, the Staff states that the LPGS showed, using highly conservative assumptions to bound the risk, that the risk of a core melt at an estuarine or riverine sited FNP in an open breakwater is well beyond the range of risk for all existing land-based plants. This statement is misleading in two respects: First, in the LPGS and FES III, the Staff compared the FNP to a "typical land-based plant." The Staff did not analyze all land-based plants and therefore the above conclusion in the Staff brief - with its reference to "all" land-based plants - is not supportable by the analysis performed by the Staff. The phrases "any previously licensed power reactor"[78] and "all existing land-based plants"[79] suffer from the same overstatement.

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[78]Staff Brief, p. 37

[79]*Id.*, p. 41.

Second, the Applicant is not aware of any recent land-based plant Class 9 accident evaluation that utilized in the environmental review "highly conservative assumptions" comparable to those utilized by the Staff for the estuarine or riverine sited FNP. The only "highly conservative" evaluation of land-based plant Class 9 accidents of which the Applicant is aware is WASH-740, discussed previously in this Brief[80] and which estimates significantly greater consequences than the LPGS.

3. On page 9 of its Brief, the Staff, referring to the FES III (§ 2.2.3.2, p. 2-5), makes the following statement:

> "The Staff further concluded that, when one factored in the expected benefits of interdiction at the source of the radioactive release, the difference in calculated population exposures (from core-melt events through the liquid pathway) between the two types of plants was several orders of magnitude." (Footnote omitted)

The Staff then refers to this quotation as a "finding that one aspect of the overall accident risk was significantly greater for an FNP than for an LBP." By referencing only source interdiction, the Staff Brief leaves the impression that calculated population exposure via the liquid pathway will differ in the range of several orders of magnitude as between FNPs and land-based plants. However, the Staff

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[80] Supra, pp. 27-28.

fails to mention in its Brief that the same section of the FES III referred to by the Staff in the quoted portion above also references pathway interdiction and concludes with the statement: "The impact in terms of dose to man, however, can be mitigated to the extent necessary by pathway interdiction." This omission by the Staff of any reference to pathway interdiction is compounded by a similar argument on page 37 of the Staff Brief where the Staff uses the word "interdiction" without making it clear that it is referring only to source interdiction. Thus, the Staff states on page 37 that the liquid pathway risks for an FNP Class 9 accident are more severe "by several orders of magnitude assuming interdiction." Of course, if pathway interdiction also is included, the impact in terms of dose to man can be mitigated to the extent necessary to make the impacts comparable to a land-based plant.

VIII. THE BRIEFS OF NRDC, THE STATE OF NEW JERSEY AND THE AMICUS CURIAE BRIEF OF UCS AND THE CALIFORNIA COMMISSION COMMENTS DO NOT PROVIDE A BASIS FOR UPHOLDING THE APPEAL BOARD MAJORITY DECISION

In addition to the Staff Brief, several parties to the proceeding and one amicus have filed briefs purportedly in support of the Appeal Board majority decision in ALAB-489. Those briefs, which are treated seriatim below, provide no additional insight into the issue which is before

the Commission on this appeal.[81]

A. NRDC Brief

Applicant previously has discussed in this Reply Brief the complete misdirection of the NRDC Brief, based upon

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[81]The California Commission also filed a document in this case denominated "Comments of the California Energy Commission on the Issue of Consideration of Class 9 Accidents." That document consisted of a petition requesting leave for filing, and a two-page statement of comments on Class 9 accident policy which the California Commission said "are intended to be general in nature and not specifically directed at floating nuclear power plants." The comments constitute a general plea by the California Commission for increasing the attention given to Class 9 accidents during Commission licensing proceedings, and do not purport to address the question as to whether Class 9 accidents are a proper subject for consideration in the Environmental Statement in the instant floating nuclear power plant application.

Attached to the California Commission comments was a draft of a paper entitled "Underground Siting of Nuclear Power Reactors: An Option for California," dated June, 1978, together with an analysis apparently prepared by consultants to the California Commission entitled "Analysis of Public Consequences from Postulated Severe Accident Sequences in Underground Nuclear Power Plants." The draft paper clearly states that the purpose of the study on which it reports was to determine general economic and technical feasibility and environmental implications of underground siting of nuclear power reactors and makes a disclaimer that it does not necessarily report the views of the California Commission, except to the extent, if any, that it received formal approval by the Commission at a public meeting. No such formal approval is claimed in the document from the California Commission requesting leave to file the comments. The consultants report, which by its title obviously does not purport to deal with floating nuclear power plants, is accompanied by a legal notice under which the Commission and the State of California disclaim any liability for the contents of the documents. Applicant has great difficulty in discerning any relevance to this proceeding of the documents filed by the California Commission.

NRDC's erroneous premise that the issue presented here is a safety issue rather than an environmental matter.[82] NRDC makes other statements in its Brief which are at variance with the issue presented in this Appeal. For example, NRDC provides its "feeling" that "the Annex is very much peripheral at this stage of the proceeding."[83] Such a statement is directly contradictory to the position of the Staff that "[a]t the heart of the certified question is an issue regarding [the Annex]"[84] and the position of the Applicant that "[t]he starting point for consideration of the proper treatment to be accorded Class 9 accidents . . . is the Annex."[85] Similarly, the NRDC argument that in order properly to resolve this matter it is necessary to develop a record,[86] ignores the Commission Order accepting review of the instant matter and not accepting the contrary view which would have remanded this case to the Licensing Board for development of a record.[87]

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[82]Supra, pp. 3-5.

[83]NRDC Brief, p. 11.

[84]Staff Brief, p. 14.

[85]Applicant Direct Brief, pp. 23-24.

[86]NRDC Brief, pp. 9-12.

[87]Commission Order, December 8, 1978.

On page 10 of its Brief, NRDC urges a procedural point in arguing that Applicant is seeking summary disposition without utilizing the process of the Commission relating to such procedures. NRDC fails to point out that it previously raised this procedural argument before the Appeal Board,[88] which rejected it.

NRDC also argues in its Brief that the Annex is "in effect a regulatory guide subject to modification by the Staff when warranted."[89] This is contrary to the use to which the Annex has been put by the Commission in the past, as well as the Commission statement that the provisions of the Annex will be "useful as interim guidance until such time as the Commission takes further action on them."[90] Thus, it is the Commission which has authorized the use of the Annex, not the Staff. As noted in the Staff Brief, the Annex has been so used by the Licensing Boards and the Appeal Board as well as by the Staff.[91] In addition, in a long line of cases, of which Hodder is the most recent example, the Commission has established successfully that the Annex

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[88]Natural Resources Defense Council Response to Applicant's Brief on Class 9 Accidents, May 5, 1978, p. 2. NRDC also raised this point at oral argument before the Appeal Board (App. Tr. 196-98).

[89]NRDC Brief, p. 11.

[90]36 Fed. Reg. 22851.

[91]Staff Brief, p. 15.

represents the policy of the Commission.[92] The repeated use of the Annex by the Commission gives the Annex the status of a regulation. As noted by Professor Davis in his Administrative Law Treatise:

> "Something that either is akin to rule making or is rule making takes place when particular courses of official action are repeatedly followed."[93]

B. New Jersey Brief

The New Jersey Brief raises only one point not raised in the Staff Brief and previously addressed by the Applicant. Extending the "full disclosure" argument of the Staff, New Jersey states: "Clearly, now that the Class 9 study has been concluded, it would be arbitrary and an abuse of discretion for the Commission to excise it from the EIS."[94] New Jersey would turn due process on its head. The central question involved in this appeal is whether it is appropriate to include an analysis of the consequences of Class 9 accidents in the Final Environmental Statement in this proceeding. If it is not appropriate because such an

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[92]In contrast, Regulatory Guides are promulgated by the Staff, are not regulations and are not entitled to be treated as such. Gulf States Utilities Co. (River Bend Station, Units 1 and 2), ALAB-444, 6 NRC 760, 772 (1977).

[93]1 K. Davis, Administrative Law Treatise, § 5.01, p. 289 (1st ed. 1958).

[94]New Jersey Brief, p. 8.

act is contrary to Commission policy or regulation, then the performance of such an act by the Staff cannot serve as a defense to proper redress before the Commission. To claim, as New Jersey does, that it is arbitrary and an abuse of discretion for the Commission to correct an action of its Staff which contravenes Commission policy or regulation would leave Applicant without a remedy and the Commission powerless to enforce its directives on its own Staff.[95]

C. UCS Brief

The UCS Brief admittedly presents no argument on the merits of the reasoning adopted by the Appeal Board in ALAB-489 but, rather, purports to present an alternative argument supporting the Appeal Board majority result.[96]

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[95]A somewhat similar Staff argument was answered by the Appeal Board in ALAB-489:

> "The Staff also asserts that (Class 9 Brief at 15) once it had undertaken to analyze core-melt accidents at floating plants, it was obliged to include the analysis and the conclusions based on it in the environmental impact statement because 'NEPA is a full disclosure statute' and 'to do otherwise . . . would be contrary to established law and guidance on this subject.'
>
> The short answer to that 'bootstrap' argument is that one cannot justify intruding in proscribed areas by violating the proscriptions. See FMC v. Seatrain Lines, Inc., 411 U.S. 726, 745 (1973)." 8 NRC at 218, fn. 86; Slip Op. at 47, fn. 86. (Emphasis in original).

[96]UCS Brief, pp. 1-2.

That argument consists of an attack by UCS on the Annex itself, whether applied to land-based plants or the FNP. UCS "briefly stated" its position to be "that the Commission lacks a technically defensible basis for unsupported statements in the Annex to Appendix D of 10 CFR Part 50 that the probability of the occurrence of Class 9 accidents is 'so small that their environmental risk is extremely low . . .'."[97] UCS asserts that WASH-1400 was the "only arguable scientific support for such a conclusion . . . ."[98]

The problem with this UCS argument is twofold. First, it does not address the only issue properly before the Commission in this appeal; i.e., whether it is appropriate to consider in this floating nuclear plant application the consequences of Class 9 accidents in the Staff environmental statement. The Order of the Commission accepting review specifically limited such review to the issue presented by the OPS proceeding, not accepting suggestions that the broader question of overall Commission policy under the Annex be addressed.

Second, WASH-1400, referred to by UCS as being the only support for the Annex, post-dates the adoption of the

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[97]UCS Brief, p. 2.

[98]Id.

Annex by the Commission in December, 1971 and the promulgation of the Commission Part 51 regulations in 1974. Accordingly, contrary to the claim in the UCS Brief, WASH-1400 could not have formed the basis for the Commission policy on the Class 9 accidents which is contained in the Annex.

IX. CONCLUSION

On January 12, 1979, the Appeal Board handed down a decision in the Hope Creek case which is relevant to the matter here under consideration.[99] In the Hope Creek case, intervenors contended that NEPA required a supplemental environmental statement discussing alternative methods of protecting that plant from accidents involving vessels carrying hazardous cargo on the river located adjacent to the plant site. Rejecting the intervenor position, the Appeal Board stated as follows:

> "We have found that the likelihood of the accident about which intervenors are concerned is so low that the plant does not have to be designed to withstand it. We can think of no logical reason why NEPA should require so much more than the safety provisions of the Atomic Energy Act and this Commission's safety regulations. See Carolina Environmental Study Group v. United States, loc cit. supra."[100]

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[99] Public Service Electric and Gas Co. and Atlantic City Electric Co. (Hope Creek Generating Station, Units 1 and 2), ALAB-518, ___ NRC ___ (January 12, 1979).

[100] Id., at _____; Slip Op. at 52.

Applicant submits that the reasoning of the Appeal Board in Hope Creek is equally applicable in the present case.

In light of the Appeal Board decision in Hope Creek, in light of the reasoned and consistent view of the Commission, most recently affirmed in the Hodder case, that the Annex represents Commission policy with respect to the treatment of Class 9 accidents; and, in light of the Staff finding that the probability of occurrence of a Class 9 accident for an FNP is the same as that of a land-based plant, Applicant submits that the decision of the Appeal Board majority in ALAB-489 withholding the applicability of the Annex to the FNP cannot stand.

For the reasons set forth in the Applicant Direct Brief and for the additional reasons set forth in this Reply Brief, Offshore Power Systems submits that it is improper and inappropriate in this manufacturing license proceeding to include an analysis of the consequences of Class 9 accidents in the Final Environmental Statement. Accordingly, Applicant respectfully requests the Commission to reverse the Order of the Appeal Board in ALAB-489 with respect to Class 9 accidents and find that the consequences of Class 9 accidents are not a proper subject for consideration in the Environmental Statement on this floating nuclear plant application. Pursuant to such finding, Applicant further requests the

Commission to issue the Order requested in the conclusion of the Applicant Direct Brief at pages 99-100.

Respectfully submitted,

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Dated: January 22, 1979

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of	:	
	:	
OFFSHORE POWER SYSTEMS	:	Docket No. STN 50-437
	:	
(Manufacturing License for Floating Nuclear Power Plants)	:	

CERTIFICATE OF SERVICE

I hereby certify that copies of the "Reply Brief of Applicant" were served upon the persons listed on Attachment 1 to this Certificate of Service by deposit in the United States mail (First Class), postage prepaid, this 22nd day of January, 1979.

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ATTACHMENT 1

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