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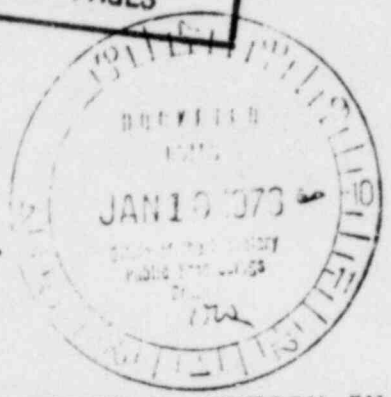

STATE OF ILLINOIS)
) SS.
COUNTY OF COOK)

AFFIDAVIT OF MYRON M. CHERRY IN SUPPORT OF MOTION TO RECALL AND REVOKE INITIAL DECISION ON THE GROUNDS OF BIAS

Docket Nos. 50-329; 50-330

Myron M. Cherry, on oath, deposes and says:

1. I am the attorney for the Saginaw, et al., Intervenors. The Intervenors represent many national organizations and include a corps of citizens local to the proposed Midland site who have donated their time and money in pursuit of issues of prolonged public concern. Thus, one or more of the Intervenors here have not only pursued an intervention in the Midland dockets but are also participating in the Emergency Core Cooling System hearings (Docket RM-50-1) and other interventions (e.g., Dkt. Nos. 50-301; 50-295; 50-304; 50-315 and 50-316) and intend to participate in the upcoming fuel cycle hearings. As such, the Intervenors continue to perform a service by representing segments of the public

in Atomic Energy Commission proceedings not otherwise represented;

2. Accordingly, the Intervenors herein bring this motion after due deliberation and mindful of its purpose and impact. If Intervenors interpretation of the relevant facts and applicable law are correct, then the force and effect of this motion goes far beyond the Midland dockets. The issue raised by this motion goes to the very basis and fairness of Atomic Safety and Licensing Boards. This is all the more so since the Initial Decision itself (premised as we believe upon the personally biased views of the Chairman and other members of the Board) attempts to suggest a manner of proceeding in the resolution of environmental issues for all Boards to follow. See paragraph 44 of the Initial Decision of December 14, 1972 in Docket Nos. 50-329, 50-330, hereinafter referred to as Initial Decision). Accordingly, the bias represented by the facts and law applicable to this motion must be searched out and neutralized as quickly as is possible in order for the Initial Decision not to be the bellwether of further decisions in the Atomic Energy Commission licensing process;

3. Under date of December 14, 1972, the Licensing Board issued an Initial Decision authorizing issuance of construction permits for the Midland Units 1 and 2. I received a copy of the Initial Decision late Monday afternoon, December 18, 1972;

4. On December 23, 1972, I received in the mail a copy of a law review article written by Arthur W. Murphy, Chairman of the Licensing Board, entitled "The National Environmental Policy Act And The Licensing Process: Environmentalist Magna Carta Or Agency Coupe De Grace?", printed in 72 Columbia Law Review 963 (Oct. 1972). This article details in depth Chairman Murphy's personal bias concerning permissible participation by the Intervenors the AEC licensing process and, in particular, Intervenors in these dockets. The article discusses in some detail the controversy surrounding the proposed Midland Units. The article itself notes that it was written at an earlier date and in connection with a part of study of the Committee on Licenses and Authorization of the Administrative Conference of the United States. I recall some time in the summer of 1972, of having become aware of the existence of the precursor of the Columbia Law Review article which was submitted to the

Conference. I did not deal with that article at any great length inasmuch as I was involved in the trying of RM-50-1 and did not fully appreciate its significance until I both received and analyzed the Initial Decision and the final version of the article as it appears in the October, 1972 issue of the Columbia Law Review;

5. In order to confirm the genesis of the article, on December 29, 1972, after having finally formed an opinion as to the impact of bias associated with the collegial reading of the article in the Columbia Law Review and the Initial Decision, I telephoned an employee of the Administrative Conference of the United States, the organization for whom Chairman Murphy's article was originally prepared, in order to fix and ascertain the date the article was first written and released to various members of the Conference and the public. I was informed that the article was originally submitted to the Administrative Conference in May of 1972. I asked to be provided with a copy of the article submitted at that date but was told that there were no more copies available and that the Administrative Conference was, in its official records, using the version of the article in the Columbia Law Review;

6. The timing of the views of Chairman Murphy originally and publicly expressed and held in May or earlier of 1972 with the decision-making process in these dockets is crucial. I point out that, during the fall of 1971 and the spring of 1972, the parties and Licensing Board in these dockets were actively engaged in framing the issues for the upcoming NEPA hearing; that a portion of the radiological case had been concluded but that the matter was still pending decision by the Licensing Board, all evidence not having been finally received by that date; and that the hearings dealing with environmental issues were not due to commence until May 17, 1972. Accordingly, it is clear beyond peradventure that the views expressed by Chairman Murphy in the article submitted to the Administrative Conference in May of 1972 were held by him not only prior to the Initial Decision but prior to the completion of the evidentiary hearings then pending. This timing demonstrates all the more the bias which affected Intervenors in this case, inasmuch as the article uses the factual background, in particular, of the Midland dockets as the vehicle for the discussions of the

(c) Chairman Murphy and the Board did not even apply the requirements of NEPA as interpreted by Calvert Cliffs, which Chairman Murphy's article admits are applicable, and the failure to do so was as a result of prejudicial bias;

9. Attached hereto are true and correct portions of part of Chairman Murphy's Article which reflect his and thus the Board's personal bias.

10. Below follows selected references to the Midland Transcript which now become clear statements of bias when viewed in light of the Initial Decision and the article.

(a) Dr. Goodman's remarks prejudging the effects of effluents at tr. 1347, lines 4-13;

(b) Dr. Hall's "understanding" of the burden of proof, suggesting that it is Intervenors who bear the burden of proof. Thus, at tr. 1048, lines 11-13, Dr. Hall stated:

> "It is not up to us to convince you that the reactor is proper. You [the Intervenors] have to convince us that it is improper.";

(c) Dr. Goodman's acknowledgment at Tr. 2697 at lines 22-25 to the effect that the Board has made up its mind before hearing all of the evidence;

(d) The ruling at Tr. 1893 at lines 19-22 that underlying assumptions of the Regulatory Staff's analysis are prima facie reasonable, unless the contrary is demonstrated by Intervenors;

(e) Dr. Goodman's remarks that safety matters and risks associated therewith are to be weighed against a need for power (certainly a biased view since even the AEC admits that it does not and may not weigh power needs against safety). The complete statement of Dr. Goodman is as follows:

> "The point is in nuclear power plants that they are built and we do not license them unless we are convinced that they are built so that the probability of some extreme accident of that kind is so small that it is reasonable to allow that reactor to be built and operated because of the need of power or steam or some other thing that it will produce in the community." Tr. 1921-22;

(f) Chairman Murphy's remark that it horrifies him if a full environmental review (precisely the kind dictated by NEPA) ever takes place. The exact text of Chairman Murphy's remarks is:

> "This is one of the things that horrifies me about the position that the Environmental Defense Fund takes about environmental issues. I really shudder at what is going to happen when the full environmental hearing contemplated by -- if it ever is -- contemplated by EDF under the [National] Environmental Policy Act is had." Tr. 821, lines 5-10; and

(g) The prejudging evidenced by the colloquy regarding burden of proof as follows:

> "[MR. CHERRY]. Mr. Chairman, we raise this because we really think that the Board is following -- and in trying to analyze the understanding of the Board, I have come to the conclusion, perhaps erroneously -- I don't mean to be disrespectful -- that what has happened here is that the two technical members have said to themselves in their minds. "The cross-examination will reveal nothing, because I know the answers based on my experience in the industry; therefore, I won't permit the cross-examination."

"CHAIRMAN MURPHY: Well, with the additional caveat, until you, who have had this material available for some time, come up with some prima facie showing that will shake their faith that they know the answer, yes?" Tr. 2102, lines 4-16.

Myron M. Cherry

Subscribed and sworn to
before me this 7th day
of January, 1973.

Mary C. Rose
Notary Public

THE ORIGINAL OF THIS AFFIDAVIT IS
BEING SENT TO THE SECRETARY OF THE
ATOMIC ENERGY COMMISSION

COLUMBIA LAW REVIEW

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THE NATIONAL ENVIRONMENTAL POLICY ACT AND THE LICENSING PROCESS: ENVIRONMENTALIST MAGNA CARTA OR AGENCY COUP DE GRACE?*

ARTHUR W. MURPHY**

The recent and continuing flood of environmental legislation is having a profound effect on administrative agencies, particularly those engaged in issuing licenses and authorizations. The variety and scope of the legislation, as well as the number of agencies involved, make it impracticable to keep up with developments in more than one agency; a survey of the field will be outdated before it is written. Accordingly, this article focuses primarily on one agency—the Atomic Energy Commission (AEC)—and its licensing of facilities for the production of electric power.

The choice of the AEC can be justified on a number of grounds. Electric power generation, whether nuclear, fossil fuel or hydro, has a substantial environmental impact, and is a major area of controversy between "environmentalists" and the advocates of economic growth.[1] Whatever the outcome of that controversy, it seems inevitable that there will have to be a substantial increase in generating capacity over the next ten years; the plans to increase that capacity have placed major reliance on nuclear power. Unfortunately, AEC licensing is in severe crisis, with serious implications for the ability of

* This article was prepared as a report to the Committee on Licenses and Authorizations of the Administrative Conference of the United States as part of the Committee's study of the impact of environmental legislation on the licensing process. The Committee is presently considering the report, along with a staff study, *Current Problems in AEC Reactor Licensing*, by Messrs. Richard K. Berg, Barry B. Boyer and James H. Johnston, as well as other inputs of the staff which are reflected in the statement by Roger C. Cramton, Chairman of the Administrative Conference, *The Effect of NEPA on Decision-Making by Federal Administrative Agencies* before the Senate Committees on Interior and Insular Affairs and Public Works, March 7, 1972. While I have had the benefit of the advice of the Committee on Licenses and Authorizations and the staff of the Administrative Conference, the views expressed are my own and have not been approved by the Committee or the Conference.

** Professor of Law, Columbia University. A.B. 1943, Harvard University; LL.B. 1948, Columbia University.

1. Utilities complain, with some justice, that power plants are relatively minor contributors to pollution compared to many other activities, and that environmentalists have tended to concentrate on utilities not because they are the worst offenders, but because they are regulated and, therefore, more easily subjected to control under existing law.

the utilities to supply needed power. Finally, the difficulties being encountered in AEC licensing are typical of what may be expected in other agencies. Except for air pollution, most environmental problems of substance are dealt with in connection with an AEC licensing proceeding.

A similar selection must be made with respect to environmental legislation. At this time, the major federal environmental legislation influencing power plant siting includes: (1) the National Environmental Policy Act of 1969;[2] (2) the Water Quality Improvement Act of 1970;[3] (3) Section 13 of the Rivers and Harbors Act of 1899[4] (which qualifies as a new act because of the interpretation that applies it to the release of pollutants into navigable streams);[5] and (4) the Clean Air Amendments of 1970.[6] As of August, 1972, there are pending in Congress a number of bills specifically dealing with power plant siting,[7] and two bills concerned with land-use planning,[8] which also may have a significant impact on power plant licensing.[9]

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2. 42 U.S.C. §§ 4321-47 (1970). The major provisions of the Act as they concern us here are described in the text accompanying note 13 *infra*.

3. 33 U.S.C. §§ 1152, 1155, 1156, 1158, 1160-72, 1174 (1970) (84 Stat. 91). Both Houses have passed bills which would have a major effect on existing water quality legislation (S. 2770, 92d Cong., 1st Sess. (1971) and H.R. 11896, 92d Cong., 2d Sess. (1972)). The bills contain major differences in the provisions for financing, federal-state relationships, and permit programs, which so far have resisted compromise. Both bills would set a national goal of the total elimination of discharges of pollutants into navigable streams by 1985, and of water quality fit for swimming and fish by 1981.

4. 33 U.S.C. § 407 (1970).

5. The "reinvigoration" of § 13 began with the decision of the Supreme Court in United States v. Standard Oil Co., 384 U.S. 224 (1966), which upheld an indictment based on the accidental discharge of commercially valuable aviation gasoline into the St. Johns River in Florida. Although not entirely clear, the decision would arguably authorize prosecution for "thermal discharges," the major water pollutant resulting from steam-powered generating plants.

6. 42 U.S.C. §§ 1857-58 (1970). At the present time, this Act seems likely to have little effect on nuclear or hydroelectric plants.

7. Of these, the most likely candidates for eventual enactment would seem to be H.R. 5277, 92d Cong., 1st Sess. (1971) (an administration bill); and H.R. 11066, 92d Cong., 1st Sess. (1971). The bills differ in material respects; however, both would require electric utilities to engage in long range planning and to consider projected needs for electric energy and the impact of proposed facilities on the environment. The provisions of the administration bill are extensively discussed by proponents and critics in *Hearings on H.R. 5277, H.R. 6970, H.R. 6971, H.R. 6972, H.R. 3838, H.R. 7015, H.R. 1074, and H.R. 1486, Before the Subcomm. on Communication and Power of the House Comm. on Interstate and Foreign Commerce*, 92d Cong., 1st Sess., ser. 31 (1971). As the title indicates, the Subcommittee considered eight bills in all. After the hearings, it produced a new draft bill, H.R. 11066, 92d Cong., 1st Sess. (1971). Subsequently, a number of other bills on the same subject have been introduced including H.R. 13966, 92d Cong., 2d Sess. (1972); H.R. 15199, 92d Cong., 2d Sess. (1972); and S. 1684, 92d Cong., 2d Sess. (1972). These bills (as well as H.R. 5277 and H.R. 11066) are extensively discussed in *Electricity and the Environment*, The Reform of Legal Institutions, Report of the Association of the Bar of the City of New York, Special Committee on Electric Power and the Environment ch. VII (1972) [hereinafter cited as *Electricity and the Environment*].

8. S. 632, 92d Cong., 1st Sess. (1971) (sponsored by Sen. Jackson); S. 992, 92d Cong., 1st Sess. (1971) (sponsored by the Nixon Administration). Both bills provide for the consideration of federal, state and local plans and for the use of federal funds to strengthen state land use planning. For a more extended discussion, *see Electricity and the Environment*, *supra* note 7, at ch. VII.

9. One other pending bill should be mentioned—the Hart-McGovern bill, S. 1032, 92d Cong., 1st Sess. (1971). This legislation would create a federal cause of action in favor of any person against "any individual or organization, or any department, agency or instrumentality of the United States, a State or local government, the District of

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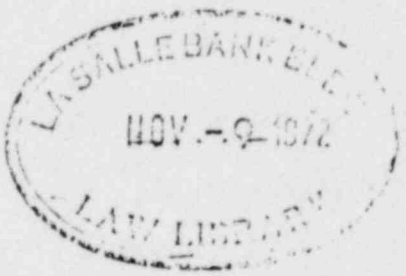

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Chairman's view of the law and facts surrounding the application of the National Environmental Policy Act and the case law interpreting that Act as applied to a particular and pending licensing hearing;

7. On January 2, 1973 at a meeting in Bethesda, Maryland with counsel for the Regulatory Staff in these dockets, I called attention to the bias and solicited the Staff's assistance in connection with this Motion. I took this step before filing the Motion in an effort to have this matter resolved expeditiously. On Friday, January 5, 1973, I was informed by David Kartalia that the Regulatory Staff would take no steps in the absence of the filing of this Motion. Accordingly, this Motion is being filed as soon as possible in light of all the circumstances.

8. As is clear:

(a) Chairman Murphy, and hence the Board, were well aware of the requirements of NEPA, particularly as interpreted by Calvert Cliffs;

(b) Chairman Murphy and the Board viewed the requirements of NEPA, particularly as interpreted by Calvert Cliffs, as interfering with the production of needed energy and development of nuclear power and particularly the construction of the proposed Midland units;

So far as the AEC licensing process is concerned, the most important environmental legislation is the National Environmental Policy Act (NEPA). The relationship of NEPA to AEC licensing is the primary concern of this article. Since much of what follows is critical of the application of NEPA, it is appropriate to emphasize here that NEPA is a long overdue and salutary step toward rectification of an imbalance in existing practice and law.[10] To embark on major government programs without considering their long term impact on the environment is obviously unsound. As a statute to be implemented, however, NEPA poses problems; it is, in the words of Judge Henry Friendly, "so broad, yet opaque, that it will take even longer than usual fully to comprehend its impact."[11] For example, it contains little guidance for agencies in balancing their traditional missions against the demands of the environment. Had NEPA been applied only to future programs, the adjustments could have been made relatively easily. The trouble has come when NEPA has been used more broadly. It may be that had NEPA been enacted seventy-five years ago, we would have forsworn the automobile and other aspects of our high energy economy. But it was not and we did not; and at least for the present, we must live with the consequences of our earlier decisions. The effort to use NEPA "retroactively," to inquire into decisions already acted upon, is disruptive of existing programs. Nowhere is the disruptive effect more evident than in the application of NEPA to the licensing process.[12]

It is the thesis of this article that the job required of the Atomic Energy Commission by NEPA, as interpreted by the courts, is one which the agency cannot perform, and, in any event, one which the licensing process as it currently exists is ill-designed to handle. The task imposed on an already overburdened structure has had, at least temporarily, a disastrous impact.

Columbia, the Commonwealth of Puerto Rico, or a possession of the United States," to enjoin any activity which is claimed to result in "unreasonable pollution, impairment or destruction" of the environment. Although the precise effect of the bill is arguable, a fair reading would, in my opinion, permit the courts to make a de novo determination of reasonableness without regard to prior agency determinations or standards such as water or air quality standards.

10. Despite my disclaimer, the criticism presented in this article is certain to be taken by some as part of an attempt to destroy the act. *See* Harnik, *Testing the Movement, It's Time to Save NEPA*, ENVIRON. ACTION (April, 1972). Speaking of the attempt to pass interim legislation authorizing operation of completed plants prior to a full NEPA review (*see* note 33 *infra*), the author said: "Should the AEC open the gates, other agencies are sure to follow suit in their attempts to rid themselves of what is widely regarded in Washington as the most annoying and troublesome law to be passed in recent years —NEPA." For an indication of the reverence with which NEPA is viewed, *see* Hanks & Hanks, *An Environmental Bill of Rights: The Citizen Suit and the National Environmental Policy Act of 1969*, 24 RUTGERS L. REV. 230 (1970). For a more balanced view (*i.e.*, one in general agreement with my own views) of the virtues and dangers of NEPA, see the testimony of Roger C. Cramton, *supra* note *.

11. New York City v. United States, 338 F. Supp. 792 (E.D.N.Y. 1972) (three-judge court).

12. This article is concerned with licensing. It may be that the effect of NEPA on operational programs will be very similar. However, my tentative judgment is that the requirement of a hearing and the availability of traditional judicial review in the case of licensing make it significantly different from operational programs.

Part I describes the situation as it exists and analyzes the reasons for the crisis. Part II offers suggestions for changes in the structure of the licensing process to enable the AEC and other agencies to better deal with environmental questions.

I. The National Environmental Policy Act of 1969 (NEPA)

A. *The Act*

The National Environmental Policy Act[13] declares a national environmental policy in broad and general terms. Section 101(b), for example, states that "it is the continuing responsibility of the Federal Government to use all practicable means, consistent with other essential considerations of national policy . . ." to achieve stated "environmental" objectives. Section 102 "authorizes and directs that to the fullest extent possible . . . [t]he policies, regulations and public laws of the United States shall be interpreted and administered in accordance with the policy set forth in this Act . . . ." Part II of the Act establishes the Council on Environmental Quality.

Section 102(c) contains the major substantive provisions of the Act. It provides:

> All agencies of the Federal Government shall . . . (c) include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on—(i) the environmental impact of the proposed action, (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented, (iii) alternatives to the proposed action, (iv) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

The thrust of this provision, as well as the Act itself, is to require an agency to demonstrate that *it has considered* environmental factors along with other relevant aspects of any proposed major action.

B. *Licensing as "Major Federal Action"*

Whether Congress intended to include agency licensing proceedings within "major Federal action" is not entirely clear.[14] Certainly, the provisions of Section 102(c) seem to have been drafted with operational programs in mind.

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13. 42 U.S.C. §§ 4321-47 (1970).

14. Considering the remarkable lack of attention given to the Act by Congress, one must wonder whether Congress had any idea of the potential impact of its action. The bill, in its original form, passed the Senate without debate, and the original House bill did not contain the provision in question. Except for the bill's relationship to the Water Quality Act (*see* note 39 *infra*), the specific provisions of NEPA were not examined in depth. The origins of NEPA and the course of its enactment are described in Third Annual Report of the Council on Environmental Quality 221-24 (1972) [hereinafter cited as CEQ Third Report].

licenses may be issued to completed plants in certain circumstances before the final NEPA review.[33]

Important as these consequences are, however, they are short-term. In this portion of its decision, the court has only required that the NEPA criteria be applied at an earlier stage than that chosen by the AEC. While, as noted above, one may criticize the court for refusing to allow the agency a period of adjustment,[34] the effect of this aspect of the opinion will dissipate over time.

2. *Certification.* The pattern of reliance on certification by other government agencies was the major philosophical underpinning of the approach of the AEC to environmental questions. Appendix D specifically stated the AEC belief

> that the preservation of environmental values can best be accomplished through the establishing of environmental quality standards and requirements by appropriate Federal, State, and regional agencies having responsibility for environmental protection.[35]

Although any party could raise environmental issues in a proceeding,[36] certification of compliance by an authorized agency was to be dispositive of the issue.[37] In the case of water quality, the AEC took the position that WQIA superseded NEPA and that the AEC role was therefore restricted to assuring itself that an applicant had procured a certificate from the appropriate agency—state, interstate or federal (EPA).[38]

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less than full power licenses have been issued to some plants. In many cases, however, the issuance of such licenses is being hotly contested.

33. *See* note 85, *infra*.

34. The AEC was criticized by representatives of industry and by one Commissioner for overreacting to *Calvert Cliffs* by forbidding operation of completed plants until NEPA environmental review was finished. (*See* the statements of Commissioner Ray and Charles F. Luce of Consolidated Edison Co., N.Y., before a hearing of the Senate Interior Committee on November 3, 1971, *reported in* 18 NUCLEAR IND. 24-25 (Dec. 1971)).

35. 35 Fed. Reg. 18474 (1970).

36. "Any party to a proceeding for the issuance of a construction permit or an operating license . . . may raise as an issue in the proceeding whether the issuance of the permit or license would be likely to result in a significant, adverse effect on the environment." *Id.* This provision applied only to facilities where the notice of hearing for the construction permit was issued on or after March 4, 1971.

37. With respect to those aspects of environmental quality for which environmental quality standards and requirements have been established by authorized Federal, State, and regional agencies, proof that the applicant is equipped to observe and agrees to observe such standards and requirements will be considered a satisfactory showing that there will not be a significant, adverse effect on the environment. Certification by the appropriate agency that there is reasonable assurance that the applicant for the permit or license will observe such standards and requirements will be considered dispositive for this purpose.

In any event, there will be incorporated in construction permits and operating licenses a condition to the effect that the licensee shall observe such standards and requirements for the protection of the environment as are validly imposed pursuant to authority established under Federal and State law and as are determined by the Commission to be applicable to the facility that is subject to the licensing action involved.

Id.

38. 35 Fed. Reg. 18470 (1970).

on its *own* regulations as establishing permissible limits of [illegible] for all reactors. Under existing practice, the AEC tests the safety of a [illegible] by reference to compliance with its regulations—Part 20[42] dealing with permissible releases in regular operation and Part 100[43] dealing with accidental releases. These regulations are framed to allow substantial individualized consideration of a single unit. Part 100, for example, requires that in the event of a hypothetical "design basis accident," calculated doses at specified distances outside the reactor not exceed certain limits, but the regulation allows "credit" for engineered safeguards.[44] Imprecise as these standards are, they do provide a reference for decision. If the calculations show that the limits will not be exceeded, the reactor may be licensed. Whether this is still the case after *Calvert Cliffs* is questionable.[45]

3. *The Requirement of "Adjudication" of Uncontested Issues.* Prior to *Calvert Cliffs*, Appendix D provided that the hearing Board would not pass on environmental issues unless they had been raised by a party. This procedure was not an abdication by the AEC of its duty to conduct an environmental review; the review would be performed outside the hearing process, *i.e.*, by the regulatory staff in the preparation of its impact statement. This approach was sharply rejected by the court as a "crabbed interpretation that makes a mockery of"[46] NEPA. The court required the Board to examine the adequacy of the regulatory staff review and to "independently consider the final balance among conflicting factors that is struck in the staff's recommendation."[47] In reaching this conclusion, the court applied to environmental questions the unique format used with respect to radiological questions. As to them, the Boards are required to make independent findings even though the license application (or the particular radiological issue) is uncontested.[48] The wisdom of the court's application of this requirement to environmental issues is the least questionable. This is not the occasion to relitigate the long-standing debate over the AEC licensing process; Board review of uncontested issues has been attacked as wasteful, repetitive and worse.[49] Although the precise nature of the Board's function has resisted definition, all seem to agree that it should

42. 10 C.F.R. § 20 (1971).

43. 10 C.F.R. § 100 (1971).

44. *Id.* For a description of the requirements, *see* Murphy, *Atomic Safety and Licensing Boards: An Experiment in Administrative Decision Making on Safety Questions*, 33 LAW & CONTEM. PROB. 566 (1968).

45. For purposes of the environmental "cost-benefit" analysis, an applicant must now consider the possible effects of a spectrum of accidents less severe than the design basis accident. 36 Fed. Reg. 22851 (1971).

46. 449 F.2d at 1117.

47. *Id.* at 1118.

48. For a discussion of the role of the Boards with respect to uncontested issues, *see* Murphy, *supra* note 44, at 578-81.

49. *See, e.g.*, Cavers, *Administrative Decisionmaking in Nuclear Facilities Licensing*, 110 U. PA. L. REV. 330 (1962); Davis, *Nuclear Facilities Licensing: Another View*, 110 U. PA. L. REV. 371 (1962); Cavers, *Nuclear Facilities Licensing: A Word More*, 110 U. PA. L. REV. 389 (1962); Green, *Safety Determinations in Nuclear Power Licensing: A Critical View*, 43 NOTRE DAME LAW. 683 (1968).

not be to duplicate staff review.[50] In practice the Boards have tended to spot check the work of the staff. Such a review is at least feasible on radiological issues because it is conducted by people with considerable expertise in the field. In contrast, the Boards have no special competence in environmental matters,[51] and, even if an adequate number of "environmentally qualified" personnel are found, the question persists whether it makes sense to extend the concept of independent review of uncontested issues to new areas.

How serious a problem is posed by this aspect of the *Calvert Cliffs* decision remains unclear. Arguably, there will be no one to challenge a Board's consideration of uncontested environmental questions. The failure of an intervenor to contest an issue should preclude him from challenging Board action with respect to that issue (although even that is not certain) but, under existing law, it appears that a person "adversely affected" by a determination, but not a party below has standing to seek judicial review of a Board decision.[52]

4. *The Requirement of Ultimate Balancing in the Adjudicatory Proceeding.* The major theme that emerges from *Calvert Cliffs* is that in an adjudicatory proceeding, the Board itself must balance the economic and technical advantages against the environmental costs of each proposed action to ensure an optimum result. In so ruling the Court essentially adopted a basic position of environmentalists, with far-reaching implications. That position is fairly simply stated: Environmentalists feel that for a long time actions detrimental to the environment have been taken without consideration of the ultimate consequences. They believe, moreover, that a frequent cause of this practice is that no single person or agency has been given responsibility to consider the total effect of

50. *See* Murphy, *supra* note 44. The court in *Calvert Cliffs* does concede that as to environmental issues the Board's review would not *necessarily* have to be *entirely duplicative* of the Staff review. *See* 449 F.2d at 1118.

51. Each Board consists of two "technically qualified" members and one member "qualified in the conduct of administrative proceedings." The members of each Board are chosen from a panel.

52. *See* Shapiro, *Some Thoughts on Intervention Before Courts, Agencies and Arbitrators*, 81 Harv. L. Rev. 721, 764-67 (1968). Section 189 of the Atomic Energy Act, 42 U.S.C. § 2239 (1970), permits intervention in a licensing proceeding by "any person whose interest may be affected" and makes a final decision reviewable in "the manner prescribed in [the Review Act of 1950] and . . . section 10 of the Administrative Procedure Act." Section 10 permits a "person . . . adversely affected" to seek review. How these two Acts are to be read together is unclear. *Compare* Easton Utilities Comm'n v. AEC, 424 F.2d 847 (D.C. Cir. 1970), *with* Izaak Walton League v. Schlesinger, 337 F. Supp. 247 (D.D.C. 1971).

Section 313(b) of the Federal Power Act restricts judicial review to *parties* in the agency proceeding. This fact was stressed in Scenic Hudson I, 354 F.2d 608 (2d Cir. 1971). One effect of relaxed standing criteria (*see* note 128 *infra*) is an interest in restricting judicial review to parties in the agency proceeding. *See* Public Land Law Review Commission Report, *One Third of the Nation's Land* (Recommendation No. 110), at 257: "To minimize the dilatory effects of court involvement, we recommend that in general the availability of judicial review be limited to those parties who participated in the administrative proceeding for which review is sought." *Cf.* H.R. 11896, 92d Cong., 2d Sess. (1972). This bill would authorize (§ 505) "citizen suits" to enforce effluent standards; it defines citizens to include citizens of the "geographic area," those having a "direct interest" affected, or "any group of persons which has been actively engaged in the administrative process and has thereby shown a special interest in the geographic area in controversy." (§ 505(g)).

a particular enterprise. For example, the FPC and the AEC have a responsibility for promoting the construction of electrical power facilities. Such agencies have, in a very real sense, a single interest focus. The environmentalists want to make sure that someone is responsible for considering not only power needs (and safety needs) but also the impact on the environment of the satisfaction of those needs. Among other things, they challenge the acceptance as given of the postulate that power needs must be satisfied.

Although the position of the environmentalists is hardly objectionable as an ideal, there is a serious danger that as applied to a particular adjudicatory proceeding, the ideal is unattainable. The difficulty stems from the requirement that the adjudicatory body make an independent determination of each issue coupled with the number of potential issues in each case. As one observer of the administrative process stated:

> If an administrator, each time he is faced with a decision, must perforce evaluate that decision in terms of the whole range of human values, rationality in administration is impossible. If he need consider the decision only in the light of limited organizational aims, his task is more nearly within the range of human powers. The fireman can concentrate on the problem of fires, the health officer on problems of disease, without irrelevant considerations entering in. . . . If the fire chief were permitted to roam over the whole field of human values—to decide that parks were more important than fire trucks, and consequently to remake his fire department into a recreation department, chaos would displace organization, and responsibility would disappear.[53]

Lest this viewpoint seem too alarmist, it is useful to examine what some intervenors, post *Calvert Cliffs*, consider to be at issue in a licensing proceeding. Chosen for this purpose are excerpts from the responses by intervenors to a request for a preliminary indication of the issues in the Midland, Mich., construction permit proceeding.[54] The excerpts do not cover all the issues argued in the case, but are sufficient to illustrate the scope of the potential inquiry:

> (1) All adverse environmental effects and social and economic costs associated with the nuclear fuel cycle, to wit, mining, milling, feed material preparation, fuel enrichment, fuel fabrication, reactor operation, transportation, fuel reprocessing, and ultimate high-level radioactive waste storage and disposal should be considered in this proceeding.[55]

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53. H.A. SIMON, ADMINISTRATIVE BEHAVIOR 13 (1957). Although the author is concerned with "the phenomenon of identification, or organizational loyalty in administration," his remarks seem appropriate here.

54. *In re* Consumers Power Co., AEC Docket Nos. 50-329 and 50-330 (1972). The author sat as the non-technical member of the Atomic Safety and Licensing Board that heard the case.

55. Letter from counsel to the Mapleton Intervenors, Sept. 28, 1971, on file in AEC Public Document Room, Washington, D.C. The State of Kansas has intervened in a number of proceedings to contend that the issues before the Boards include the effect

(2) The need for the electricity and alternative proposals to provide more electricity. For instance, public programs to discourage the unnecessary use of electricity by the general public and industry, rate schedules which impose substantially higher charges for electricity during peak demand periods, rationing of electricity during peak periods, etc.

Alternative means for providing the electricity which it has predicted will be needed, including bringing in power from Canada or other power systems or converting to more efficient means of transmitting electricity including direct current transmission and underground transmission.[56]

(3) A NEPA analysis for a nuclear power plant also requires an analysis of alternatives. Thus, given a long range view of proper rationalization of our natural resources, if a power plant is needed, then should it be a nuclear power plant? Accordingly, it appears necessary to analyze long and short range supplies of coal, oil, gas and uranium and make some judgment as to whether or not a nuclear power plant ought to be built, given the relative supplies of various of our natural resources. This issue is all the more significant because of the proliferation of nuclear power plants and the obvious and continued use of available uranium. This analysis must consider the feasibility of the Atomic Energy Commission's so-called "fast breeder" program. The Commission has stated that with dwindling supplies of uranium it is necessary to increase activity regarding the fast breeder program. To the extent that available resources of uranium are to be generated by the fast breeder, the Midland environmental review should also analyze the relative environmental and operational feasibility of the fast breeder program.[57]

Kansas of the plan currently under consideration to store long-lived wastes in salt deposits in that state.

56. The Environmental Defense Fund's (EDF) statement of *Subjects Which Must Be Explored*, dated September 30, 1971, is on file in the AEC Public Document Room, Washington, D.C. The paragraphs in the text and the excerpts in this footnote have been regrouped and changed in form for ease of presentation, but without, it is thought, any change in sense. Additional contentions by the EDF include the following:

> The operating experience of comparable sized PWRs and how this affects the reliability of the power to be generated by this plant. The new systems on this plant and possible outages which might occur as a result of these new systems. The predicted non-operating days for this plant. The predicted average number of full operating days for this plant. The criteria to be used in deciding at any given time whether to keep radioactive releases as low as *possible* or to continue operating the plant in order to meet electric needs. Delays which could be caused by design modifications resulting from yet to be completed tests by the AEC. See for instance, WASH. 1146 and compare the recent modifications in ECCS necessitated by the semi-scale tests.
>
> The extent to which the plan by Dow Chemical to purchase steam from the plant affects the decision to build the plant and build it at this location. Alternatives available to Dow if the plant is not built including improved fossil plant production of steam and discontinuing uneconomical and/or outmoded operations. Potential effects on the Midland community of the construction of this plant. The possible advantages to the community if both Dow and the plant were located elsewhere and thus the city was relieved of two major sources of pollution. The effect on the economy of Midland including the possible development of a tourist and recreation industry to replace Dow.

In addition to producing electricity the proposed plant would supply steam to the adjacent Dow Chemical Company for use in manufacturing. Another group of intervenors would litigate the "benefits" of moving Dow's plant to Texas. Dow is the major employer in Midland, providing jobs for some 10,000 persons.

57. The items under "(3)" are from Exhibit B to a letter from Myron Cherry, counsel

Of course, the fact that the intervenors assert that such issues are open to scrutiny in the proceeding does not establish what may be contested. At present, the intervenors position is under challenge, and the AEC may take a narrower view of the permissible range of issues.[58] The court in *Calvert Cliffs*, however, did not defer to the AEC views, and one must realistically discount them.

An indication of the courts' attitude concerning the scope of the relevant issues may be gathered from the recent decision of the Court of Appeals for the District of Columbia in *National Resources Defense Council v. Morton*.[59] In that case, conservation groups challenged the adequacy of the environmental statement prepared by the Department of Interior in connection with the proposed leasing of oil and gas drilling rights in the Continental Shelf, and, specifically, the adequacy of the "discussion of alternatives" mandated by NEPA. The court found the statement deficient and disapproved of the agency's refusal to analyze the environmental effects of alternatives. In particular, the court rejected the conclusion that there was no need to consider alternatives, such as elimination of oil import quotas, that were beyond the power of the agency to effectuate. On the other hand, the court sustained the agency's refusal to examine alternatives such as solar and fusion power which were not "reasonably available." While it is impossible to draw firm conclusions from the decision—especially since it involves an operational program rather than a licensing proceeding—the opinion, on balance, seems to support a broad view of the issues to be decided by a hearing Board.

In the *Calvert Cliffs* decision itself, the court appears to require the hearing Board to scrutinize a wide range of issues in arriving at its final determination. In the words of the court:

> NEPA mandates a case-by-case balancing judgment on the part of federal agencies. In each individual case, the particular economic and

for the Saginaw Intervenors, to the Board, Sept. 30, 1971, on file in AEC Public Document Room, Washington, D.C. Other contentions of Saginaw Intervenors include the following:

> Any analysis under NEPA must include a review of whether Consumers' determination to build the Midland units is justified at all. Thus if it is not demonstrated that Consumers has long range needs for an additional power plant, it should not be able to build it. NEPA, it would also appear, requires an inquiry as to whether Consumers, if additional power needs are demonstrated, could purchase necessary electricity, by virtue of a present or new inter-connection, from utilities having a different peak period than Consumers, rather than build a facility.
>
> An analysis of demand for electricity must include a discussion of what creates demand. We all know that utilities spend a good deal of money in promoting a need for electricity. Under NEPA should a utility be able to build a plant based in whole or in part upon demand for electricity which it has created itself? Or indeed, should a sound, long range environmental policy require a utility to invest sums to promote a decrease in the use of electricity in order to conserve natural resources and avoid unnecessary or unwise expenditures of capital costs.

58. The Atomic Safety and Licensing Appeal Board has upheld the ruling of the Board in one case that excluded from consideration all issues of the fuel cycle concerning matters before transportation of the fuel to the reactor site and after transportation to the fuel reprocessing plant or burial site. *In re* Consumers Power Co., AEC Docket Nos. 50-329 and 50-330, July 19, 1972.

59. 458 F.2d 827 (D.C. Cir. 1972).

According to the court, "if the decision was reached procedurally without substantive consideration and balancing of environmental factors conscientiously *fully and in good faith* it is the responsibility of the court to reverse."[65] This emphasis on procedure seems innocuous but may prove to be lethal. What does it mean to give "full and good faith consideration" to issues of the kind involved in these proceedings?

The potential dimensions of the problem of defining "full and good faith consideration" are highlighted by the dissent of Judge Oakes in *Scenic Hudson II*.[66] In the now-famous first decision in this case (*Scenic Hudson I*), the Court of Appeals for the Second Circuit set aside the FPC approval of a proposed "pumped storage facility" to be built at Storm King Mountain in the Hudson River Valley.[67] The court remanded the case to the FPC, *inter alia*, for consideration of alternatives to the proposal. On remand the FPC again approved the proposed facility with some modifications, and on appeal the Second Circuit upheld the FPC determination by a 2 to 1 vote.

In his dissent, Judge Oakes cited four theories compelling reversal of the FPC decision.[68] The first involved the possible effect of the facility on an aqueduct supplying New York City and other municipalities. The evidence of possible damage to the aqueduct was conjectural and contradicted. The witnesses to whom Judge Oakes gave credit testified that there was "a small but real risk" to the aqueduct; that the degree of the risk was "unknown;"[69] that the "risk of failure cannot be regarded as imminent but it represents a definite hazard;" and that "evaluation of the risk . . . cannot be made on an actuarial basis. . . . [It] might be taken as a calculated business risk if only money were involved; however, a failure of this water supply system might jeopardize the lives and welfare of millions of persons. . . ."[70] Judge Oakes' path from this evidence to his conclusion was somewhat obscure. At one point he stated that "the burden is . . . on the applicant to prove and the commission to find *no danger to public life, health and property*."[71] Later in his opinion Judge Oakes

65. *Id.* at 1115 (emphasis added).

66. Scenic Hudson Preservation Conference v. FPC, 453 F.2d 463 (2d Cir. 1971), *cert. denied*, — U.S. —, 92 S. Ct. 2453 (1972).

67. Scenic Hudson Preservation Conference v. FPC, 354 F.2d 608 (2d Cir. 1965).

68. Judge Oakes would not even remand the case for further proceedings. 453 F.2d at 494.

69. *Id.* at 496.

70. *Id.* at 497.

71. *Id.* at 497 (emphasis added). The basis for this statement is footnote 11 which is set forth here in its entirety:

> "Further, the project must be safe so as not to endanger life, health and property." Commissioner Ross, dissenting in Consolidated Edison Co. of New York, Inc. (FPC March 1965), *rev'd* in Scenic Hudson Preservation Conf. v. Federal Power Comm'n, 354 F.2d 608 (2d Cir. 1965), *cert. denied*, 384 U.S. 941 (1966). *See also* Section 10(c) of the Federal Power Act, 16 U.S.C. § 803(c) (1970), requiring a licensee to "conform to such rules and regulations as the Commission may from time to time prescribe for the protection of life, health and property," and rendering the licensee liable "for all damages occasioned to the property of others by the construction . . . of the project works . . . ."

Id. n.11.

seemed to hedge on the requirement of *no* danger: "If a danger is 'remote' the degree of 'remoteness' assumes importance in proportion to the magnitude of the danger. Here the danger is obviously great, and there is no finding as to the degree of remoteness."[72] It is difficult to avoid the conclusion that Judge Oakes simply disagreed with the FPC's evaluation of the importance to be accorded the possibility of damage to the aqueduct. He rejected the majority view that "the resolution of highly complex technological issues such as these were entrusted by Congress to the Commission and not to the courts."[73] This rejection apparently stemmed from the belief that the FPC does not possess "any particular . . . expertise in geology."[74] His own geological qualifications do not appear.

The second ground for Judge Oakes' dissent involved air pollution. He disapproved of the FPC's failure "to order that only the most efficient and least polluting generating units [on Consolidated Edison's system] be utilized for pumping power."[75] Again one must conclude that the basis of this contention was Judge Oakes' belief that the FPC was insensitive to the problems posed by air pollution.

The third ground cited by Judge Oakes as a basis for reversal was his passionate disagreement with the FPC view of aesthetics. He found "outrageous" and "shocking" the FPC finding that the mountains "will swallow the structures which will serve the needs of the people for electric power."[76] He did not attempt to explain the theory of judicial review that made his view of aesthetics superior to that of the FPC.

Finally, Judge Oakes would have reversed because of the failure of the FPC determination to satisfy the requirements of NEPA.[77] Specifically, he was concerned with the inadequacy of the FPC treatment of alternatives. Among other things, he criticized the FPC for considering only alternative sites within one hundred miles of New York City.

The implications of Judge Oakes' opinion are disturbing. Take, for example, the issue of possible damage to the aqueduct because of the location of the plant. Every nuclear power plant involves what is thought to be a small risk of serious accident. There is at present no meaningful way of quantifying the probability of such an accident. Estimates vary by orders of magnitude. For example, the *Brookhaven Report* estimated the probability of a "major release" of fission products at between 1/100,000 and 1/1,000,000,000 per reactor per year.[78] Obviously, there is room for disagreement about the degree

72. 453 F.2d at 487.
73. *Id.* at 480.
74. *Id.* at 486.
75. *Id.* at 489.
76. *Id.* at 491.
77. Although NEPA was enacted after the FPC hearing, it was conceded that the Act applied.
78. Atomic Energy Commission, *Theoretical Possibilities and Consequences of Major Accidents in Large Nuclear Power Plants* (WASH-740, 1957).

implementation of the preferred alternative. One reason is that each proceeding concerns only a single site. The decision in Proceeding *A* that site *B* is better than site *A* does not obviate the possibility that in Proceeding *B* the agency will find site *C* is better than *B* or, since there is no res judicata, that site *A* is better than *B*.[82] Another problem is that the viability of the alternatives depends on choices that are within the province of other agencies, organizations and individuals. The Midland, Michigan dispute, referred to above, concerning the possible effect on the location of a power plant of the operations of Dow Chemical Company provides an example. Putting aside for the moment the difficulty of establishing the truth of the broad propositions contended for by intervenors, it must be realized that neither the Board, the AEC, nor anyone else has the power to order the "optimum result." The only binding effect of the choice of an alternative is the negating of the site under examination. In the circumstances, there is a strong temptation to approve the contested site and fudge the question of alternatives.[83]

What has been said should suggest that even in the best of circumstances the task required of the agencies by NEPA as interpreted by *Calvert Cliffs* may be impossible to perform. And, unfortunately, we have far from the best of circumstances. It cannot be a surprise to anyone connected with the field to be told that there are some environmentalists who do not want hearings to end. To them a power plant delayed is an environmental value preserved, and *Calvert Cliffs* may provide an irresistible temptation to use the process for delay. Although I believe that the delays caused by intervenors to date have been exaggerated, the potential for delay is ever-present. Even before *Calvert Cliffs*, there was a serious question whether the adjudicative process, with the full paraphernalia of court-developed rules of discovery and cross-examination, was a viable method for handling complex technical problems. With *Calvert Cliffs* it becomes imperative to take a close look at the role of intervenor in such proceedings as well as other aspects of how best to approach the task of making environmental decisions.

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82. The inherent difficulty of the single site investigation has been noted in England in connection with their town planning program:

> The traditional form of a single site enquiry has this basic drawback. An objector to Site A may accept the necessity for the project, but base his opposition on the greater alleged suitability of Site B. But an enquiry into Site A cannot result in a decision in favor of Site B because the necessary notices, etc., have not been given so as to enable those objecting to Site B to have their say and perhaps advocate Site C. And so on.
>
> So we are faced, on that approach, with the prospect of a continuing series of enquiries, with perhaps an urgently needed project receding ever further into the limbo.

Walker-Smith, *Public Participation in Locating Facilities Dedicated for Public Use*, PUB. UTILITIES FORTNIGHTLY, Sept. 17, 1971, at 95, 96.

83. A natural disposition in consequence is to plump for Site A and have it done with. The result of such a course, however, would be a reaction on the part of the public that the enquiry was not meaningful, or merely a charade to cloak a prefabricated decision with, at any rate, a miniskirt of democratic propriety.

Id. at 96.

satisfaction of demand, and, if we are, should we attempt to control the factors which go into demand or leave them as at present to the individual utility and the customer? The answer to these questions involve awesome social and political judgments. One may accept with equanimity the prospect of a world without cosmetics, or even aluminum beer cans, but the dislocations will not all be welcome. Efforts to eradicate poverty and to equalize opportunity are predicated on the existence of a high energy economy. It may be that our assumptions must be radically altered.[103] However, at the moment we do not have new premises to take their place, and it would be shocking to make decisions between power and the environment without considering such factors. Judgments on these fundamental questions are essentially political: it is foolish to suggest that they should be made by a three-man Atomic Energy Safety and Licensing Board, or, indeed, by the Atomic Energy Commission itself. The notion that an administrative agency or a court should decide, without legislative guidance, questions such as the desirability of power rationing and the order in which various types of demand should be satisfied[104] is wholly undemocratic. Until the legislature gives some guidance in these areas, power rationing cannot be viewed as a reasonable alternative under NEPA, and should be excluded from agency consideration.[105]

Similar problems inhere in the development of a national fuel policy. One needs only to scan the literature about the available sources of fuel to realize that to require an adjudicatory body to decide whether a single installation involves a commitment of irreplaceable fuel supplies is a futile gesture.[106] In one sense, any commitment of fuel is the use of an irreplaceable national

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answered on an individual plant basis." ENERGY POLICY STAFF, OFFICE OF SCIENCE AND TECHNOLOGY, ELECTRIC POWER AND THE ENVIRONMENT at xi (1970).

103. In the United Kingdom, a group of scientists has warned, *inter alia*, that the country must soon stop building roads and eventually reduce its population by one-half. N.Y. Times, Jan. 14, 1972, at 1, col. 5. *See also* D.H. MEADOWS, THE LIMITS TO GROWTH at 23 (1972):

> If the present growth trends in world population, industrialization, pollution, food production, and resource depletion continue unchanged, the limits to growth on this planet will be reached sometime within the next one hundred years. The most probable result will be a rather sudden and uncontrollable decline in both population and industrial capacity.

Of course, such predictions are not universally accepted: *The Limits to Growth* has been characterized by some critics as "an empty and misleading work." Passell, Roberts & Ross, book review, the N.Y. TIMES BOOK REV., April 2, 1972, at 1.

104. The control of demand promises to be a complex problem. Some of the complexities are outlined in *Electricity and the Environment*, *supra* note 7, at ch. VI.

105. I leave open the question whether the decision should be federal, state or local. It seems clear that we need a national policy, but it may be that a cooperative rather than a preemptive structure is appropriate. For an interesting discussion of the siting problem, with primary focus on Virginia, *see* Willrich, *The Energy-Environment Conflict: Siting Electric Power Facilities*, 58 VA. L. REV. 257 (1972).

106. In June, 1971, the Senate Interior and Insular Affairs Committee sent questionnaires to all federal agencies in the energy field to obtain information on studies and reports developed by them which might be "valuable for the Committee's Study of National Fuels and Energy Policy." The Index of the Reports covers 45 pages and very brief abstracts cover almost 500 pages. SENATE COMM. ON INTERIOR AND INSULAR AFFAIRS, STUDIES AND REPORTS RELEVANT TO NATIONAL ENERGY POLICY, 92d Cong., 1st Sess. (1971).

phenomenon, but also one of guidance promises to be a greatly troublesome one in the future. If NEPA were being construed narrowly to require only that agencies *embark on new programs* set forth the consequences of the program and of alternative programs, the need for new legislation would be less urgent. But NEPA has received a very broad interpretation from the courts;[110] it is viewed as a congressional mandate to agencies to consider environmental goals equally with their traditional objectives. As interpreted, NEPA could be used to nullify an agency's regular mission. If that is what Congress intended, then Congress must face squarely the implications of its action.

While some of the basic questions can and must be dealt with at the legislative level, we cannot expect the legislature to administer the power program. Some administrative agency, or agencies, must implement the legislative decision. Should these agencies proceed on a case-by-case or a generic basis? As noted earlier, *Calvert Cliffs* seems to reject generic proceedings and mandate an individualized case-by-case treatment of all questions. If this interpretation of the decision is correct, it is a giant step in the wrong direction.

There are a great many environmental questions that should be settled on a generic basis.[111] One of them currently under examination is the ultimate storage of nuclear wastes. If the problems of high-level waste storage cannot be solved, the reactor licensing program must be re-examined. This does not mean, however, that the question must be considered in connection with each individual reactor license; rather, the major parameters of the question should be considered at one time and be binding in individual cases. This would not be a de-emphasis of environmental questions. The decision of the AEC to put a permanent waste-storage facility in Kansas—or elsewhere—is one which ought to be the subject of an environmental statement.[112] The same seems

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[110]. *See, e.g.*, Arlington Coalition on Transportation v. Volpe, 458 F.2d 1323 (1972). The opinion begins (p. 1326):

> This is an *ecology* case. It is the declared public policy of the United States to protect and preserve the national environment "to the fullest extent possible." National Environmental Policy Act of 1969, 42 U.S.C.A. § 4332 (NEPA). The NEPA is a value judgment by the Congress that in order to "foster and promote the general welfare" each generation of Americans must, beginning now, act "as trustee of the environment for succeeding generations." 42 U.S.C.A. § 4331. We hold that even a vital highway construction must yield to the congressionally structured priority.

[111]. The desirability of "rule making" is accepted as an article of faith by most observers of the administrative agencies. *But see* Robinson, *infra* note 113, for a note of skepticism.

[112]. The AEC announced on June 17, 1970 that it had tentatively chosen the salt mines near Lyons, Kansas as the site of a national nuclear waste repository. 1 ENVIRON. REP. – CURRENT DEVELOPMENTS 179 (BNA 1970). The radioactive waste materials would be placed in rooms mined in the salt formations approximately 1,000 feet underground. This plan was criticized by the Kansas Geological Survey in a report submitted to the Governor of Kansas, *id.* at 1207, and, on March 16, 1971, several representatives from Kansas spoke in opposition to the AEC's plans before the Joint Committee on Atomic Energy of Congress, *id.* at 1270. The Final Environmental Statement on the proposal was filed June 4, 1971, 36 Fed. Reg. 11053 (1971).

In the Act authorizing the appropriations for the AEC for fiscal year 1972, provision

[illegible] borrowed from the judiciary.[119] For example, [illegible]

[illegible] as well. Today, it is generally assumed that any radiation [illegible] genetically deleterious consequences.[120] The decision to go forward with nuclear plants is, therefore, a value judgment that the risk is worth assuming. One can argue whether a risk should be taken, but it is not useful to "try" that question in the traditional adjudicatory setting. With regard to the *level* of permissible radiation, however, the judgment may be based on information that can be appropriately developed through some of the techniques utilized in the trial process.[121] At the very least, the agency should be required to disclose the basis of its "factual" judgment. Some opportunity should probably be given for inquiry into that basis, and, certainly, an opportunity should be allowed for the introduction of contrary scientific evidence into the record.

A similar spectrum of issues is present in the controversy over the emergency core cooling system (ECCS) of pressurized water reactors. Because of the importance of this controversy to the future of nuclear power, and the importance of the ECCS hearing now being conducted to the subject of this paper, I will, at the risk of gross error, attempt a lawyer's description of

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119. Professor Cramton, *supra* note 118, describes the essentials of trial-type procedure as the following:

> the special characteristics of the tribunal, which should be impartial and competent;
>
> the right of the parties to participate through special procedural devices, such as entitlement to notice, opportunity to present proofs and to cross-examine opposing witnesses, and the like;
>
> a special requirement that the decision be based on the record, consistent with accepted principle and rationally explained;
>
> and, finally, as a means of enforcing the other requirements, reviewability of decisions by an appellate court.

The paradigm for the use of the trial as a decision-making technique is the criminal or civil case in which the defendant is charged with violating pre-existing legal standards. Although the characteristics of such cases are familiar, several are worth brief mention. First, the procedure is adversary in nature, with the parties taking opposing positions on the issues. Second, the facts generally are within the control or knowledge of the parties and arise out of non recurring past events. Third, the issues are bipolar in that they call for a "yes" or "no" answer. Fourth, the court is impartial and is called upon to decide a limited number of questions that are usually within the common understanding of the average judge.

120. One of the major potential effects of low level radiation is that human genes may be damaged or altered. The risk of genetic damage lies behind most of the recommended standards for radiation exposure. There is a natural mutation rate among humans which is believed to be caused, at least in part, by natural background radiation. From this it is reasoned that any man-made sources of radiation which augment natural background radiation will similarly be responsible for a proportionate statistical increase in the number of genes affected. The risk of such an increase argues most strongly for a conservative radiation exposure practices.

FIRST ANNUAL REPORT OF THE COUNCIL ON ENVIRONMENTAL QUALITY 141 (1970).

121. The most persistent critics of the AEC regulations governing permissible releases during normal operation (10 C.F.R. § 20) have been Drs. A.R. Tamplin and J.W. Gofman; a collection of their studies, the "refutations" of these studies and their rebuttal are contained in *Hearings on Environmental Effects of Producing Electric Power Before the Joint Comm. on Atomic Energy*, 91st Cong., 2d Sess., pt. 2 (vol. II) (1970).

preclude a person or organization from filing a statement for the record.[128] however, such a limited appearance [illegible]

[illegible] permit one to intervene, [illegible] definition of the role of the intervenor becomes of crucial importance. It is fair to observe that most intervenors in AEC licensing proceedings view their role to be that of defendants in a law suit. Given that theory, the applicant for a license has the burden of proof on all issues, and intervenors may inquire freely into any aspect of the "applicant's case" by way of discovery or cross-examination. Within limits, this approach is unobjectionable; however, the types of questions involved in these proceedings—and in any power plant hearing on environmental questions—are such that the potential for inquiry is virtually limitless. Some method of control is therefore essential.

In assessing the proper role for the intervenor, it must be re-emphasized that a licensing proceeding has a different focus than that of the ordinary law suit. The Board is not interested in who "makes the best showing" but only, to the extent possible, in ascertaining the truth. In this sense, all issues are open whether or not contested by a party. On the other hand, it is less important that a person have his say than that he have something to say.

As a general rule, intervenors should be allowed to introduce affirmative evidence freely. While this is not logically necessary, the offering of affirmative testimony by intervenors has, to date, not posed any substantial threat of delay.[129] In most instances, intervenors have not attempted to make their case affirmatively. Rather, it is the intervenors' insistence upon unlimited examination into the case of other parties that presents the major threat to the proceedings. Serious consideration should be given to a requirement that cross-examination on certain issues not be permitted unless the opponent has made some type of threshold case.[130] Where the issue is technical, for example, the party might be required to have had a technical expert scrutinize the evidence offered by the opposing side.[131] In many instances something addi-

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ference adopted a number of recommendations on public participation. Recommendation B (e) would permit an agency to base its allowance of intervention on "the adequacy of representation provided by the existing parties to the proceeding."

128. The AEC practice, for example, has been to permit almost anyone to make a timely "limited appearance." 10 C.F.R. § 2.715 (1971). Professor Ernest Gellhorn (*supra*, note 126) discusses the possible types of limited participation. If an intervenor is agreeable, such a limited participation may be sensible, but, as Professor Gellhorn points out, the saving in time may be outweighed by the argument and the risk of reversal, where the intervenor is not agreeable.

129. I emphasize that it is the *threat* of delay that is cause for alarm. Although the time spent in the licensing process is significant, there is, at present, little evidence that public participation in the process has been a major factor contributing to delays.

130. Where the issue is local or particular to the case and turns on non-specialized information, there is probably no reason to impose a threshold. I think that this recommendation does not run counter to that of Professor Gellhorn for *full* participation as a party, note 126 *supra*. My proposal contemplates full participation to the extent that the party has something to contribute. *Cf.* Shapiro, *supra* note 52, at 755, 759.

131. For example, in the case of a reactor construction permit, an appropriate require-

towers to minimize thermal effects of power plants. We have had little experience with operating large nuclear plants. Obviously, the agency must be free to re-examine positions as new knowledge becomes available. Indeed, it may be under a duty to re-examine where persuasive evidence comes to light that the earlier decision was incorrect.[171]

3. *Problems of Definition and Notice.* Even if we assume that agencies will take advantage of the power to hold generic hearings and that the courts will give such agency decisions binding effect in other proceedings, some difficulties remain with regard to the widespread use of such proceedings. The first is a problem of identifying and defining the issues to be accorded generic treatment. Some of the issues appropriate for an across-the-board determination are obvious: air and water quality standards of general applicability, radiation protection standards, the demand level for electric power, and the preferred method of satisfying demand on a regional basis. Matters such as the criteria for site selection, however, pose difficulties. Second, from the point of view of fairness to potential intervenors as well as the effect on subsequent hearings, the issues to be given generic treatment must be defined precisely. Here, the ECCS experience may be misleading; the ECCS issue had developed in individual licensing proceedings and had defined itself as appropriate for generic treatment. Similarly, in other areas, particularly where technology is unsettled, it may be necessary to wait until individual cases define the questions. Finally, notice of the proceeding may be more of a problem with respect to environmental decisions than in other areas. Where a decision will have an impact on an industry, there is ordinarily little difficulty in notifying the people affected. Yet, notwithstanding the present high level of interest in environmental questions, it seems fair to assume that members of the public will not focus on environmental issues surrounding the construction of a nuclear power plant at least until plans to build the plant are announced. Even then, the public may not be fully aware that a generic proceeding in Washington is foreclosing from further inquiry many questions concerning the proposed plant. To a great extent, this situation cannot be helped. Effective public participation cannot mean that all decisions must wait until the average citizen is made aware of the problem; rather, special efforts must be made to give notice to environmental groups, state and local agencies, and individuals and groups in the areas likely to be affected. Furthermore, special attention should be paid to making available to these groups the opportunity to challenge the generic decisions.

171. In Environmental Defense Fund v. EPA, — F.2d — (D.C. Cir. May 5, 1972), the court said that re-examination of the agency's decision on receipt of a scientific advisory committee report would be "an implicit requirement of law, for the administrative process is a continuing one, and calls for continuing reexamination at significant junctures." *Id.*

Conclusion

It goes without saying that there are no easy answers to the topic that I discussed. The implications of NEPA are truly revolutionary. The requirement that we take environmental effects into account will have important consequences for most governmental and many private decisions, including a number not ordinarily thought of as affecting the environment. Welcome as it is, NEPA will take some adjusting to. Its application to the licensing agencies is greatly complicated by judicial interpretation. In particular, the *Calvert Cliffs* requirement of individualized balancing of environmental factors in each licensing proceeding is unworkable.

For power plant licensing, certain steps would seem to be necessary before the goals of NEPA can be realized. First, Congress must make some specific judgments as to energy policy, structure of the power supply industry, organization of the regulatory process, and, more fundamentally, national growth policy. It is irresponsible to place the burden of environmental decision-making on the agencies, with no guidance as to the proper balance of environmental and other values.

Even with more congressional guidance, the job of the agencies will be difficult. The issues are numerous, frequently value-laden, and often involve specialized knowledge not readily available to the public. Unless many of the issues are resolved by "rules" and standards, the individual proceedings will be unmanageable. To accommodate the need for generic decisions with the desired public participation, I have suggested the development of hybrid procedures to decide questions common to many proceedings. Precisely which questions will be amenable to generic treatment must await more experience, but questions of safety, technology, and maximum emission standards would certainly seem likely candidates. The tension between the general rule and the particular application is inherent in the process and will not disappear. We must, of course, try to decide each case fairly, taking account of the individualized circumstances, but we cannot re-examine all of our premises in every case.

How the procedural suggestions made in this article will fare in the courts is difficult to predict. In the last analysis, one can only hope that courts will heed Judge Friendly's irrefutable dictum that Congress must be assumed to have given the agencies power to administer.[172] Until recently one could be confident of that ultimate conclusion, but the current trend of court decisions, particularly in environmental matters, makes one wonder. Perhaps the present "malaise" in the courts is only temporary—a reflection of frustration that will disappear if the courts become convinced that agencies are making a good faith effort to solve difficult problems. Yet, there is strong

172. WEAN, Inc. v. United States, 396 F.2d 601, 617 (2d Cir.), *cert. denied*, 393 U.S. 834 (1968).

CERTIFICATE AND AUTHENTICATION

I certify that a copy of the foregoing Motion and supporting papers were mailed, postage prepaid and properly addressed, on January 7, 1973, to members of the Atomic Safety and Licensing Board, the Atomic Safety and Licensing Appeal Board, the AEC Commissioners, all counsel of record, and the secretary of the Atomic Energy Commission.

Myron M. Cherry

PLEASE TAKE NOTICE THAT EFFECTIVE THE MORNING OF JANUARY 15, 1973, SERVICE OF ALL PAPERS UPON COUNSEL FOR INTERVENORS SHOULD BE MADE AS FOLLOWS:

MYRON M. CHERRY
One IBM Plaza
Chicago Illinois 60611
(312) 222-9350