

# COLUMBIA LAW REVIEW

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Vol. 72

OCTOBER 1972

No. 6

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

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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involved, make it impracticable to keep up with developments in more than one agency; a survey of the field will be outdated before it is written.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.<sup>1</sup> 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

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\* 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.

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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;<sup>2</sup> (2) the Water Quality Improvement Act of 1970;<sup>3</sup> (3) Section 13 of the Rivers and Harbors Act of 1899<sup>4</sup> (which qualifies as a new act because of the interpretation that applies it to the release of pollutants into navigable streams);<sup>5</sup> and (4) the Clean Air Amendments of 1970.<sup>6</sup> As of August, 1972, there are pending in Congress a number of bills specifically dealing with power plant siting,<sup>7</sup> and two bills concerned with land-use planning,<sup>8</sup> which also may have a significant impact on power plant licensing.<sup>9</sup>

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2. 42 U.S.C. §§ 4321-49 (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. 7045, H.R. 1079, 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

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.<sup>10</sup> 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."<sup>11</sup> 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.<sup>12</sup>

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.

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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<sup>13</sup> 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.<sup>14</sup> Certainly, the provisions of Section 102(c) seem to have been drafted with operational programs in mind.

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].

Both the President<sup>15</sup> and the Council on Environmental Quality<sup>16</sup> (CEQ), however, seem to have construed NEPA as applying to licensing, and, in any event, both the AEC and the FPC have concluded that licensing of a substantial facility is a major Federal action within the meaning of the Act.<sup>17</sup>

The decision to apply NEPA to licensing action was probably inevitable. Certainly, on the merits, there can be no serious question that environmental effects should be examined before constructing nuclear or hydro-electric plants. However, that this examination is the result of an Act not specifically designed to deal with licensing has had unfortunate consequences. For example, the problem of "retroactive" application of NEPA is particularly acute in the case of AEC *operating* licenses. Because of the two stage licensing procedure of the AEC, reactors, fully built and ready to operate, are now being subjected to a cost-benefit analysis appropriate to the question whether they should have been constructed in the first place. This is not to suggest that we should be powerless to correct errors of the past, but only to note that to require completed plants to lie idle—at considerable expense—while a NEPA statement is prepared is not a sound approach to the problem.

A second and, in the long run, more serious consequence of the application of NEPA to licensing flows from the nature of the factors that agencies are required to consider in their determinations—"the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity" as well as "any irreversible and irretrievable commitments of resources which would be involved." These provisions, which are undoubtedly appropriate to operations, seem to require the licensing authority in each case to examine factors not amenable to resolution in an adjudicatory proceeding.<sup>18</sup>

### C. The "Calvert Cliffs" Decision

The AEC's initial response to NEPA was incorporated as a new Appendix D to Part 50 of its Regulations; Appendix D underwent a number of revisions. The first formulation, issued on March 31, 1970,<sup>19</sup> and concededly intended only for interim guidance, had little effect on the licensing process.

15. Exec. Order No. 11,514, 3 C.F.R. 104 (1970), 42 U.S.C. § 4321 (1970), directs agencies (§ 2(d)) to review their "administrative regulations, policies, and procedures, including those relating to loans, grants, contracts, leases, licenses, or permits, in order to identify any deficiencies or inconsistencies . . . with the purposes . . . of the Act."

16. The CEQ's *Interim Guidelines*, published April 30, 1970, define "action [requiring] the preparation of an environmental statement" to include projects involving federal licenses. 35 Fed. Reg. 7390, 7391 (1970).

17. At present the AEC environmental regulations apply to power reactors, testing facilities, fuel reprocessing plants, and other facilities whose construction or operation may be determined by the Commission to have a significant impact on the environment. 36 Fed. Reg. 18071 (1971). The FPC's *NEPA Regulations* cover licensing or relicensing of major hydroelectric projects (those in excess of 2000 horsepower) as well as various licenses under the Natural Gas Act. 18 C.F.R. §§ 2.81, 2.82 (1971).

18. See part II and D, *infra*.

19. 35 Fed. Reg. 5463 (1970).

The AEC was to forward license applications (both construction and operating) to other government agencies for comment on the environmental impact, unavoidable adverse effects, alternatives, and irreversible commitments of resources inherent in the proposed action.<sup>20</sup> After obtaining their comments, the staff would prepare a Detailed Environmental Statement. According to the regulation, the environmental impact of the proposed installation would not be an issue in the AEC proceeding, but the licenses, if granted, would require the applicant to conform with applicable standards for protection of the environment. On June 1, 1970, the AEC revised its pending Appendix D.<sup>21</sup> The new regulation imposed additional duties on the applicant in preparing environmental information, but, as before, it precluded the raising of environmental issues in the licensing proceeding.

On December 3, 1970, the AEC published its "final" revision of Appendix D.<sup>22</sup> For the first time, the regulation provided an opportunity to contest environmental issues (except water quality) in the licensing process; however, as will be discussed below, the contest would be more apparent than real as to matters which were the subject of standards promulgated by other agencies. Moreover, a full NEPA review would not be conducted where the notice of hearing on the construction permit application was issued before March 4, 1971.

This was the situation when, on July 23, 1971, the Court of Appeals for the District of Columbia held in *Calvert Cliffs Coordinating Committee, Inc. v. United States Atomic Energy Commission*<sup>23</sup> that the AEC regulations did not comply with NEPA and directed substantial revision of those regulations. Whether the interpretation of NEPA posited in *Calvert Cliffs* is correct appears moot. The AEC has chosen not to challenge the decision,<sup>24</sup> and, at least for the present, we must deal with NEPA as there interpreted. The opinion in *Calvert Cliffs* is characterized by what one can fairly term hostility to the AEC.<sup>25</sup> No doubt, there was reason for judicial frustration; the AEC response to NEPA had been slow, and at least in the early stages its acceptance of NEPA had been something less than whole-hearted. Nevertheless, one would have hoped for more sympathy with the serious administrative problems

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20. *Id.* The language of the regulation followed that of 42 U.S.C. § 4332(2)(c) (1970).

21. 35 Fed. Reg. 8594 (1970). This revision, in view of the enactment of WQIA, excluded water quality from consideration except as to the existence of an appropriate certificate.

22. 35 Fed. Reg. 18469 (1970).

23. 449 F.2d 1109 (D.C. Cir. 1971).

24. The first AEC response stated that AEC was "considering the possibility of requesting further appellate review or clarification of the decision." AEC News Release No. 0-134, Aug. 4, 1971. However, shortly after the new chairman took office, the AEC announced it would not appeal or ask for clarification. AEC News Release No. 0-147, Aug. 26, 1971.

25. The court at various times described the Commission's approach as "crabbed," "shocking," "ludicrous," "strange indeed," "total abdication," and "pointless."

faced by the agency in trying, however belatedly, to deal with complex new duties. Whether the hostility caused the court to overstate its views as to NEPA can only be a matter of speculation. Caution suggests that one should read the decision as written.<sup>26</sup>

1. *Timing.* As previously noted, the AEC in its implementing regulation had made the scope of environmental review depend on whether the notice of hearing for a construction permit was issued before March 4, 1971. *Calvert Cliffs* wiped out this distinction based on time of the notice of hearing and subjected to NEPA requirements all reactor applications regardless of their stage in the regulatory process. Furthermore, the court required an AEC examination of the environmental repercussions of all reactors *licensed* after January 1, 1970, the effective date of NEPA.

The impact of this part of *Calvert Cliffs* is immediate and far-reaching; the decision affects some 93 reactors proposed, under construction, ready to operate, or in operation, representing over 80 million kilowatts of electric generating capacity.<sup>27</sup> Five of the affected plants had already received operating licenses. Seven were participating in operating license hearings or awaiting issuance of an operating license and nine were nearing completion of the AEC review prior to an operating license hearing.<sup>28</sup> The cost, in monetary terms, of postponing the operation of completed plants is high; it is estimated that the cost of replacing the lost capacity of the Palisades plant in Michigan is \$1 million per month,<sup>29</sup> while that of New York's Indian Point 2 plant is put at \$3 million per month.<sup>30</sup> In non-monetary terms the costs may be higher. According to the FPC, "additional delays of new power plants which would be physically ready for service will almost invariably have serious consequences adverse to the public interest including detriment to the environment."<sup>31</sup> The AEC has sought to minimize the problem by authorizing interim operation at less than full power.<sup>32</sup> Under recently enacted interim legislation, operating

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26. The Act has received a remarkably "liberal" construction by the courts. *See, e.g.,* *Natural Resources Defense Council v. Morton*, 458 F.2d 827 (D.C. Cir. 1972), discussed at note 59 *infra* and accompanying text; *Greene County Planning Bd. v. FPC*, 455 F.2d 412 (2d Cir. 1972) (the court required the FPC to prepare its own draft statement rather than rely on that prepared by the applicant); *National Helium Corp. v. Morton*, 455 F.2d 650 (10th Cir. 1971) (the Secretary of the Interior must prepare an environmental statement before cancelling helium purchase contracts); *New York City v. United States*, 338 F. Supp. 792 (E.D.N.Y. 1972) (three-judge court) (the Interstate Commerce Commission must prepare an environmental statement on the request of the bankrupt Bush Terminal Railroad to abandon certain operations). For a review of court decisions on NEPA through mid-1972, *see* CEO, THIRD REPORT, *supra* note 14, ch. 7.

27. AEC News Release No. 0-134, *supra* note 24.

28. The hearing at the operating license stage is not mandatory unless requested by a party.

29. 18 NUCLEAR IND. 13 (March, 1971).

30. 18 NUCLEAR IND. 26 (Sept., 1971).

31. 18 NUCLEAR IND. 20 (Sept., 1971). For an estimate of the importance of certain units awaiting operating licenses, *see* 118 CONG. REC. H4039-40 (daily ed. May 3, 1972).

32. For a time, this effort was frustrated by the decision in *Izaak Walton League v. Schlesinger*, 337 F. Supp. 947 (D.D.C. 1971); however, the case has been settled and

licenses may be issued to completed plants in certain circumstances before the final NEPA review.<sup>33</sup>

Important as these consequences are, however, they are short-run. 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,<sup>34</sup> 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.<sup>35</sup>

Although any party could raise environmental issues in a proceeding,<sup>36</sup> a certification of compliance by an authorized agency was to be dispositive of the issue.<sup>37</sup> 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).<sup>38</sup>

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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 the NEPA environmental review was finished. (See the statements of Commissioner Ramey 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 (Nov., 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).

The court rejected this approach completely. With respect to water quality, it stated:

Water quality certifications essentially establish a *minimum condition* for the granting of a license. But they need not end the matter. The Commission can then go on to perform the very different operation of balancing the overall benefits and costs of a particular proposed project, and consider alterations (above and beyond the applicable water quality standards) which would further reduce environmental damage. Because the Commission *can* still conduct the NEPA balancing analysis, consistent with WQIA, Section 104 does not exempt it from doing so. And it, therefore, *must* conduct the obligatory analysis under the prescribed procedures.<sup>39</sup>

As to matters other than water quality, the court said:

Certification by another agency that its own environmental standards are satisfied involves an entirely different kind of judgment. Such agencies, without overall responsibility for the particular federal action in question, attend only to one aspect of the problem: the magnitude of certain environmental costs. They simply determine whether those costs exceed an allowable amount. Their certification does not mean that they found no environmental damage whatever. In fact, there may be significant environmental damage (*e.g.*, water pollution), but not quite enough to violate applicable standards. Certifying agencies do not attempt to weigh that damage against the opposing benefits. Thus the balancing analysis remains to be done. It may be that the environmental costs, though passing prescribed standards, are nonetheless great enough to outweigh the particular economic and technical benefits involved in the planned action. The only agency in a position to make such a judgment is the agency with overall responsibility for the proposed federal action—the agency to which NEPA is specifically directed.<sup>40</sup>

With respect to water quality, the effect of *Calvert Cliffs* may be short-lived. Both the Senate and the House have passed bills containing a provision that would seem to limit, if not overrule, this aspect of the case.<sup>41</sup> But the basic approach of the case remains unaffected; the AEC must make an independent judgment and may not rely on the findings of other agencies.

The spirit of *Calvert Cliffs* seems even to preclude reliance by the AEC

39. 449 F.2d at 1125. As a matter of statutory interpretation, this conclusion seems clearly wrong. When the NEPA bill was about to go to conference and the WQIA was pending in the Senate, the NEPA sponsor, Sen. Jackson, and the WQIA sponsor, Sen. Muskie, took the floor to make clear that a detailed environmental statement would not have to cover "water quality if the State or other appropriate agency has made a certification pursuant to [WQIA]." 115 Cong. Rec. 29053 (1969) (remarks of Sen. Jackson). While these comments presented some difficulty for the court, it took refuge in the plain meaning rule.

40. 449 F.2d at 1123.

41. S. 2770, 92d Cong., 1st Sess. (1971) and H.R. 11896, 92d Cong., 2d Sess. (1972). The language of the provision (§ 510(d) of the Senate bill and § 511(d) of the House bill) would seem to overrule *Calvert Cliffs*: "The requirements of [NEPA] as to water quality considerations shall be deemed to be satisfied . . . by certification . . . with respect to any federal license. . . ." However, some doubt as to the import of the language is raised by the remarks of the sponsor, Sen. Baker. 117 Cong. Rec. 17456 (1971).

on its *own* regulations as establishing permissible limits of radiation exposure for all reactors. Under existing practice, the AEC tests the safety of a reactor by reference to compliance with its regulations—Part 20<sup>42</sup> dealing with permissible releases in regular operation and Part 100<sup>43</sup> 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.<sup>44</sup> 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.<sup>45</sup>

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”<sup>46</sup> 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.”<sup>47</sup> 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.<sup>48</sup> The wisdom of the court’s application of this requirement to environmental issues is at least questionable. This is not the occasion to rehash the long-standing debate over the AEC licensing process; Board review of uncontested issues has been attacked as wasteful, repetitive and worse.<sup>49</sup> 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 & CONTEMP. 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. 633 (1968).

not be to duplicate staff review.<sup>50</sup> 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,<sup>51</sup> 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.<sup>52</sup>

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

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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 order 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 463 (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 major 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.<sup>53</sup>

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, Michigan construction permit proceeding.<sup>54</sup> 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.<sup>55</sup>

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53. H.A. SIMON, *ADMINISTRATIVE BEHAVIOR* 13 (1957). Although the author was 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 the 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 on

(2) The need for the electricity and alternative proposals to providing 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.<sup>56</sup>

(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.<sup>57</sup>

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.<sup>58</sup> 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*.<sup>59</sup> 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

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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).

technical benefits of planned action must be assessed and then weighed against the environmental costs; alternatives must be considered which would affect the balance of values. . . . The point of the individualized balancing analysis is to ensure that, with possible alterations, the *optimally beneficial* action is finally taken.<sup>60</sup>

How does one decide what is "the optimally beneficial action"? The decision to build a nuclear power plant involves a complicated series of value judgments by many different groups. Which of these judgments is now to be the subject of the litigated proceeding? If one accepts the formulation of environmentalists and, so far as one can determine, the court in *Calvert Cliffs*, any of these judgments may be the subject of attack.

The interpretation of NEPA accepted in *Calvert Cliffs* would, I suggest, put the Boards in an impossible position. In every litigated case there are, conceivably, countless issues. Most of these are resolved by resort to standards, *e.g.*, rules of law either procedural or substantive; other issues are removed by stipulation; only a few are tried. But if one is to take literally the opinion in *Calvert Cliffs*, no standards are binding upon the person who must determine the overall impact of the plant. Nor does stipulation seem a likely source of relief.<sup>61</sup> There is fundamental disagreement between environmentalists and power advocates as to what is desirable.<sup>62</sup> Furthermore, the difficulty posed by the sheer number of issues is complicated by the nature of the required inquiry. Were this an ordinary lawsuit, one would not be concerned with whether either party had established a particular proposition by an objective standard, but only with measuring the quantity of proof introduced by both sides and deciding by reference to an assigned burden of proof. But the court in *Calvert Cliffs* has quite specifically stated that the Board must make an independent determination with respect to environmental factors, even where the issues are uncontested. Presumably that determination must go beyond the proof adduced by the parties.

But, one may ask whether this really will prove to be an overwhelming task for the hearing Board. The Board will do its best and its decision will be, practically, irreversible. The *Calvert Cliffs* opinion, however, while conceding that the Board's substantive decision can be reversed only if it is arbitrary or "clearly gave insufficient weight to environmental values,"<sup>63</sup> stressed that on a procedural level NEPA established a "strict standard of compliance."<sup>64</sup>

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60. 449 F.2d at 1123 (emphasis added).

61. A recent suggestion of the AEC General Counsel for more stipulation elicited little enthusiasm from utility or environmental lawyers. See, *e.g.*, Address by Gerald Charnoff, Settlement of Contested Cases, ALI-ABA Symposium on Reactor Licensing, Washington, D.C., Nov. 12, 1971.

62. There is a tendency among many people to discount the fundamental nature of the disagreement. It is true that relatively few environmentalists seek to return the country to a state of "forever wild," but there is a widespread sentiment that the growth rate of power production must be slowed or even stopped.

63. 449 F.2d at 1115.

64. *Id.* at 1128.

According to the court, "if the decision was reached procedurally without individualized consideration and balancing of environmental factors—conducted fully and in good faith—it is the responsibility of the courts to reverse."<sup>65</sup> 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*.<sup>66</sup> 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.<sup>67</sup> 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.<sup>68</sup> 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;"<sup>69</sup> 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. . . ."<sup>70</sup> 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.'*"<sup>71</sup> 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 486.

70. *Id.* at 488.

71. *Id.* at 487 (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."<sup>72</sup> 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."<sup>73</sup> This rejection apparently stemmed from the belief that the FPC does not possess "any particular . . . expertise in geology."<sup>74</sup> 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."<sup>75</sup> 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."<sup>76</sup> 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.<sup>77</sup> 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.<sup>78</sup> Obviously, there is room for disagreement about the degree

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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).

of remoteness of a major accident. Literally applied to radiological hazards, Judge Oakes' approach would mean that the Board's judgment on any nuclear power plant would be subject to reversal based on a federal judge's own determination of the permissible risk. Although the present AEC practice is hardly perfect,<sup>79</sup> it does make possible a uniform approach to siting problems which would be destroyed if a judge were free to disregard established standards.

Similar problems inhere in Judge Oakes' approach to the question of alternatives. As previously noted, he criticized the FPC for considering only alternative sites within one hundred miles of New York City.<sup>80</sup> But where should a Board stop? Could it be certain that 200 or 1,000 miles would be enough? And if extraterritorial sources are available, must a Board consider the reliability of the alternative in the event of war or international disagreement? How does the decision-maker know when he has given a possible alternative the "full and good faith" treatment that *Calvert Cliffs* requires?

I have dealt with the dissent in *Scenic Hudson II* at some length not to belabor Judge Oakes but to give concrete form to the booby trap which I see in the *Calvert Cliffs* decision. The possible alternatives to the construction of a proposed plant, "including not building any plant," require consideration of a virtually unlimited number of highly speculative factors. When does the Board know it has given "full and good faith" treatment to all points? There is general, if not unanimous, agreement that such possible technologies as fusion or solar power are, at present, too speculative to merit attention;<sup>81</sup> yet elimination of these issues still leaves many others. Judge Oakes found fault with the FPC's consideration of aesthetics, alternatives, air pollution, and the risk to the aqueduct. Using the same approach, the disagreement could have involved fisheries, underground transmission, or something else.

One final problem with the procedure mandated by *Calvert Cliffs* should be emphasized: although the agency must consider alternatives, it does not have power to bring about any particular result. Assuming, for example, that the agency makes the elaborate cost-benefit analysis required and decides that another alternative is better, the agency can (indeed it would seem that it *must*) deny the application, but in many cases, the denial will not lead to the

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79. The practice is to postulate an accident of specified intensity and then, on the basis of arbitrary factors such as fission product release and meteorological conditions, to measure the exposure of persons outside the required exclusion area. 10 C.F.R. § 100 (1971).

80. The basis of his objection seemed to have been founded on the economics of high voltage transmission. "In this day of high voltage transmission, what is so magic about one hundred miles?" 453 F.2d at 493.

81. See *Natural Resources Defense Council v. Morton*, 458 F.2d 827 (D.C. Cir. 1972). An odd phenomenon of environmental disputes is that many people who vigorously assert that rampant technology is the root of the evil simultaneously assert that there is an easy technological solution available but being suppressed. It is to be hoped that the courts will give considerable deference to agency exclusion of remote "alternatives" and not require a trial of the issue of their availability.

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*.<sup>82</sup> 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.<sup>83</sup>

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 pre-fabricated decision with, at any rate, a miniskirt of democratic propriety.

*Id.* at 96.

## II. A STRUCTURE FOR ENVIRONMENTAL DECISION-MAKING

It is now clear that, under NEPA, environmental effects must be considered before the licensing of nuclear plants by the AEC or of hydro plants by the FPC.<sup>84</sup> This requirement is sound and, absent a panic over current delays,<sup>85</sup> unlikely to be dispensed with. The situation as to fossil fuel plants is less clear;<sup>86</sup> however, it seems both inevitable and desirable that fossil fuel plants be subjected to an environmental review comparable to that for nuclear and hydro plants.<sup>87</sup> If the conclusion of Part I—that the environmental review mandated by NEPA as interpreted in *Calvert Cliffs* is not viable—is correct, we must either revise the system or face the prospect of not building any substantial power plants, even where “needed.” This section is devoted to suggestions for reform in the decision-making process to ensure that environmental questions are approached in a more sensible fashion.

### A. *The Timing of the Environmental Decision*

It should hardly need emphasis that fundamental environmental questions such as the site of a power plant must be decided at an early stage in the process. One need only look at the AEC experience for proof that to delay the environmental inquiry until the plants are fully built is not the optimum solution. Early site consideration is one of the major aspects of pending power plant

84. So far as relevant to this article, FPC jurisdiction is limited to hydro and pumped storage facilities. There are very few new hydro sites left in this country; however, pumped storage facilities are of increasing importance and, by their nature, tend to be proposed at locations of unusual scenic beauty.

85. PUB. L. No. 92-307, enacted June 2, 1972, gives the AEC authority to issue temporary operating licenses where the facility is needed to “assure the adequacy and reliability of the power supply. . . .” The authorization expires on October 30, 1973. Whether the Act will take care of the emergency remains to be seen. On the one hand, the authorization to use “expedited procedures” may avoid protracted hearing delays. However, the concern expressed in the Report (S. Rep. No. 787, 92d Cong., 2d Sess. (1972)) with preserving procedural rights (see particularly the supplemental views of Sen. Baker) create some doubt about how expeditious the procedures may be. The private opinion of some observers is that the cure may be worse than the disease.

86. Ordinarily, such a plant does not require a federal license and the only avenue to subject it to NEPA has been through the refuse permit program of the Corps of Engineers, under Section 13 of the Rivers and Harbors Act of 1899, 33 U.S.C. § 407 (1970). The Corps has taken the view that it would only require NEPA environmental statements where proposed discharges from the plant would have a “significant environmental impact unrelated to water quality.” 36 C.F.R. § 209.131(n)(2) (1970). Moreover, the statement need only concern itself with the effect of the discharge and not the impact of the total project. A recent decision of the District Court for the District of Columbia, relying heavily on *Calvert Cliffs*, has directed the Corps to prepare environmental statements in all cases; however, the statement apparently need only cover the impact of the discharge. *Kalur v. Resor*, 335 F. Supp. 1 (D.D.C. 1971). The decision in that case is now on appeal, and in the interim, a moratorium has been declared on issuance of permits, although the Corps will continue to receive and evaluate applications. 2 ENVIRON. REP.—CURRENT DEVELOPMENTS 1088 (BNA 1972).

87. It would be most unfortunate if the disparate requirements of licensing were to skew decisions in favor of a particular form of energy. There have already been instances in which the current delays in AEC licensing have led utilities to plan fossil fuel plants to supply power pending completion of the nuclear plants. Since the environmental effects vary with the fuel used, the procedures cannot be the same, but there can be no justification for a system in which only one type must pass environmental tests.

siting bills,<sup>88</sup> and was the major objective of an AEC-sponsored bill in 1971.<sup>89</sup> It should not be a serious problem for proponents of hydro or fossil fuel plants; in contrast, nuclear power plants may present a problem because nuclear technology has not yet reached the point of standardized design. Intervenor at hearings on construction permits<sup>90</sup> frequently have had to shadowbox with incomplete designs.<sup>91</sup> This problem should be of diminishing importance for light water reactors, which are in most respects sufficiently standard to enable potential opponents to anticipate the effect on the environment of a proposed plant.<sup>92</sup> The point of developing a standardized design for the next generation of breeder reactors, however, is a long way off, and although many questions can be resolved as the breeder program develops, inquiry into environmental effects cannot be foreclosed before the design is final.<sup>93</sup>

Even where design is standard, one other problem posed by early site legislation must be considered, *i.e.*, that most people are not sufficiently aroused

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88. For example, both H.R. 5277 and H.R. 11066, 92d Cong., 1st Sess. (1971), require utilities to file long-range plans and disclose specific site plans two years before construction is scheduled. Hearings on proposed sites are authorized five years before scheduled construction.

89. Introduced as H.R. 9286, 92d Cong., 1st Sess. (1971), and S. 2152, 92d Cong., 1st Sess. (1971), the bill would have required a hearing on an application for a site authorization before any substantial construction activity. The hearing at the construction permit stage would be held only if requested and no hearing would be held at the operating license stage.

90. For nuclear plants, the grant of a hearing at the construction permit stage is probably too late, since millions of dollars will have been spent on site acquisition, design and processing the application.

91. The application for a construction permit is not required to show a final design but only the type of reactor proposed to be built, the chief safety characteristics of the reactor, and the features of the proposed site pertinent to safety. 10 C.F.R. §§ 50.33-34 (1971). A construction permit may be granted, if, *inter alia*, it is found that there is "reasonable assurance that . . . the proposed facility can be constructed and operated at the proposed location without undue risk to the health and safety of the public." 10 C.F.R. § 50.35 (a) (4) (ii) (1971).

92. For a general background on the technical terms used in this article, see R. LYERLY & W. MITCHELL, III, *NUCLEAR POWER PLANTS* (rev. ed. 1969) and J. HOGERTON, *NUCLEAR REACTORS* (rev. ed. 1970).

93. Assessments of developing technology pose particularly difficult problems under NEPA. In a recent statement at the Joint Hearing of the Senate Committees on Public Works and Interior and Insular Affairs concerning the administration of the National Environmental Policy Act, AEC Chairman Schlesinger observed:

Another area of present uncertainty involves the rationalization of the 102 statement and agency actions which essentially constitute or involve Research and Development. R&D by its very nature implies that there are uncertainties and unknowns. Continuing efforts and projects are designed to clarify and to provide answers for these uncertainties and unknowns. In such a situation, the procedural exigencies of the 102 environmental statement, together with the deceptively simple appearing five-point requirement for the contents of the statement, allow the implication—readily picked up by zealous litigants, not to mention ordinary citizens and other Federal agencies—that the R&D project should not begin until the statement can be made to contain the very answers which the R&D effort is seeking. While some of these assertions are freighted in efforts to halt continuation of a whole area of technological development, the fact remains that there is no present guidance to shape the scope of the statement and the degree of precision and future reach required in areas of rapidly developing technology. The present controversy (including a pending lawsuit) surrounding the proper scope of a NEPA impact statement for the LMFBR demonstration plant is illustrative of this problem.

AEC News Release No. S-2-72, March 3, 1972.

to pay serious attention to proposed installations until the plants are relatively close to construction. A variant of this problem is created by rapid changes in the population of a given area. The approval of a site at a time when the surrounding area is sparsely populated may not adequately take account of subsequent (though pre-construction) population growth. Both of these phenomena at least suggest that site hearings must be structured to ensure that adequate notice of the proposed installation be given to all who might be interested and that there should be a mechanism in the early site hearing for representation of all foreseeable interests.<sup>94</sup> The question of early site determination, of course, goes beyond license approval and extends into the area of site acquisition. Ultimately, a mechanism must be established for early identification of available sites in a particular locality, *i.e.*, 10 or 20 years before the site is to be utilized, and for the acquisition of available sites by the local authorities or the public utility.<sup>95</sup>

### B. *Who Should Make the Environmental Decision*

The question of who should be responsible for the decision on environmental matters is extremely complex. The proposal often espoused is "one-stop" licensing. The reason for its popularity is not difficult to discern. One witness before the Joint Committee on Atomic Energy has testified that permits were needed from 10 different state agencies and 5 federal agencies to build and operate a nuclear power plant in California.<sup>96</sup> Although the list will vary from state to state, it is not insubstantial anywhere. But the goal of one-stop licensing is probably unrealizable; environmental questions involve every aspect of our lives,<sup>97</sup> and input on environmental decisions must come from a number of different sources. Moreover, the impact of the proposed plant may be local, state-wide, regional, national or, perhaps, international. The question whether the major decision-making authority ought to be a state, regional or federal one is highly political and beyond the scope of this paper. The choice of appropriate decision-making unit is apt to have a significant if somewhat unpredictable out-

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94. Cf. *Recommendation No. 5, Representation of the Poor in Agency Rulemaking of Direct Consequence to Them*, 1 RECOMMENDATIONS AND REPORTS OF THE ADMINISTRATIVE CONFERENCE OF THE UNITED STATES 13 (1970).

95. A program for long-range site acquisition in New York is described in the Ninth Annual Report of the New York State Atomic and Space Development Authority at 7-14 (1971).

96. *Hearings on AEC Licensing Procedure and Related Legislation, Before the Subcomm. on Legislation of the Joint Comm. on Atomic Energy*, 92d Cong., 1st Sess., pt. 1, at 267 (1971). In the case of a fossil fuel plant in New York City at least 27 approvals are required from City, State and Federal agencies. Luce, *Power for Tomorrow: The Siting Dilemma*, 25 RECORD OF N.Y.C.B.A. 13, 19 (1970). Many of these approvals are, however, pro forma. For an overview of the structure of the decision-making process, see *Electricity and the Environment*, *supra* note 7, at ch. IV.

97. A quick survey of the ENVIRONMENTAL LAW REPORTER discloses lawsuits involving, among other issues, air and water pollution of various kinds, noise, aesthetics, flooding, noxious odors, fishing rights, land reclamation, recreation, forestry, pier construction, motor vehicle licensing, food poisoning, highway construction, pesticides, detergents and crocodile skins.

come on a particular plant. Experience in the case of nuclear plants suggests that residents of the immediate locality are likely to support the construction of the plant once they are persuaded that they can live with normal releases of radiation. Outside the immediate area, however, there is apt to be opposition from those concerned with the overall environmental effects, and for whom there are no immediate compensating benefits such as jobs or a higher tax base.<sup>98</sup>

Whatever the choice, major emphasis should be on ensuring that particular environmental questions are not subject to scrutiny in more than one forum.<sup>99</sup> Concurrent jurisdiction over environmental effects is a mess.<sup>100</sup> Duplication is most likely to occur where a federal and state agency have similar responsibilities, but it may also be present among agencies at the same level.<sup>101</sup> Questions of preemption and allocation of function must be firmly decided by the legislatures or the process could become interminable.

### C. *The Need for Criteria*

If the adjudicatory process is to be viable, an effort must be made to establish criteria to guide the adjudicators. Whatever the attraction in theory of leaving "the ultimate balancing" to a single adjudicatory body, it is simply not feasible. Some of the decisions that must be made as part of the final balance are clearly appropriate for legislative action.

An example of the need for legislative guidance is provided by the national economic growth policy.<sup>102</sup> Are we to continue to have as an overall goal the

98. For a discussion of the reactions to one site, see Note, *The Legal Setting of Nuclear Powerplant Siting Decisions: A New York State Controversy*, 57 CORNELL L. REV. 80, 83-84 (1971). We can expect that, with increasing frequency, residents of remote areas (e.g., Vermont, New Mexico) will fight against building local plants to provide power to distant cities.

99. As to radiological questions, the Supreme Court has recently held that the Atomic Energy Act preempted the field of nuclear power (a conclusion which in my judgment was clearly correct). *Northern States Power Co. v. Minnesota*, 405 U.S. 1035 (1972). However, agitation has now begun to have Congress disclaim the preemption.

Sen. Schweiker, of Pennsylvania, sought an amendment to S. 3543, 92d Cong., 2d Sess. (1972) (amendment of the Atomic Energy Act of 1954 to authorize the Commission to issue temporary operating licenses) which would permit individual states to set their own standards for the regulation of radioactive discharges in the environment from nuclear powerplants, as long as the state's standards are stricter than the federal standards. This amendment was rejected. 118 CONG. REC. 8054 (daily ed. May 17, 1972).

100. In the case of the Storm King Project, the conservationists, in addition to seeking reversal of *Scenic Hudson II*, have persuaded a state court to set aside the water quality certification by the New York State Department of Environmental Conservation. *Scenic Hudson Preservation Conference v. State Comm'r of Environmental Conservation* (Sup. Ct., Albany County Special Term, Feb. 11, 1972). Their petition specifically challenged the effect of the project on the scenic and recreational uses of the water and the Catskill Aqueduct—questions extensively litigated in the federal proceeding. The opinion stated that "[i]t is to this Court's mind of no moment that some of these questions may well have been considered at the federal licensing level." *Id.*

101. Discharges from a nuclear plant, like those from a fossil fuel plant, require a permit from the Corps of Engineers (see note 86 *supra*). Under the decision of *Kalur v. Resor*, 335 F. Supp. 1 (D.D.C. 1971), a nuclear plant would seem to be subject to two NEPA reviews, one by the AEC and one by the Corps of Engineers.

102. "The basic question of whether electricity use is growing too rapidly cannot be

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.<sup>103</sup> 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<sup>104</sup> 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.<sup>105</sup>

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.<sup>106</sup> 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*, 72d Cong., 1st Sess. (1971).

resource, but we are not about to stop using fuel entirely. Even if it were possible to obtain more reliable estimates of the available resources and of the cost of extracting presently undeveloped mineral deposits, difficult questions of national policy would still remain. To what extent should the United States rely on outside sources of fuel? If, for example, it could be established that there are sufficient oil supplies in the rest of the world to carry us to the point where fusion power is technologically feasible, a "reasonable alternative" might be to forego the anticipated difficulties of breeder reactors and the associated problems of plutonium management. But such a decision would leave the country at the mercy of outside sources with some very sticky military and economic consequences in the event of a wrong guess. No doubt the judgment could and should be made,<sup>107</sup> but surely it is a national judgment—not one to be made by the AEC in connection with every license application for a nuclear reactor.

A third kind of question which must be resolved on a national, and probably legislative, level is the structure of the electric utility industry. It may be that New York's Consolidated Edison Company ought to satisfy its needs for increased power by purchase, rather than by construction of power plants in metropolitan New York City. But given the present structure, is that a reasonable alternative? Rural localities increasingly resist the construction of plants for the purpose of supplying urban areas. To require each adjudicating agency to consider alternatives that the agency has no power to implement can only contribute to negative decisions.<sup>108</sup> If production facilities are to be located in the most advantageous place environmentally, some agency must be given the power to mandate how the system of supply and interconnection is to work.

It should be clear from what has been said that Congress must undertake the job of giving specificity to the vague mandate of NEPA. Legislatures unwilling or unable "to look a problem squarely in the face"<sup>109</sup> are not a new

107. Among recent pleas for developing a national energy policy is that of Judge Irving Kaufman:

I suggest that a major share of the blame for the unnecessary delays and ineffectual public participation in power planning in the United States may be laid at the doorstep of fragmented government regulation of power development. We sorely lack a federal agency—with sufficient authority, power, and purse to choose among the infinite patterns of potential development—responsible for planning and controlling the growth and dispersal of electric generating capacity over a realistically extensive span of space and time.

Kaufman, *Power for the People—and by the People: Utilities, The Environment and the Public Interest*, 46 N.Y.U. L. REV. 867, 872-73 (1971).

108. This conclusion is not, I believe, inconsistent with the conclusion of *Natural Resources Defense Council v. Morton*, 458 F.2d 827 (D.C. Cir. 1972), that the Secretary of the Interior may not limit his consideration of alternatives to those he or his agency can adopt. The decision involved an operational program, the scope of which was, as the court specifically recognized, "far broader than that of other proposed Federal actions . . . such as a single canal or dam." *Id.* at 835. The court stressed that the Environmental Statement was to be sent to the President and Congress, both of whom did have power to relax import quotas. *Id.* While the decision may have troublesome implications even within the context of major operational programs, the appropriate ground rules for such cases are quite different from those of individual licenses.

109. FRIENDLY, *THE FEDERAL ADMINISTRATIVE AGENCIES* 28 (1962).

phenomenon; but absence of guidance promises to be especially troublesome in this instance. If NEPA were being construed narrowly to require only that agencies *embarking 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;<sup>110</sup> 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 intends, then Congress must face squarely the implications of its action.

While some of the basic questions can and must be decided 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.<sup>111</sup> 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.<sup>112</sup> The same seems

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 essential 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 143, 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

clearly true of the decision to go forward with the breeder reactor program and to take on the enhanced problems of security and health which may be associated with it.<sup>113</sup> These decisions seem to be precisely the kinds of major operational programs for which the NEPA review was designed. But isn't one such review enough? Do we need, can we afford, one hundred?

At this point it should be emphasized that, since licensing is involved, it is assumed that the decision-making process will include a hearing. NEPA does not mandate a hearing; and, although for reasons discussed below I think the agencies should consider ways to improve public participation in all decisions, it would be unwise to force decisions on such operational programs as the waste repository or the breeder reactor into the traditional hearing format. As to these programs, the agencies must be free to proceed, provided that they *consider* the environmental impact. Both the waste storage and breeder projects, however, do involve questions which, because of the requirement of balancing, become "issues" in the licensing proceeding, *e.g.*, whether the wastes from the projected facility can be safely disposed of, and what are the environmental costs of fuel production. Each question may involve a number of complex technological issues; the group of people knowledgeable about the technology is small, and, therefore, the testimony adduced in separate hearings is likely to be substantially repetitive. It is difficult in these circumstances to justify requiring the same complex, time-consuming inquiry in every case. Moreover, to the extent that value judgments are involved, there would seem to be a strong argument for the proposition that they should be given uniform effect.

A similar presumption in favor of generic proceedings should attach to many other environmental questions, particularly air and water quality standards. Indeed, it is hard to see how an effective environmental program can be maintained without standards of general applicability in these areas. The major objection on the part of environmental groups to the AEC approach to water quality determinations is that reliance on general standards makes

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was made for the appointment by the President of a nine-member advisory council to study the plans for a national radioactive waste repository in Lyons, Kansas. Act of August 11, 1971, Pub. L. No. 92-84, 85 Stat. 304 (1971). The Act provides that no high level radioactive materials shall be buried at the proposed site until the advisory council reports to the Congress that such project and the transportation of waste materials to the project can be carried out in a manner which assures the safety of the project, the protection of the public health, and the preservation of the quality of the environment of the region.

113. On June 4, 1971, President Nixon in a message to Congress announced plans for a breeder reactor program. CLEAN ENERGY NEEDS, H.R. Doc. No. 92-118, 117 CONG. REC. 4715 (daily ed. June 4, 1971). A draft environmental statement on the proposed demonstration plant was submitted by the AEC on July 12, 1971. The draft has been attacked as inadequate by a group (Scientists' Institute for Public Information) seeking to compel a statement on the overall program. 2 ENVIRON. REP.—CURRENT DEVELOPMENTS 701 (BNA 1971). A pending suit by that group, *Scientists' Institute for Public Information v. AEC*, Civ. No. 1029-71 (D.D.C. 1971), was dismissed on March 24. N.Y. Times, March 25, 1972, at 62, col. 6. The difficulty of preparing a NEPA statement on the entire program given the present state of the art was commented upon by AEC Chairman Schlesinger, *supra* note 93.

impossible the maximizing of benefits in particular instances.<sup>114</sup> To some extent this objection seems directed to the adequacy of the particular standards, rather than to the utility of standards in the first instance. There is reason to suspect that the real objections of environmentalists to reliance on standards are that environmental groups have not had an adequate voice in the formulation of the standards and that the grounds for departing from the standards in particular cases are uncertain.<sup>115</sup> The latter objection will be examined below; the former is a subdivision of the broad question of public participation in decision-making.

#### D. *Public Participation in Decision-Making*

I have avoided until now using the traditional classification of proceedings as "rule making" and "adjudication" and substituted generic and case-by-case. I have done so because at least in this context the traditional terms are more confusing than enlightening. The considerations which favor generic proceedings may have little to do with whether the agency is being "quasi-legislative" or "quasi-judicial."<sup>116</sup> When considering the question of public participation, however, it is necessary to start the discussion in the traditional terms, since the classification of a proceeding as rule making or adjudication will, in theory and often in fact, determine the nature and extent of required or permissible public participation.<sup>117</sup> Although the terms are undoubtedly useful, it is increasingly recognized that as to some questions of public participation the classification inhibits rather than enhances analysis.<sup>118</sup>

In the case of AEC licensing, some of the processes governing adjudication seem appropriate for "rule making," while some of the issues involved in adjudication do not lend themselves to resolution by the full panoply of tech-

114. See, e.g., Statements of Anthony Z. Roisman on behalf of the Sierra Club and Louis S. Clapper on behalf of the National Wildlife Federation, reported at 18 NUCLEAR IND. at 52-53 (Dec., 1971).

115. As I read *Calvert Cliffs*, that decision would treat the standard as a minimum requirement, but direct the licensing agency to weigh independently the environmental injuries permitted by the standard, such as an increase of  $x$  degrees in water temperature. This is a much more difficult task than assessing whether there are reasons peculiar to the particular site which justify a "waiver" of the standard.

116. I will follow Judge Friendly's lead and abstain from "indulging in the sport" of trying to distinguish judicial from legislative. FRIENDLY, *supra* note 109, at 8. As he points out, "[I]ncreasingly we are coming to recognize that to a not inconsiderable extent, as a French jurist has said, 'the two powers are of the same nature.'" *Id.* at 9.

117. The Administrative Procedure Act provides that an interested person to a rule-making proceeding shall be given "an opportunity to participate . . . through submission of written data, views, or arguments with or without opportunity for oral presentation." 5 U.S.C. § 553(c) (1970). Where rule making is required by statute (e.g., the Federal Food, Drug, and Cosmetic Act, 21 U.S.C. §§ 301-92 (1970)) to be made "on the record after opportunity for an agency hearing," 5 U.S.C. § 553(c) (1970), or where adjudication is involved, "[a] party is entitled to present his case or defense by oral or documentary evidence, to submit rebuttal evidence, and to conduct such cross-examination as may be required for a full and true disclosure of the facts." 5 U.S.C. § 556(d) (1970).

118. See, e.g., Cramton, *Trial Type Hearings in Nuclear Power Plant Siting and Kennedy, Nuclear Electric Power and the Environment—New Regulatory Structures and Procedures*, papers delivered at the ALI-ABA Program on Atomic Energy Regulation, Nov. 1971.

niques borrowed from the judiciary.<sup>119</sup> For example, promulgation of rules respecting maximum permissible releases of radioactive materials from a reactor involve judgments that are susceptible of factual testing and others that are not. Today, it is generally assumed that any radiation has, at least genetically, deleterious consequences.<sup>120</sup> 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.<sup>121</sup> 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

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).

a technical problem. The potential radiological dangers to the public from a nuclear plant are from the escape to the environment of radioactive materials, primarily fission products, produced during operation.<sup>122</sup> In order to reach the environment, fission products must escape from the fuel rods in which they are enclosed (the rods collectively called the core), from the primary containment system (including the pressure vessel), and from the secondary containment system with which all large water reactors are surrounded. In order for a substantial release of fission products to occur, it is believed that there must be a melting of a significant portion of the core fuel elements, such as might happen following a sudden "loss of coolant" (presumably by a large-scale pipe rupture). The ECCS is one of the safety devices which has been incorporated in water reactors; it is designed to cool the core in the event of a "loss of coolant" accident.<sup>123</sup> Almost everyone would agree that the probability of a "loss of coolant" accident is quite small. Experts differ as to the likelihood of core meltdown in the case of a loss of coolant. Recently, some "semi-scale" tests have raised doubts as to how well the ECCS of some reactors would function in case of a large scale pipe failure.<sup>124</sup> As a result, the ECCS has become a focal point for present safety analyses of pressurized water plants. Some of the questions involved in this analysis of ECCS depend on factual information that should be susceptible of "proof." Yet, regardless of the proof, a fundamental value judgment as to how the agency should proceed is required. Should, for example, the magnitude of the possible accident dictate that the agencies await completion of more elaborate tests? How extensive should these tests be? Should the AEC authorize interim operation at lower than maximum power levels pending completion of the tests? These latter questions cannot be realistically the subject of proof but are essentially "judgmental."

Even when we turn to issues which are specific to the particular plant or locality we find the same mixed bag—some of the issues susceptible of proof and others involving judgments about matters so speculative or so inherently arbitrary (*e.g.*, aesthetics) as to be neither provable nor disprovable.

In sum, the licensing of any large scale power plant is bound to involve a wide range of issues—"legislative," "adjudicative," "generic," "factual," and "judgmental." With regard to each issue, some members of the public will request an opportunity to be heard. The conventional view would make the extent of their participation depend not on their ability to contribute to the resolution of the issues but on whether the agency is thought to be engaged

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122. See J.M. WEST, *et al.*, NUCLEAR ENGINEERING HANDBOOK 7-7 (1958).

123. See EMERGENCY CORE COOLING: REPORT OF ADVISORY TASK FORCE ON POWER REACTOR EMERGENCY COOLING, U.S. AEC, October 23, 1967.

124. The results of the tests are described in PRESENTATION TO ATOMIC SAFETY AND LICENSING BOARD ON WATER-REACTOR SAFETY PROGRAM, July 1, 1971, on file in the AEC Public Document Room, Washington, D.C.

in rule making or adjudication. If the former, admission to the proceeding is free, but the rights of persons admitted are sharply limited; if adjudication, intervention has been much less free but the intervenor is accorded all rights of a party. Experience suggests that this practice accords too few rights in rule making and too many in adjudication, with the result that the public may be frustrated in the former and the agency may be paralyzed in the latter. The discussion that follows is an attempt to formulate an approach emphasizing the potential contribution of a member of the public rather than the nature of the proceeding.<sup>125</sup>

Notwithstanding the recent decision in *Sierra Club v. Morton*,<sup>126</sup> the trend in the area of standing seems clearly toward a relaxation of the requirements for intervention. Yet even if the courts will allow restrictions on standing, the agencies should not adopt them. The question of intervention should no longer be who gets in, but rather what rights do intervenors have once they are admitted to the proceeding. Where local residents are asserting private interests, there should be no substantial restrictions on intervention. Where, however, persons or organizations are asserting broad interests, as "private attorneys general," it would seem appropriate to restrict intervention to those persons who will be likely to contribute to the proceeding. Where there are multiple interventions advancing the same position, the presiding officer should be free to exclude or to condition duplicate interventions on representation by a single counsel.<sup>127</sup> This prohibition of duplicative intervention should not

125. The idea of tailoring the proceedings to the nature of the issues is hardly new. Professor Kenneth Davis has been urging such an approach, with a strong bias for rule making, for years. In his treatise on administrative law, Professor Davis states: "A trial is designed for resolving issues of fact, not for determining issues of law, policy, or discretion. In rule making, the method of trial has no place except when specific facts are at issue, and even then it should seldom be used when the disputed facts are legislative." K. DAVIS, *ADMINISTRATIVE LAW TREATISE* § 6.06 (1958). In the case of adjudication, Professor Davis, after noting that a trial is not necessarily required for legislative facts, states: "[E]ven when no legal right to a trial exists, a trial may still be appropriate. The question of whether to use the method of trial for legislative facts is one of convenience, not one of legal right." *Id.* at § 7.06. Although I am in general agreement with Professor Davis, I would attach less importance to whether the hearing involved rule making or adjudication and whether the facts were "legislative or adjudicative." Some of the latest proposals for "hybrid" proceedings and some important recent cases are discussed later in the paper. See text accompanying notes 142-62 *infra*.

126. 405 U.S. 727 (1972). Until this Supreme Court decision, the trend seemed unmistakable. See, e.g., *Office of Communication of United Church of Christ v. FCC*, 359 F.2d 994 (D.C. Cir. 1966) [hereinafter referred to as *Church of Christ*]; *National Welfare Rights Organization v. Finch*, 429 F.2d 725 (D.C. Cir. 1970). Cf. *Scenic Hudson Preservation Conference v. FPC*, 354 F.2d 608 (2d Cir. 1965). The cases on standing and other aspects of intervention are extensively discussed in E. Gellhorn, *Public Participation in Administrative Proceedings*, 81 *YALE L.J.* 359 (1972).

127. The problem of over-extending the record and of duplication can be handled by permitting intervention and then restricting the activities of various parties. However, at least in the present ambiguous state of the law, it would seem easier to prohibit intervention entirely where the intervenor does not advance contentions different from those of others in the case. Even where the proceeding is "adjudicatory," there appears to be no obstacle to limiting intervention on such grounds. The inherent power of the agency to impose such controls was recognized in the *Church of Christ* case, 359 F.2d 994 (D.C. Cir. 1966). The court also expressly recognized the agency's power to "limit public intervention to spokesmen who can be helpful." *Id.* at 1005. In November, 1971, the Administrative Con-

preclude a person or organization from filing a statement for the record;<sup>128</sup> however, such a limited appearance should not carry with it any of the rights accorded a party.

Assuming that permission to intervene will be relatively freely granted, 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.<sup>129</sup> 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.<sup>130</sup> 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.<sup>131</sup> In many instances something addi-

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ference adopted a number of recommendations on public participation. Recommendation B (c) 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 nonspecialized 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-

tional in the way of a prima facie showing of the utility of cross-examination should be required.<sup>132</sup> I do not mean to suggest that intervenors should not be allowed to make their case defensively. Given the nature of some of the issues, all that the non-expert can hope to accomplish is to expose the expert's assumptions through cross-examination. But the possibility of abuse is real where total reliance is placed on a strong defense.<sup>133</sup>

The methods of controlling the use of cross-examination will depend on the particular issue and particular case. Some inquiry by way of cross-examination, perhaps, should be allowed on almost all issues, but the agency must have power to stop it when it threatens the process. The courts have tended to deprecate the reality of that threat, relying on the economic limitations imposed by litigation expenses and lawyers' fees.<sup>134</sup> But in the present climate, it does not seem wise to rely on intervenors becoming exhausted by the administrative process. There is already considerable evidence that economics may not exert

ment might be that the voluminous Preliminary Safety Analysis Report (PSAR) have been read by someone capable of understanding it. A forceful argument that cross-examination should be a "privilege" and not a "right" is made in Westwood, *Administrative Proceedings: Techniques of Presiding*, 50 A.B.A.J. 659 (1964).

132. For example, there are a number of reactors in operation that incorporate many of the features present in those for which licenses are being sought. Should not a person challenging the safety of one of these features be required to show some experiential basis for his challenge? This problem is closely allied to the subject of the binding effect of decisions in generic hearings discussed below. See text accompanying notes 163-70 *infra*.

133. Many of the same problems are posed by the use of pre-hearing discovery. A comprehensive report to the Administrative Conference has recently been published, and I will not try to cover the same ground here. See Tomlinson, *Discovery in Agency Adjudication*, 1971 DUKÉ L.J. 89 (1971). The Administrative Conference adopted (June 2-3, 1970) Official Recommendation No. 21 dealing with this subject. The Recommendation is based on the premise that "agencies that conduct adjudicatory proceedings generally enjoy broad investigatory powers, and fairness requires that private parties have equal access to all relevant, unprivileged information at some point prior to the hearing." It sets out minimum standards for the agencies, including provisions for pre-hearing conferences, depositions, interrogatories, and production of documents. 1 RECOMMENDATIONS AND REPORTS OF THE ADMINISTRATIVE CONFERENCE OF THE UNITED STATES 571 (1970).

Interrogatories to the AEC Staff have posed a particularly difficult problem. Written questions to the Staff can be an effective way of getting at technical questions; on the other hand, preparation of written answers to detailed interrogatories has put a considerable burden on an under-staffed agency. Furthermore, the problems of document production have been complicated by an overly broad claim of privilege by the AEC Staff. Such broad claims would seem to be inconsistent with the spirit if not the letter of the Freedom of Information Act, 5 U.S.C. § 552 (1970), to be contrary to agency self-interest in dispelling the climate of mistrust surrounding the AEC, and, finally, to impose on the Boards a heavy burden of scrutinizing claims of privilege. The role of the Staff in this type of proceeding needs re-examination, but many difficulties could be avoided if the Staff adopted a presumption in favor of disclosure of all information. The AEC has recently made major revisions in its rules which will make available to the public all documents relevant to a proceeding, as a matter of course, absent "a compelling reason" for non-disclosure, § 2.790.

134. See, e.g., *Scenic Hudson I*, 354 F.2d 608, 617 (2d Cir. 1965): "Our experience with public actions confirms the view that the expense and vexation of legal proceedings is not lightly undertaken." *Church of Christ*, 359 F.2d 994, 1006 (D.C. Cir. 1966):

The fears of regulatory agencies that their processes will be inundated . . . are rarely borne out. Always a restraining factor is the expense of participation . . . , an economic reality which will operate to limit the number of those who will seek participation. . . .

See also *National Welfare Rights Organization v. Finch*, 429 F.2d 725, 738-39 (D.C. Cir. 1970).

the necessary control. If current proposals to have the agency defray costs and pay counsel fees of intervenors are adopted,<sup>135</sup> that control will surely weaken.

The key to devising an appropriate system of control is a rationalization of the role of the intervenor. Given the nature of the inquiry being performed by the agency, the analogy of the intervenor to a party in a civil suit is inapt. Primarily the function of the intervenor should be to assist the agency,<sup>136</sup> to present positions relevant to the ultimate decision, to expose inconsistencies in the applicant's position, to bring to bear information not likely to be brought forth by the applicant, and to challenge assumptions. The intervenors, however, cannot displace the agency. While the latter must be free to investigate and examine any issue, it is not necessary, and probably not desirable, that intervenors be equally free. It must be remembered that the agency staff will have completed an environmental review prior to the hearing; a *de novo* review at the hearing is impractical.<sup>137</sup> It is reasonable to expect that the trier of fact will not, ordinarily, choose to duplicate the staff review, but there can be no similar assurance in the case of intervenors. Of course, where an intervenor is affirmatively contesting an issue, he should be free to inquire into the other side's case, but the mere "general denial" by an intervenor should not always be enough to put a question "in issue." The difference between the freedom of the intervenor and that of the examiner is particularly important where, as in the AEC, the trier of fact is a Board that includes technically qualified members.

On the subject of cross-examination one final point is in order. Where issues involve scientific data, written evidence rather than oral testimony should be preferred.<sup>138</sup> No one who has observed an AEC licensing proceeding can doubt that examining a complex technical subject by means of oral testimony is both difficult and time-consuming. Often the hearings must be recessed to permit witnesses to examine documents. Concentration on written testimony would not eliminate the opportunity for cross-examination, but would put it in better perspective. In this kind of licensing there are very few areas in which credibility, in the traditional sense, is at issue.<sup>139</sup> Often the objective of cross-examination seems to be not to elicit information, but

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135. A proposed recommendaton that agencies be encouraged to consider providing legal services was defeated by the Administrative Conference, but the subject is far from dead. See the discussion in *Greene County Planning Bd. v. FPC*, 445 F.2d 412, 425-27 (2d Cir. 1972); E. GELLHORN, *supra* note 126.

136. Such a view of the role of an intervenor seems consistent with the decision in the *Church of Christ and Greene County* cases. See also *Report of the Council on Environment*, 1 ENVIRON. L. REP. 50057, at 50059-61 (B.N.A. 1970).

137. See Murphy, *supra* note 44, at 581-84, for a description of the selective review performed by AEC licensing boards.

138. Section 7(c) of the APA, 5 U.S.C. § 556(d) (1970), seems specifically to sanction insistence on written evidence in cases of initial licensing except upon a showing of prejudice to a party.

139. On the other hand, the opportunity to observe a technical witness is sometimes helpful in evaluating his testimony.

to score points that may lead to a favorable decision on appeal—or worse, to “make news” for the media.<sup>140</sup> The use of written evidence will eliminate some of the element of dramatic confrontation present at the hearing, and the suggestion is certain to produce anguished protests from those who regard oral testimony as a constitutional right.<sup>141</sup> Yet, we must ask ourselves what confounding expert witnesses by fancy footwork has to do with finding truth. Unless one believes that the hearing is secondary to the press release, such cross-examination is not very helpful.

### E. *Problems of the “Hybrid” Proceeding*

The case for developing hybrid proceedings for the resolution of environmental questions involved in licensing is strong. While the need to deal with issues generically is great, the complex nature of many of the questions to be decided necessitates some restriction on the procedural rights of parties even in the particular (*i.e.*, non-generic) case. At the same time, the public must be able to participate effectively in the process; to a considerable extent, the crisis of the licensing process in agencies dealing with environmental issues is attributable to the widespread feeling that these agencies have not been sufficiently sensitive to all affected interests. In a very real sense, for example, the AEC is now enjoying the fruits of a policy of refusing to hear the issues in which the public was interested.<sup>142</sup>

The idea of fashioning hybrid procedures has been gaining much support recently. Professor Glen O. Robinson, for example, has written:<sup>143</sup>

Future efforts in the direction of administrative procedures reform should steer away from prescription of uniform procedures for the entire administrative system and focus instead on specific procedures tailored to the distinctive functions of each individual agency. . . . Instead of worrying whether the modification of airline certificates by a regulation such as the CAB's blocked space rule is a function of “rulemaking” or “adjudication,” it would be more useful to ask: What procedures are best suited to this particular type of airline case; what procedures are best suited to resolving

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140. The thesis that the intervenor should be aiming his case at the media rather than the hearing examiner is postulated in Like, *Multi-Media Confrontation—The Environmentalists' Strategy for a “No Win” Agency Proceeding* (Jan. 1971), reprinted in *Hearings*, *supra* note 96, pt. 3, at 1402.

141. *See, e.g.*, Like, *supra* note 140, at 1408: “Intervenor must vigorously resist any suppression of its right to cross-examination as a violation of the Administrative Procedure Act and the due process requirements of a public hearing.” The idea of written procedures is hardly new; it was urged for cases before public service commissions as early as 1938. Brown, *Public Service Commission Procedure—A Problem and a Suggestion*, 87 U. PA. L. REV. 139, 159-60 (1938).

142. Until relatively recently the public was largely interested in thermal effects. The AEC interpreted the Atomic Energy Act prior to the enactment of NEPA as precluding jurisdiction over non-radiological aspects of reactors and this position was upheld in the courts. *New Hampshire v. AEC*, 406 F.2d 170 (1st Cir. 1969). It seems highly likely that a contrary interpretation by the AEC would also have been sustained.

143. Robinson, *The Making of Administrative Policy: Another Look at Rulemaking and Adjudication and Administrative Procedure Reform*, 118 U. PA. L. REV. 485, 536-37 (1970).

the particular issue of airline freight service or the equities of certificate modifications of this type; what private interests are affected in this type of case; who will desire, and who should be permitted, to participate, and to what extent; what are the administrative burdens and the time pressures that are involved for alternative kinds of procedure in cases of this type? . . .

This is not to suggest that there would not be certain uniform procedures appropriate to all, or most, of these varied functions. But such uniformity would not be imposed on the proceedings because they are "adjudicative" or "legislative" in character, but would emerge only out of basic similarities in agency functions and in the private interests affected, where they were shown in fact to exist.

And more recently, Mr. Brice Claggett has endorsed the idea of hybrid procedures more strongly:<sup>144</sup>

The most constructive way to eliminate many of the inequities and inadequacies which appear from time to time in administrative proceedings is to pay less attention to theoretical, conceptual, and largely artificial lines between adjudication and rule making, and to devote more attention to the task of fashioning, out of the available arsenal of procedural techniques, hybrid modes of procedure most appropriate to the issues and circumstances of particular cases or classes of cases. In general, when an agency decision must or should turn on disputed issues of fact susceptible to the receipt of evidence, those issues should be resolved in an evidentiary hearing even though the proceeding is labeled a rule making and the facts are allegedly "legislative." Conversely, when an agency is considering adoption of a policy which could have a significant impact on unrepresented parties, means should be found to give notice and invite participation by non-parties even though the proceeding is labeled an adjudication.

The idea has also received judicial endorsement, particularly by Judge Harold Leventhal of the United States Court of Appeals for the District of Columbia.<sup>145</sup> While there is little purpose in duplicating the work of others with which I am in general agreement, there are some questions concerning hybrid proceedings that have received insufficient attention.

1. *Limitations, if any, imposed by the Administrative Procedure Act.* In his article, Mr. Brice Claggett stated: "there is no statutory reason why an agency, even in a proceeding labeled 'rule-making' may not incorporate some or all of the procedures characteristic of an adjudication and vice versa."<sup>146</sup> I have no difficulty with the statement up to the "vice versa." The Administrative Procedure Act specifies minimal requirements of notice, publication and "opportunity to participate in the ruling through submission of written data, views, or arguments with or without opportunity for oral presentation."<sup>147</sup>

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144. Claggett, *Informal Action—Adjudication-Rule Making: Some Recent Developments in Federal Administrative Law*, 1971 DUKE L.J. 51, 85 (1971).

145. See notes 148-55 *infra* and accompanying text.

146. Claggett, note 144 *supra*, at 70.

147. 5 U.S.C. § 553(c) (1970).

In a proceeding falling within the traditional classification of rule making, the agency would seem free to grant *more* rights to participants than those mandated by the Act. The question, if any, would come should the agency attempt to limit a party's participation in an "adjudicatory" hearing, or if a party to a generic proceeding were to demand an opportunity to "prove" his case or to cross-examine the agency witnesses. In this situation, the APA does not provide much guidance.

In *American Airlines, Inc. v. Civil Aeronautics Board*,<sup>148</sup> an en banc decision by the Court of Appeals for the District of Columbia, the majority, relying on *United States v. Storer Broadcasting Co.*,<sup>149</sup> upheld the denial of an adjudicatory hearing to airlines that had argued that the adoption of the "blocked space" rule was a modification of their certificates of public convenience and necessity which could be made only after an adjudicatory hearing. Judge Leventhal, speaking for the court, expressed the opinion that a grant of more than minimal rights in a rule-making hearing might be appropriate, but stressed that, in fact, more than the minimum had been accorded.<sup>150</sup> The court continued:

If additional procedural safeguards are to be imposed as a requirement it would be more salutary to incorporate them into a rule making procedure than to adopt a blanket requirement of an adjudicatory procedure. A rule making setting would better permit confinement of oral hearings to the kind of factual issues which can best be determined in the light of oral hearings, without undue elongation of the proceeding or sacrifice of the expedition and flexibility available in rule making. It would also permit the hearing examiner to confer with experts and the Board concerning "legislative facts" and policy questions.<sup>151</sup>

The opinion is certainly strong support for the proposition that agencies have great freedom to tailor their proceedings to the type of issues posed. It should be stressed, however, that the court expressly held that the agency was engaged in rule making.

In *Marine Space Enclosures v. Federal Maritime Commission*,<sup>152</sup> the Court of Appeals for the District of Columbia held that Section 15 of the Shipping Act<sup>153</sup> required the Federal Maritime Commission to grant a request of interested parties (in this case, potential competitors) for a hearing prior to

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148. 359 F.2d 624 (D.C. Cir.), *cert. denied*, 385 U.S. 843 (1966).

149. 351 U.S. 192 (1956).

150. 359 F.2d 624, 632.

151. *Id.*

152. 420 F.2d 577 (D.C. Cir. 1969). *Citizens for Allegan County v. FPC*, 414 F.2d 1125 (D.C. Cir. 1969), cited in the opinion, upheld the denial of a hearing by the FPC to intervenors on the transfer of a municipally-owned dam and power house to a utility. This case can be regarded as authority for the denial of an adjudicatory hearing in some circumstances. However, the intervenors in that case sought, in essence, to attack collaterally a municipal election authorizing the transfer, and, therefore, the FPC denial of a hearing on the allegations seems clearly correct.

153. 46 U.S.C. § 814 (1970).

approval of a contract to construct a maritime passenger terminal in New York City. In remanding, the court said:

The requirement of a hearing in a proceeding before an administrative agency may be satisfied by something less time-consuming than courtroom drama. In some cases briefs and oral argument may suffice for disposition. Ordinarily, however, antitrust issues do not lend themselves to disposition solely on briefs and argument. Even though there may be no disputed "adjudicatory" facts, the application of the law to the underlying facts involves the kind of judgment that benefits from ventilation at a formal hearing. In some cases, however, the public hearing may usefully approach the legislative rather than the adjudicatory model.

At a public hearing the parties could focus on whether a new terminal is, in fact, needed and whether a seventy-year exclusive dealing arrangement is necessary to provide for return of capital and maintenance costs; whether the carriers will, in fact, use the terminal and whether, if there is resistance to the plan, traffic will be diverted from New York, and to what extent; whether it is feasible to reduce the restraints proposed by projecting a smaller terminal providing high-quality facilities for part of the traffic, yet leaving carriers free to employ more modest private port terminal facilities. These matters are of the kind we have referred to as "questions of public interest \* \* \* [that] will often be illuminated by an exploration in greater depth than can be provided simply by pleadings and documents." . . .

The requirement of an evidentiary hearing is not a mandate of a prolix procedure protracted beyond endurance and beyond the requirements of the issues. Even in the most formal proceedings a capable hearing officer can evolve techniques that both expedite the proceeding and illuminate the issues.

Notwithstanding these considerations, we refrain at this juncture from specifying that our remand order requires an evidentiary hearing. . . . It may be that the issues can be adequately developed for Commission determination through receipt of documents and sworn statements, and hearing oral argument. Any evidentiary hearing may be limited to certain specific issues. These procedures, however, represent the very minimum requisite to satisfy the hearing requirements of § 15 when approval is sought for agreements which contain restrictions that are, in the Commission's words, of such "unique" and of "especially anticompetitive character."<sup>154</sup>

These cases suggest that an agency has great flexibility in fashioning procedures. The *Marine Space* case implies that an agency could restrict the rights of a party in an "adjudication," and *American Airlines* strongly intimates that in some instances of "rule making," an agency may be required

154. 420 F.2d at 589-90. Another very interesting opinion by Judge Leventhal is *Walter Holm & Co. v. Hardin*, 449 F.2d 1009 (D.C. Cir. 1971). There, the court held that tomato importers were entitled to a hearing prior to the issuance of a marketing order by the Secretary of Agriculture. The court said: "It is not the law that all orders must be preceded by oral hearings when hearing is sought only on matters not involving material issues of fact. . . . And it is not the case that all administrative actions legitimately denominated regulations are ipso facto freed from any need for oral hearings." 449 F.2d at 1015.

to grant rights traditionally thought to belong to adjudications.<sup>155</sup> In *Upjohn Co. v. Finch*,<sup>156</sup> the Court of Appeals for the Sixth Circuit provided additional support for the proposition that the rights of a party to an adjudication may be less than those accorded a party at a trial. In *Upjohn*, the Commissioner of Food and Drugs, on the basis of a report by a panel of experts, proposed to decertify certain previously approved drugs that were being extensively marketed and manufactured by the plaintiff. The plaintiff was given an opportunity to "make an oral presentation," but was denied a hearing on the ground that its proffered evidence as to the safety and effectiveness of the drugs was insufficient. In the court of appeals, the agency defended on the ground that the proceeding was rule making, while the plaintiff claimed the proceeding was adjudication. The court said:

In deciding the present case, this Court does not find it necessary to determine whether the order . . . is rule-making or adjudication. Regardless of what characterization may be given to this order, we hold that the Commissioner did not commit reversible error . . . by revoking the certificates . . . without a full evidentiary hearing. . . . Whether the order be viewed as rule-making or adjudicatory, we hold that the Commissioner was authorized to demand that a genuine and substantial issue of fact be presented as a prerequisite to an evidentiary hearing. . . .<sup>157</sup>

Although these cases provide considerable reason for optimism that flexible approaches will be upheld by the courts, there are also reasons for caution. It is hard, for example, to know whether *Marine Space* and *Upjohn* go beyond what Professor Kenneth Culp Davis has been reminding us for years—that even in an "adjudication" there are many questions that do not have to be the subject of a trial.<sup>158</sup> Furthermore, *American Airlines*, while strongly endorsing an agency's freedom of choice, hedges by suggesting that the right of a party may turn on the classification of a fact at issue as "legislative or adjudicative."<sup>159</sup> Finally, *Upjohn* involved a statute that specifically defined

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155. Mr. Clagett, *supra* note 144, at 72-73, sees cases such as *American Airlines Inc. v. CAB*, as hinting that it may be an abuse of discretion to deny adjudicatory rights as to some issues in rule making. He construes *Walter Holm & Co. v. Hardin* as "plainly stand[ing] for the landmark proposition that there are circumstances in which courts may and will require the holding of evidentiary hearings in rulemaking proceedings. . . ." *Id.* at 75. Although the language of the opinion, quoted *supra* note 154, is certainly strong support for Mr. Clagett's conclusion, the statute in the case, 7 U.S.C. § 608(5) (1970), specifically required notice and an opportunity for a hearing as a prerequisite to the issuance of a marketing order. Mr. Clagett concedes that the court was "undoubtedly influenced" by the existence of such a requirement.

156. 422 F.2d 944 (6th Cir. 1970).

157. *Id.* at 954-55.

158. K. DAVIS, *supra* note 125, ch. 7, particularly §§ 7.06 & 7.07 (1958). This seems a good point to acknowledge (if acknowledgement is necessary) the debt to Prof. Davis' fundamental contributions to understanding in this area.

159. 359 F.2d at 633. "The issue involves what Professor Davis calls 'legislative' rather than 'adjudicative' facts." Mr. Clagett criticizes the courts for relying on the distinction and takes issue with Professor Davis' approach. See Clagett, *supra* note 144, at 78-80. It does not seem useful to enter this controversy, but simply to note that the prob-

substantial evidence to support a certification as evidence based on "adequate and well-controlled investigations."<sup>160</sup> This definition made it easier for the court to require a threshold showing.

The questions raised here are not academic. At the present time the AEC is holding a hearing on ECCS. Although the hearing is characterized as "rule making," the participants are being accorded rights including access to documents as well as opportunity to introduce testimony and cross-examine government witnesses, far beyond that ordinarily granted in such a proceeding.<sup>161</sup> It is by all odds a very adjudicatory rule making. Whether it will satisfy the participants, however, is something else, and the agency may soon have to answer the question of how much is enough.<sup>162</sup>

The scheduling of the ECCS hearing is a welcome move. The issues

lems of immediate concern to us here fall in the twilight area of that generally useful distinction.

160. 21 U.S.C. § 355(d) (6) (1970).

161. Actually, there are two hearings being held: one on ECCS and another on the AEC regulations requiring releases of radioactivity to be "as low as practicable." However, there has been relatively little controversy about the latter proceeding, and we are unlikely to learn as much from it. AEC News Release P-5, January 7, 1972, describes the proceedings as "legislative-type public rulemaking hearings" but goes on to prescribe the following procedures:

1. All persons admitted as participants will present their testimony under oath and will be afforded the opportunity for relevant questioning of the witnesses of other participants as may be required for full and true disclosure of the facts.

2. The Commission's determination in the rulemaking proceeding will be supported by the record; if reliance is placed on information which is not in the record, notice will be given of such information and an opportunity provided to comment thereon and to request an opportunity to respond thereto.

3. Participants will make appropriate documents available to the extent practicable and will reference and produce on request the documents on which they rely. Requests for interrogatories, depositions, or formal discovery will not be entertained unless, in exceptional circumstances, the presiding board finds that there is compelling justification therefor.

4. The AEC will make available appropriate witnesses to explain the background, purpose, and rationale of its proposed numerical guides for design objectives and technical specification requirements for limiting conditions for operation of light water-cooled nuclear power reactors to keep radioactivity in effluents as low as practicable, published on June 9, 1971. Other participants, to the extent practicable, are expected to make available knowledgeable persons. No subpoenas requiring the testimony of witnesses will be issued by the presiding board. Participants may request specified witnesses and, if such request is made, the presiding board, upon determining that the request is relevant, nonduplicative, and meritorious, will encourage such witnesses to testify. The presiding board may, upon a showing of exceptional circumstances, such as a case in which a particular named person has direct personal knowledge of a material fact not known to the witnesses in the proceeding, certify directly to the Commission for determination of whether the testimony of a named person should be included in the record of the proceeding.

162. The EECS hearing is complicated by its history. The question as to EECS originally arose in individual license hearings. On June 19, 1971, while those hearings were pending, the AEC adopted, as a rule, Interim Acceptance Criteria, 36 Fed. Reg. 12247 (1971), amended by 36 Fed. Reg. 24082 (1971), which, if valid, would remove many of the questions from the licensing hearings. Moreover, the AEC adopted the new rules under the emergency exception to the APA: 5 U.S.C. § 553 (1970), so that even the minimal hearing prescribed for rule making was therefore not held. The AEC did, however, invite comments with a view to possible amendments. Some intervenors take the position that even though the new proceeding may produce a rule binding on subsequent applications, they cannot be retroactively denied adjudicatory rights,

involved are of a type singularly adapted to generic resolution, yet the factual assumptions underlying the presently effective "acceptance criteria" need public airing. The hearing represents an unusual and imaginative effort toward resolution of the licensing crisis. It would be most unfortunate if it foundered on conceptualism.

2. *The Binding Effect of Generic Decisions.* As mentioned earlier, a major objective of generic hearings such as the ECCS hearing is to avoid repeated inquiries into identical questions of complicated technology, absent some showing that a new inquiry is warranted. If that objective is to be achieved, the factual findings of the generic hearings must be presumptively binding on subsequent licensing hearings. It is not entirely clear how this can be accomplished. The suggestion has been made that the individual licensing board officially notice the earlier proceedings. Although such a device would save some time, the Board would still be required to permit the parties to challenge the matter being noticed.<sup>163</sup> What is needed is an analogue to *stare decisis* for factual determinations whereby the earlier determination would be binding subject to a showing of reasons why it should not be applied in the individual case: for example, the availability of factual information not presented to the generic hearing or of new data based on experience or experiments developed since the hearing would be sufficient to prompt a re-examination of the issue.

Here again, the case law is generally auspicious. Supreme Court decisions such as *United States v. Storer Broadcasting Co.*<sup>164</sup> and *FPC v. Texaco, Inc.*<sup>165</sup> as well as a number of others in the courts of appeals<sup>166</sup> have sustained the agencies' reliance on rule making in lieu of an adjudication that appeared to be required by statute. These holdings rest at least in part on the existence of procedures for securing waivers or exceptions from the operation of the rule. A number of the decisions have dealt specifically with the question of the substantiality of the case that must be presented in order to entitle one to a hearing on the application for a waiver.<sup>167</sup> These decisions certainly provide

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163. The opportunity to challenge and rebut the noticed information is, of course, an essential element of the use of official notice. K. DAVIS, *supra* note 125, § 15.01 (1958). In adjudications, the APA specifies: "When an agency decision rests on official notice of a material fact not appearing in the evidence in the record, a party is entitled, on timely request, to an opportunity to show the contrary." 5 U.S.C. § 556(e) (1970).

164. 351 U.S. 192 (1956).

165. 377 U.S. 33 (1964).

166. *See, e.g.,* WBEN, Inc. v. United States, 396 F.2d 601 (2d Cir.), *cert denied*, 393 U.S. 914 (1968); American Airlines Inc. v. CAB, 359 F.2d 624 (D.C. Cir.), *cert denied*, 385 U.S. 843 (1966); Superior Oil Co. v. FPC, 322 F.2d 601 (9th Cir. 1963). Cf. WAIT Radio v. FCC, 418 F.2d 1153, 1157 (D.C. Cir. 1969) where the court stated: "The agency's discretion to proceed in difficult areas through general rules is intimately linked to the existence of a safety valve procedure for consideration of an application for exemption based on special circumstances."

167. *See, e.g.,* Industrial Broadcasting Co. v. FCC, 437 F.2d 680 (D.C. Cir. 1970); Pikes Peak Broadcasting Co. v. FCC, 422 F.2d 671 (D.C. Cir.), *cert denied*, 395 U.S. 979 (1969); National Broadcasting Co. v. FCC, 362 F.2d 946 (D.C. Cir. 1966);

a useful model for sustaining a requirement that a threshold case of substantiality must be made before the generic "holding" can be challenged. It must be pointed out, however, that these decisions involved traditional application of "rules" to particular instances<sup>168</sup> and not the binding effect of factual determinations.

The difficulty that may be encountered in the case of factual determinations is illustrated by *Dayco Corporation v. FTC*.<sup>169</sup> The FTC had found Dayco in violation of the Robinson-Patman Act after a hearing; to establish a number of elements of its case (including the existence of competition between purchasers from Dayco), the FTC "noticed" (incorporated by reference might be a better description) evidence and findings of an earlier proceeding to which Dayco was not a party. The Court of Appeals for the Sixth Circuit held that the agency acted improperly even though Dayco had been given an opportunity, which was refused, to rebut the noticed material. There is, of course, a considerable difference between the type of proceeding involved in *Dayco*—an adjudication that the company had violated a statute—and the generic proceeding contemplated with respect to environmental issues; there is a good argument that a stricter standard of proof should be required in the former. Nevertheless, it is disconcerting that the court did not seem to distinguish between the issue of the existence of competition and other issues more appropriate for a new adjudication. It is perhaps even more alarming that the court seemed to base its conclusion on the proposition—certain to be echoed in environmental hearings—that the agency had shifted the burden of proof to the company.<sup>170</sup>

It should be noted that although the effect of the generic decision would be presumptively binding on parties in subsequent cases, it would always be open to re-examination by the agency. We know relatively little about many questions of environmental impact such as the use of cooling ponds and

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*Dyestuffs and Chemicals, Inc. v. Flemming*, 271 F.2d 281 (8th Cir. 1959). See also *United States v. Storer Broadcasting Co.*, 351 U.S. 192, 205 (1956).

168. The circumstances under which an AEC regulation can be challenged in a licensing proceeding are prescribed in *In re Baltimore Gas & Electric Co.*, 2 CCH AT. EN. L. REP. ¶ 11,579.02 at 17,701-04 (1969). A new section, Section 2.758 of the AEC Rules, has been proposed which would permit a party to an adjudicatory proceeding to petition for a waiver or exception to an AEC rule, but would require a prima facie showing of entitlement, by affidavit, before the Commission would consider the petition.

169. 362 F.2d 180 (6th Cir. 1966).

170. At least the court cited as dispositive the statement in 1 F. COOPER, STATE ADMINISTRATIVE LAW 413 (1965) that to take notice of "litigation facts" would be to shift the burden of proof. *Id.* at 186. The court also regarded as significant that the facts being noticed were not acquired by "accumulated knowledge" but were based on a particular case. *Id.* at 187. The acceptance of the generic decision as presumptively binding does not, of course, shift the burden of proof; however, it would require the party challenging the decision to come forward with reasons supporting his challenge. The refusal by the court in *Dayco* to permit presumptive reliance on the earlier decision—thus requiring the agency to prove again the existence of competition—is inconsistent with the proposal in this article.

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.<sup>171</sup>

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.

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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 questions 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.<sup>172</sup> 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

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172. *WBEN, Inc. v. United States*, 396 F.2d 601, 617 (2d Cir.), *cert. denied*, 393 U.S. 914 (1968).

sentiment among environmentalists for having the courts displace the agencies as environmental decision-makers,<sup>173</sup> and, perhaps more disturbing, some judges are beginning to agree.<sup>174</sup>

The system outlined in this article will, it is believed, make environmental decisions possible. While it may even expedite them, it is not designed to hurry them. There is a clear case to be made for some interim solution to the power plant licensing crisis, but in the long run the solution cannot rest on denial of an appropriate opportunity to be heard.

There has been a great deal of criticism in recent years of the tendency of agencies to use trial-type procedures for decision-making.<sup>175</sup> Although I am confident that the worst features of trial-type procedures can be minimized by de-emphasizing oral testimony and controlling cross-examination, the system proposed herein continues to be heavily "judicial." I have not explored other approaches such as "management" or "consensus" primarily because they do not, in my view, offer enough opportunity for public scrutiny of the decision process. An opportunity for such scrutiny in some public forum is essential. It may be true that the public will not often add much to the information supplied by experts,<sup>176</sup> but if nothing more, the activities of environmentalists have provoked a comprehensive re-examination of the issues. No doubt the existence of disagreement within the agencies will be embarrassing. Some will argue that the existence of disagreement is by itself sufficient to denigrate the agency decisions, but the answer to these problems is not to try to preserve the appearance of certainty at the expense of public inquiry. The major problem of decision making in a technological society promises to be that of making the public voice more effective in the process. The price of failing to solve that problem may be higher than we yet foresee.

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173. *E.g.*, the Hart-McGovern Bill, S. 1032, 92d Cong., 1st Sess. (1971). The bill is patterned on an Act drafted by Professor Joseph Sax. See J. SAX, *DEFENDING THE ENVIRONMENT* (1970). To the extent that it would eliminate obstacles to public participation such as lack of standing and sovereign immunity, it is unobjectionable. But, insofar as it would authorize the courts to decide the merits of environmental questions in complete disregard of agency action, it has serious, and I believe potentially disastrous, implications.

174. In *Scenic Hudson II*, for example, Judge Timbers dissented from the denial of a rehearing en banc and expressed doubt that it was proper to apply the substantial evidence test to the FPC determination that the benefits of the project outweighed the damage. 453 F.2d 494. And in dissenting from the denial of certiorari in the same case, Mr. Justice Douglas said: "I share Judge Timber's doubts that under § 101 [of NEPA] the balance struck by an agency unskilled in environmental matters should be reviewed only through the law of the 'substantial evidence' test." 92 S. Ct. 2455.

175. For a general discussion of the criticisms as well as a very interesting and perceptive study of the problem, see Boyer, *A Re-Evaluation of Administrative Trial-Type Hearings for Resolving Complex Scientific and Economic Issues*, A Staff Report to the Chairman of the Administrative Conference, December 1, 1971.

176. In the ECCS hearing, for example, the information upon which the intervenors rely seems so far to have come from AEC in-house documents.