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Nuclear Regulatory Commission Proceedings: A Guide For Intervenors

Dean Hansell*

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I Introduction

In the public debate about the wisdom of generating electricity by nuclear power, Nuclear Regulatory Commission (NRC or Commission) licensing proceedings have become a significant forum. Although this federal agency has never denied an electrical utility its sought-after license for a nuclear plant, a nuclear licensing proceeding is the one forum where the applicant for the license, the agency charged with protecting the public's health and safety during the construction and operation of commercial nuclear facilities, state and local government agencies, and the general public can debate the merits of a proposed nuclear facility.

Many different objectives may be served by intervention in licensing proceedings before the NRC. Some groups want to stop a project while others are concerned only about certain features of the proposed nuclear facility. Other organizations, such as state and local government agencies, may have no specific objection to a proposed plant but want to make sure that the decision-making process and the technical review are done thoroughly and openly. Regardless of one's interests in a proposed nuclear facility, intervention in NRC licensing proceedings can be an appropriate and critical undertaking. However, intervention must be based upon a clear and realistic understanding of what can be accomplished through an NRC proceeding and what options are available for raising issues under NRC law.

This article will discuss the procedural options available to, and the applicable law governing, state and local governments and citizen groups seeking to litigate matters before the NRC. Part II of the article discusses the goals of nuclear litigation. The expense of litigation and the improbability that a proposed facility will be halted by litigation alone require a group or government agency to be quite clear about its objectives before intervening in a nuclear proceeding.

In order to participate in an NRC proceeding, certain procedural steps are necessary. Part III, a discussion about intervention, first sets out the requirements for standing as a basis for intervention, both as a matter of right and as a matter of discretion. Next, Part III sets out the standards for late intervention, appearances by government agencies, and limited appearances. The section then discusses the contention requirement, the significance of contentions to licensing proceedings, and the special hearings at which contentions are considered.

Parts IV through VIII detail the various proceedings to which a nuclear plant may be subjected. Part IV contains a brief overview of the regulation of nuclear power plants. The requirements for obtaining construction permits and operating licenses are set out in Parts V and VI, respectively. An analysis of construction permit and operating license amendments follows in Part VII. Finally, Part VIII consists of a brief discussion of rulemaking proceedings and proceedings to modify, suspend, or revoke a license or permit. The article will limit its focus to procedural aspects of NRC litigation.¹

II Goals of Intervention

Because NRC litigation can be time-consuming and expensive and may attract a great deal of publicity, those who decide to contest a proposed nuclear facility through litigation should be clear about their objectives.

Nuclear litigation is not always a good way to oppose a nuclear facility. It can deflect scarce resources from other, more potentially efficacious methods of achieving one's goals. As with other litigation, nuclear litigation can involve not only lawyers' fees but

^{1.} Because of the myriad substantive questions that may arise in a nuclear licensing proceeding, it is neither appropriate nor possible to discuss technical issues in this article. Many potential issues that might arise in a nuclear proceeding have already been litigated elsewhere. Prior to framing issues for an NRC licensing proceeding, potential litigants should speak with others who have already participated in nuclear proceedings.

expert-witness expenses, court costs, depositions and other discovery costs, as well as travel expenses. Proceedings can be protracted, sometimes lasting several years. Finally, with litigation there is the danger that a group will devote most of its limited resources and energy to an effort that may not succeed.

If one's goal is to halt the construction or operation of a nuclear facility, the option of litigation should be approached cautiously. The courts, especially the United States Supreme Court, have made it clear that they are not the forum in which to stop nuclear power. Recent Supreme Court pronouncements on nuclear power have been resolved against states and citizen groups seeking to litigate issues about nuclear power.² Further, the NRC has never denied a power plant license to an applicant.³

An understanding of the relationship between the courts and the Commission in the nuclear power question is critical to intervenors. Courts typically will defer to the Commission in two

2. See, e.g., Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, 435 U.S. 519 (1978), and Duke Power Co. v. Carolina Envtl. Study Group, 438 U.S. 59 (1978). Although not all judges subscribe to the limited role for the judiciary in deciding questions about the wisdom of nuclear power that Justice Rehnquist, writing for the court in Vermont Yankee, envisions, it is a view that enjoys some favor among the judiciary:

Nuclear energy may some day be a cheap, safe source of power or it may not But Congress has made a choice to at least try nuclear energy, establishing a reasonable review process in which courts are to play only a limited role. The fundamental policy questions appropriately resolved in Congress and in the state legislatures are not subject to reexamination in the federal courts under the guise of judicial review of agency action. Time may prove wrong the decision to develop nuclear energy, but it is Congress or the States within their appropriate agencies which must eventually make that judgment. In the meantime courts should perform their appointed function.

Vermont Yankee, 435 U.S. at 557-58 (emphasis in original).

3. No understanding of the law of nuclear power is complete without understanding the organization responsible for creating most of the law, the NRC. Ever since its inception the NRC has been an unwavering supporter of nuclear power, viewing itself more as a partner with the nuclear industry than as a neutral regulatory agency. Not only have most of the commissioners been unapologetic supporters of nuclear power, but the Commission itself has never exercised much leadership, instead allowing its staff to act with almost total autonomy. Scientist Daniel Ford has described the NRC's lack of leadership in this way:

Following the A.E.C. [Atomic Energy Commission] practice, the [NRC] Commissioners devoted themselves to broad policymaking—the industry frequently referred to the Commission as a debating society—and formally delegated all routine functions, such as the issuance of plant-construction permits and operating licenses, to the staff. Without waiting for Commission guidance on how to resolve the long list of safety issues, the staff simply went ahead and handed out one nuclear-plant approval after another.

Ford, The Cult of the Atom-II, THE NEW YORKER 45, 96 (Nov. 1, 1982).

types of challenges. Cases that have broad-ranging implications for the statutorily mandated role the courts perceive for nuclear power and cases that question the Commission's technical expertise are not likely to be reversed on appeal.⁴ Intervenors raising these types of issues on appeal are not likely to succeed. The only area where the courts seem willing to reverse the Commission has been in the Commission's interpretation of law.⁵

On the other hand, nuclear litigation can achieve several important objectives. It can ensure that the NRC staff gives more in-

4. Cases upholding the Commission on the basis of the Congressional scheme to promote nuclear power include: Duke Power Co. v. Carolina Envtl. Study Group, 438 U.S. 59 (1978); Northern States Power Co. v. Minnesota, 447 F.2d 1143 (8th Cir. 1971); and Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, 435 U.S. 519 (1978).

Cases upholding the Commission's exercise of its technical expertise include: Seacoast Anti-Pollution League v. Nuclear Regulatory Comm'n, 598 F.2d 1221 (1st Cir.), cert. denied, 444 U.S. 915 (1979); Power Reactor Dev. Co. v. International Union of Elec., Radio and Mach. Workers, 367 U.S. 396 (1961); Vermont Yankee, 435 U.S. 519; Morningside Renewal Council v. Atomic Energy Comm'n, 482 F.2d 234 (2d Cir. 1973), cert. denied, 417 U.S. 951 (1974) (but see dissenting opinion of Justice Douglas); and New England Coalition on Nuclear Pollution v. Nuclear Regulatory Comm'n, 582 F.2d 87 (1st Cir. 1978).

- 5. Such cases include: Calvert Cliffs' Coordinating Comm. v. Atomic Energy Comm'n, 449 F.2d 1109 (D.C. Cir. 1971); Brooks v. Atomic Energy Comm'n, 476 F.2d 924 (D.C. Cir. 1973); Sholly v. Nuclear Regulatory Comm'n, 651 F.2d 780 (D.C. Cir. 1980), reh'g denied, 651 F.2d 792, cert. granted, 451 U.S. 1016 (1981).
- 6. The NRC is the regulatory agency that has responsibility for the commercial use of nuclear power. Its five commissioners are often called upon to serve in an adjudicatory capacity in the licensing of nuclear facilities. 42 U.S.C. § 2021 (1976 & Supp. V 1981); 10 C.F.R. § 1.1 (1982). Employees of the Commission review the merits of matters brought before the NRC. This staff normally makes recommendations to the commissioners by serving as a party in licensing proceedings. As used in this article, "staff" refers to the employees of the NRC and "Commission" refers to the NRC commissioners.

Hearings on licensing proceedings are not normally conducted by the Commission. Instead, the Atomic Energy Act of 1954 (AEA of 1954), 42 U.S.C. §§ 2241-2284 (1976) & Supp. V 1981) (see infra note 78) and the Code of Federal Regulations, 10 C.F.R. §§ 0.735-1—170.41 (1982), provide for the establishment of one or more Atomic Safety and Licensing Boards ("licensing board") to conduct such hearings. A licensing board is a three-member panel consisting of one person qualified to conduct administrative proceedings and two who have technical qualifications. 42 U.S.C. § 2241(a) (1976); 10 C.F.R. § 1.11 (1982). In practice, the Commission traditionally appoints an attorney to serve as chairperson and a nuclear engineer and an environmental scientist to serve as the technical members of the licensing board. These individuals preside over most licensing proceedings and make such decisions as the Commission calls upon them to make. The courts will apparently grant de novo hearings only when the presiding officer of the licensing board is unavailable, and then only in limited circumstances, such as where the credibility of the witnesses becomes an issue. New England Coalition on Nuclear Pollution v. Nuclear Regulatory Comm'n, 582 F.2d 87, 99 (1st Cir. 1978).

Using its general statutory powers, the Commission has also established an Atomic

tense scrutiny to health and safety issues. More specifically, the prospect that intervenors in a nuclear proceeding will cross-examine them on how well they did their job normally results in more thorough review by the staff. For example, persistence by intervenors brought to light that the plans for the Browns Ferry Nuclear Plant, which had been crippled for months by a fire that started in its cable spreading room, was designed to contain only a single cable spreading room rather than two rooms (one a backup) as contended by the utility. Persistence by intervenors also highlighted the fact that the water-discharge permit originally issued by the Environmental Protection Agency for the Black Fox Nuclear Plant in Oklahoma would have allowed discharge of radionuclides into the Verdigris River, three miles upstream from the water intake for a major Tulsa suburb.

Nuclear litigation can also be an important tool for raising the public's level of consciousness about nuclear power. Nuclear proceedings often receive a great deal of public attention and can be used as a significant forum for making the public aware of important questions pertaining to nuclear power in general or the construction or operation of a particular nuclear facility. The hearings provide an opportunity for members of the group and the public to air their views about the wisdom of the proposed action.

Finally, nuclear litigation, when combined with other events, may better enable a group to achieve its goals. Because contested nuclear licensing proceedings facilitate open decision-making and ensure a more careful scrutiny by the staff and the Commission, the applicant must more carefully weigh the merits of its proposed option, and political leaders and other decision-makers must more carefully assess the wisdom of the proposed action. Hence, even unsuccessful litigation may, in concert with other forces, encourage more thorough and better-reasoned decision-making.

Safety and Licensing Appeal Board ("appeal board") to review the decisions of licensing boards. 10 C.F.R. § 1.12 (1982). Finally, the AEA of 1954 provides for the establishment of a permanent Advisory Committee on Reactor Safeguards (ACRS). 42 U.S.C. § 2039 (1976 & Supp. V 1981); 10 C.F.R. § 1.20 (1982). The ACRS performs both generic and site-specific functions. It advises the Commission on certain generic safety issues and will also review each application for a construction permit or an operating license and report its conclusions to the licensing board. 42 U.S.C. § 2232(b) (1976). The ACRS report is proffered and received into evidence at the licensing proceeding. 10 C.F.R. § 2.743(g) (1982). However, because the ACRS is not subject to cross-examination, the ACRS report cannot be admitted for the truth of its contents, nor may it provide the basis for any findings in a contested proceeding. Arkansas Power & Light Co., 6 A.E.C. 25, 32 (1973) (Ark. Nuclear-1, Unit 2).

For example, though (over the well-articulated objections of intervenors) applicants for the Bailly Nuclear Power Plant had been granted a construction permit, a reduced need for power, coupled with rising costs and mounting questions about the wisdom of locating a nuclear plant twenty miles from Chicago, ultimately forced the utility-applicant to reconsider its decision and to cancel the plant.⁷

III Intervention

One may, if he meets certain substantive procedural requirements, intervene as a full party before any NRC licensing proceeding.⁸ To intervene, a person must have standing and must identify those issues or contentions upon which he chooses to participate in the NRC proceeding. The procedures for intervention, outlined below, are the same for all NRC proceedings. The standards for intervention are generally the same for all proceedings, except for export license hearings. A government agency is sub-

- 7. Because it is successful, intervention is not without its detractors. A Department of Energy (DOE) task force, charged by former Secretary of Energy James Edwards with streamlining the nuclear licensing process, identified what it perceived to be the major sources of delay in the construction of nuclear power plants, including:
 - a. the admission of insufficiently specific contentions in the proceedings;
- b. the reluctance of licensing boards to limit cross-examination and oral argument, and the allowance of direct examination that is of little relevance; and
- c. the practice of holding NRC staff meetings with intervenors to help them formulate contentions, which indirectly "encourage" intervenors.

 REPORT OF DOE TASK FORCE ON NUCLEAR LICENSING AND REGULATORY REFORM 14 (1982).

The DOE Task Force report is another of a continuing series of misguided efforts to limit the role of intervenors in NRC licensing proceedings. Intervenors are perceived by most members of the nuclear industry, and by DOE, as merely unwelcome meddlers who delay proceedings.

Much of the so-called delay that is attributed to intervenors is in fact caused by such factors as construction difficulties and problems raising capital. A recent Congressional study on the reasons for the delay in the construction of nuclear plants concludes:

[u]nforeseen difficulties in managing this complex and sophisticated technology, unanticipated problems in raising the necessary capital for such enormous construction projects, and plain old mistakes by utility management are the real reasons for construction stretchouts, no matter how attractive it might be to scapegoat the NRC and its processes for lagging construction schedules.

LICENSING SPEEDUP, SAFETY DELAY: NRC OVERSIGHT, HOUSE COMM. ON GOV'T OPERATIONS, H.R. DOC. No. 277, 97th Cong., 1st Sess. 22 (1981).

8. The right of intervention by petitioners extends to any NRC licensing proceeding (42 U.S.C. § 2239 (1976); 10 C.F.R. § 2.714(a)(1) (1982)), including limited work authorization and license amendment proceedings (discussed *infra* in Parts V(C) and VII, respectively).

ject to basically the same standards for intervention as a full party but may intervene as an interested agency under more liberal standards.⁹

Once a person has been admitted as a party to an NRC proceeding, that party may fully participate in all aspects of that proceeding and in any appeals. However, admission to one NRC proceeding (such as a construction permit proceeding) does not necessarily entitle one to intervention in a subsequent licensing proceeding (such as an operating license proceeding) involving that same facility.¹⁰

A person expresses intent to intervene by filing a petition to intervene within the time period set forth in the public notice of the proceeding.¹¹ Such petition should be filed not later than the time period set forth in the public notice¹² and must set forth with particularity the interest of the petitioner in the proceeding, how that interest will be affected by the outcome of the proceeding, and the specific aspects of the proceeding as to which the petitioner seeks to intervene.¹³

In certain licensing proceedings¹⁴ the Commission may find that a hearing is not in the public interest and will, prior to taking action on the application, so state in the Federal Register.¹⁵ This finding will in part depend upon whether members of the public have expressed much interest in the proposed action to the Com-

^{9.} At the discretion of the chairperson of the licensing board, a non-party may present a statement of views on any issue before any NRC proceeding. 10 C.F.R. § 2.715 (1982). See also supra note 49 and accompanying text.

^{10.} However, a licensing board determination in one proceeding that a person has sufficient interest in that proceeding to intervene should be persuasive authority to a licensing board in a subsequent licensing proceeding involving the same facility.

^{11. 10} C.F.R. § 2.714(a)(1) (1982). Public notice of the docketing and commencement of all NRC proceedings is given in the Federal Register and a copy of the license application placed in the Public Document Room of the Commission in Washington, D.C., and generally in the appropriate NRC regional office. 10 C.F.R. §§ 2.101, 2.104, 2.105 (1982). Prior to docketing and public announcement about an application for a construction permit or an operating license, the staff will make a preliminary review of the application, for completeness and form. 10 C.F.R. § 2.101(a)(2) (1982). The Commission may, as part of the preliminary review of the completeness of a construction permit application, in "selected" construction permit applications review the technical adequacy of the application as well. *Id.* The rule does not state the criteria the Commission is to use to determine when a construction permit case is appropriate for such review.

^{12.} See infra Part III(C) for a discussion of untimely intervention petitions.

^{13. 10} C.F.R. § 2.714(a)(2) (1982).

^{14.} E.g., licenses for facilities or for nuclear waste disposal and amendments to these licenses. 10 C.F.R. § 2.105(a) (1982).

^{15. 10} C.F.R. § 2.105 (1982).

mission.¹⁶ In proceedings where a hearing is not mandatory but depends upon the filing of a successful intervention petition, a special licensing board convenes for the limited purpose of deciding whether the petition should be granted. If the special board grants the petition, a second licensing board is established to conduct the hearing.¹⁷ Absent a request for a hearing by the applicant or any person whose interest may be affected by the outcome of the proceeding, the staff may issue an operating license.¹⁸

Standards for intervention are somewhat liberal. The Commission views intervention as a positive factor in the licensing process; intervenors contribute by helping ensure that the Commission will have a full record before making a decision and by raising issues that otherwise might not be raised.¹⁹

A. Standing

Under the doctrine of standing as of right, an intervening party must have an economic, property, or other interest that could be affected by the outcome of the proceeding.²⁰ However, the NRC may, consistent with section 189(a) of the AEA of 1954, establish reasonable regulations that have the effect of denying certain persons an automatic right to intervene in a licensing proceeding.²¹

Persons living, working, or owning land within the vicinity of a nuclear plant are generally granted standing. Petitioners living or working thirty to forty miles from a plant are also considered by the Commission to have sufficient interest in the outcome of a pro-

^{16.} Hence, parties seeking to contest a license or amendment to a license for which a hearing is not automatic should inform the Commission of their interest in the proceeding even before the application is docketed.

^{17.} Wisconsin Elec. Power Co., 8 N.R.C. 71, 73 (1978) (Point Beach Nuclear Plant, Units 1 & 2).

^{18. 10} C.F.R. § 2.105(e)(1) (1982).

^{19.} See Virginia Elec. & Power Co., 1 N.R.C. 10, 15 n.9 (1975) (North Anna Power Station, Units 1 & 2); Consolidated Edison Co. of New York, 8 A.E.C. 850, 853-54 (1974) (Indian Point Nuclear Generating Station, Unit 2).

^{20.} In ruling on a petition for leave to intervene, the Commission considers, among other things, the factors listed in 10 C.F.R. § 2.714(a)(1) (1982). See infra text accompanying notes 43-45.

^{21.} Business & Professional People for the Pub. Interest (BPI) v. Atomic Energy Comm'n, 502 F.2d 424, 428 (D.C. Cir. 1974). Since *BPI* was decided, the Commission has considerably liberalized the requirements for intervention, 44 Fed. Reg. 4,459 (1979), so the law that gave rise to the controversy in *BPI* no longer exists.

The nature of the interest affected must be specially pleaded; no interest will be presumed. Nuclear Eng'g Co., 7 N.R.C. 737, 743 (1978) (Sheffield, Ill. Low-Level Radioactive Waste Disposal Site). A party attempting to intervene must concretely demonstrate a potential for injury to its interest if the licensing proceeding has one outcome rather than another. *Id.*

ceeding to be granted standing.²² Sometimes the Commission recognizes purely economic interests as a basis for standing as of right. A petitioner who seeks to intervene on the basis of antitrust concerns may raise purely economic interests so long as the petitioner can demonstrate that economic injury will be the proximate result of the anti-competitive activity sought to be prevented by section 105 of the AEA of 1954.²³ The Commission has, however, fairly consistently denied standing to ratepayers whose only alleged interest in a proceeding is a general economic interest as a ratepayer.²⁴

The Supreme Court in *Duke Power Co. v. Carolina Environmental Study Group*²⁵ articulated the standing requirement for intervention as of right in NRC proceedings as follows: whether there has been an allegation of "such a personal stake in the outcome of the controversy as to assure that concrete adverseness which sharpens the presentation of issues upon which the court so largely depends for illumination of difficult constitutional questions."²⁶ The personal stake required includes both a "distinct and palpable injury" to the plaintiff²⁷ and a causal connection between the claimed injury and the challenged conduct.²⁸

In *Duke Power* the Court articulated its "but for" test of standing. The Court found potential environmental harm to plaintiffs from construction of a proposed nuclear power plant. However,

^{22.} See, e.g., Northern States Power Co., 6 A.E.C. 188, 190 (1973) (Prairie Island Nuclear Generating Plant, Units 1 & 2). In some proceedings, distances of 45 miles have been sufficiently close to grant standing. Virginia Elec. Power Co., 9 N.R.C. 54, 56 (1979) (North Anna Nuclear Power Station, Units 1 & 2). However, consumers of fish, produce, or meat products raised within 50 miles of the site do not have a sufficient basis for standing. Washington Pub. Power Supply Sys., 9 N.R.C. 330, 336 (1979) (WPPSS Nuclear Project No. 2). Nor is it a sufficient basis for standing that petitioners own but rent out a farm 10 to 15 miles from a proposed plant, even if petitioners visit the farm occasionally. Id. at 336-38.

^{23. 42} U.S.C. § 2135 (1976 & Supp. V 1981). Detroit Edison Co., 7 N.R.C. 583, 592-93 (1978) (Enrico Fermi Atomic Power Plant, Unit 2). For a discussion of the pleading requirements that are applicable for raising anti-trust issues, see Kansas Gas & Elec. Co., 1 N.R.C. 559, 576-77 (1975) (Wolf Creek Generating Station). The vitality of this portion of Kansas Gas is questionable. Regulation 10 C.F.R. § 2.714 was amended in 1979 to make intervention easier. 44 Fed. Reg. 4,459 (1979).

^{24.} Kansas Gas & Elec. Co., 6 N.R.C. 122, 128 n.7 (1977) (Wolf Creek Generating Station, Unit 1); Detroit Edison Co., 7 N.R.C. 473, 474-75 (1978) (Enrico Fermi Atomic Power Plant, Unit 2).

^{25. 438} U.S. 59 (1978).

^{26.} Id. at 72, citing Baker v. Carr, 369 U.S. 186, 204 (1962).

^{27.} Id. at 72, citing Warth v. Selden, 422 U.S. 490, 501 (1975).

^{28.} Arlington Heights v. Metropolitan Housing Dev. Corp., 429 U.S. 252, 261 (1977).

the controversy did not center on whether to grant a license to the plant. At issue was the constitutionality of a Congressionally developed insurance scheme that, inter alia, limited the liability of a holder of a utilization facility license and certain of its suppliers in the event of a major nuclear accident.²⁹ The Supreme Court addressed the causal connection between this insurance plan and the alleged injury that would result from construction of the nuclear power plant. The Court concluded that but for the existence of the Price-Anderson Act, the plant would not be built and that because of this "but for" causal connection between the Act and the construction of the plant, plaintiffs had established a sufficient causal link between the alleged injury and the challenged conduct.³⁰

If intervention is not granted as of right, it may still be granted as a matter of discretion. The principal factor the NRC uses to determine whether to grant intervention as a matter of discretion is the petitioner's ability to contribute to the development of a sound record.³¹ Among the factors that weigh against granting discretionary intervention are the availability of other means to protect the petitioner's interest, the extent to which the petitioner's interest will be represented by existing parties, and the extent to which the petitioner's participation will inappropriately broaden or delay the proceeding.³²

In an export licensing proceeding (such as for the export of a nuclear reactor), the standards for intervention are tighter than those for domestic licensing proceedings. An allegation of generalized harm from granting the license—harm that would affect a large number of people equally—may not form the basis for standing even though it would in a domestic licensing proceeding.³³ There is no statutory reason for having tighter intervention standards in export licensing proceedings. The standards instead apparently reflect a sentiment within the NRC that export licensing proceedings deal with matters of foreign affairs and are there-

^{29.} The Price-Anderson Act, 42 U.S.C. § 2210 (1976 & Supp. V 1981).

^{30.} Duke Power Co. v. Carolina Envtl. Study Group, 438 U.S. 59, 77-78 (1978).

^{31.} Detroit Edison Co., 7 N.R.C. 473, 475 n.2 (1978) (Enrico Fermi Atomic Power Plant, Unit 2).

^{32.} Portland Gen. Elec. Co., 4 N.R.C. 610, 616 (1976) (Pebble Springs Nuclear Plant, Units 1 & 2). The final factor noted, the effect of petitioner's intervention on the time to conduct the proceeding, is especially significant if without the grant of discretionary intervention the hearing would not be held. Tennessee Valley Auth, 5 N.R.C. 1418, 1422 (1977) (Watts Bar Nuclear Plant, Units 1 & 2).

^{33.} Edlow Int'l Co., 3 N.R.C. 563, 571-72 (1976); Ten Applications, 6 N.R.C. 525, 530-32 (1977).

fore none of the business of American environmental and public interest groups. Groups seeking to intervene in export licensing proceedings will have to draft their statements of interest in the proceeding with particular care to ensure that they specifically and thoroughly set forth the interests sought to be protected.

B. Representation

An intervenor may appear on his own behalf or be represented by counsel.³⁴ Although the rules may state that only lawyers can represent organizations, this so-called requirement is waived as a matter of course.³⁵ A person may not intervene and assert the rights of third persons who are not minors or under a legal disability,³⁶ but an incorporated environmental group has the right to intervene and represent its members who have an interest that will be affected.³⁷ There must, however, be a specific showing of a member's interest in the power plant.³⁸ Moreover, an organization that is a party to an NRC proceeding may not represent persons other than its own members in the absence of express authorization to do so.³⁹

C. Late Intervention

Whether intervenors who file their applications late are admitted to licensing proceedings is a frequent subject of litigation. The issue has come up so often as to raise some question about the limited circulation of notices of applications for NRC licenses and

^{34. 10} C.F.R. § 2.713(b) (1982). Offshore Power Sys., 2 N.R.C. 813, 815 (1975) (Manufacturing License for Floating Nuclear Power Plants). The requirements for admission of attorneys before the NRC and the Commission's standards of conduct for lawyers are set forth in 10 C.F.R. § 2.713 (1982).

^{35.} See, e.g., Metropolitan Edison Co., 7 N.R.C. 746, 748 (1978) (Three Mile Island Nuclear Station, Unit 2); Duke Power Co., 6 N.R.C. 642, 643 n.3 (1977) (Cherokee Nuclear Station, Units 1, 2 & 3).

^{36.} Detroit Edison Co., 7 N.R.C. 473, 474 n.1 (1978) (Enrico Fermi Atomic Power Plant, Unit 2); Tennessee Valley Auth., 5 N.R.C. 1418, 1421 (1977) (Watts Bar Nuclear Plant, Units 1 & 2).

^{37.} Public Serv. Co. of Indiana, 3 N.R.C. 328, 330 (1976) (Marble Hill Nuclear Generating Station, Units 1 & 2). See generally Sierra Club v. Morton, 405 U.S. 727 (1972).

^{38.} Allied-General Nuclear Serv., 3 N.R.C. 420, 422 (1976) (Barnwell Fuel Receiving and Storage Station). An organization seeking to represent the rights of specific members is advised to obtain letters of authorization from members who themselves have the requisite personal interest to support an intervention petition. An organization need not demonstrate that its membership voted on the specific contentions raised. Duke Power Co., 9 N.R.C. 146, 151 (1979).

^{39.} Long Island Lighting Co., 5 N.R.C. 481, 483 (1977) (Shoreham Nuclear Power Station, Unit 1).

the relatively brief time period—traditionally thirty to sixty days—after publication of such notice in the Federal Register before the deadline for filing.⁴⁰

By rule, the Commission has established five factors that the licensing board must consider in determining whether to allow an untimely petition to intervene.⁴¹ The factor that carries the greatest weight is a showing of good cause⁴² for the failure to file on time. The additional factors are the same factors considered in determining whether to grant a petition to intervene as a matter of discretion:43 the availability of other means for protecting petitioner's interests;44 the extent to which petitioner's interests will be represented by existing parties; the extent to which petitioner's participation might contribute to developing a sound record; and the extent to which petitioner's participation will broaden the issues or delay the hearing.45 A petition to intervene out of time must set forth its arguments in each of these areas and the licensing board will balance the various factors. In so doing, the board can permit intervention even if an acceptable reason for filing late has not been given, if the other factors merit such intervention.46 Further, if the petitioner has given a satisfactory reason for not filing on time, a lesser showing is needed to satisfy the other four factors.47

^{40.} At least 15 days advance notice of the hearing must be given after publication in the Federal Register (or 30 days in the case of an application for a construction permit). 10 C.F.R. § 2.104 (1982). For a case discussing the significance of Federal Register notice, see Houston Lighting & Power Co., 11 N.R.C. 7 (1980) (Allens Creek Nuclear Generating Station, Unit 1).

^{41. 10} C.F.R. § 2.714(a)(1) (1982).

^{42.} Gulf States Util. Co., 6 N.R.C. 760, 796 (1977) (River Bend Station, Units 1 & 2).

^{43. 10} C.F.R. § 2.714(a)(1) (1982).

^{44.} The Commission has held that one's interests are not protected by the availability of limited appearances, since limited appearances lack the participational rights of presentation of evidence and cross-examination. Duke Power Co., 9 N.R.C. 146, 150 (1979) (transportation of spent fuel from Oconee Nuclear Station for storage at McGuire Nuclear Station).

^{45.} This criterion poses a particular dilemma to intervenors: to the extent that a petitioner raises issues not raised by others, it broadens the issues and delays the proceeding. To the extent that it raises similar issues to those already raised by other intervenors, its interests could be represented by others who are already admitted to the proceeding. The delay factor can hurt a petitioner's chances of successfully being admitted to a proceeding if the intervention might result in substantial delay Detroit Edison Co., 7 N.R.C. 759, 762 (1978) (Greenwood Energy Center, Units 2 & 3).

^{46.} Virginia Elec. & Power Co., 4 N.R.C. 98, 107-08 (1976) (North Anna Power Station, Units 1 & 2).

^{47.} Wisconsin Pub. Serv. Corp., 8 N.R.C. 78, 83 (1978). In this case an adequate reason for not filing on time was the existence of confusing (and perhaps even mis-

D. Intervention by Government Agencies

A government agency may intervene as a full party in an NRC proceeding. An agency may also intervene as an "interested agency."48 Under the interested agency provision a government agency may, but need not, take a position as to whether the permit or license should be granted. It is not clear whether intervention is as of right for government agencies or whether there is a standing requirement. If a standing requirement does exist, it is limited to a determination of whether the agency is "interested." The only recorded case dealing with the right of a government body to participate in an NRC licensing proceeding as an interested government agency held that the scope of what constitutes sufficient interest is a broad standard, and permits, for example, a government agency in a neighboring state to intervene.⁴⁹ As a practical matter, government agencies have not been denied the right to intervene in a licensing proceeding on the ground that they are not interested.⁵⁰ In fact, the Commission stresses that it is always desirable to have a state intervene as a full party or as an interested state.51

An interested government agency has the same responsibilities and may have the same rights as any party to a proceeding. Although it need not state contentions, an interested government agency is bound by the same procedural rules as are full parties.52 It can appeal decisions of the licensing board,⁵³ introduce witnesses and evidence, cross-examine other witnesses, and file

leading) letters from the staff to a prospective pro se intervenor and the failure of the staff to promptly respond to communications from the petitioner about the proceeding. Id. at 81-82.

^{48. 10} C.F.R. § 2.715(c) (1982). This section was originally limited to "interested" states but was amended in 1978 to include counties and municipalities. 43 Fed. Reg. 17,802 (1978). See Project Management Corp., 4 N.R.C. 383, 392 (1976) (Clinch River Breeder Reactor Plant).

^{49.} Exxon Nuclear Co., 6 N.R.C. 873, 876 (1977) (Nuclear Fuel Recovery and Recycling Center).

^{50.} In testimony before Congress, NRC Commissioner Bradford could not recall a single situation where a state's intervention was not allowed. NRC Oversight: Limitations on Intervenors in Licensing Proceedings: Hearings before the Subcomm. of the House Comm. on Gov't Operations, 96th Cong. 2d Sess. 72 (1980).

^{51.} Public Serv. Co. of New Hampshire, 6 N.R.C. 535 (1977) (Seabrook Station, Units 1 & 2). This principle, presumably, is applicable to other units of government as well.

^{52.} Gulf States Util. Co., 6 N.R.C. 760, 768 (1977) (River Bend Station, Units 1 &

^{53.} Metropolitan Edison Co., 7 N.R.C. 39 (1978) (Three Mile Island Nuclear Generating Station, Unit 2).

pleadings.⁵⁴ If a government unit appears as a full party and raises certain contentions, it can also appear as an interested government unit on issues not raised by its own contentions.⁵⁵ It is not clear whether interested government units qua interested government units can raise issues not raised by any of the other parties. The regulations are silent on this point and no case has decided the issue.

E. Contentions

One of the most unusual aspects of NRC licensing proceedings is the contention requirement.⁵⁶ In advance of any licensing proceeding all intervenors must identify the issues or contentions upon which they seek to participate and state the basis of each contention.⁵⁷ The Commission's power to require contentions before a party may be admitted to a licensing proceeding has been upheld by the United States Court of Appeals for the District of

^{54. 10} C.F.R. § 2.715(c) (1982).

^{55.} Project Management Corp., 4 N.R.C. 383, 393 (1976). In view of this principle, government units appearing as parties should be careful about raising issues that are raised by other parties whose expertise or interest in the subject is greater than that of the government unit. The other party may be excluded from the hearing on the ground that since the government agency has raised the issue, the agency can adequately represent the interests of the excluded petitioner as well. The reasoning of this case is applicable to local and county units as well as states.

The Commission, however, has ruled in one case that a state cannot appeal issues it did not participate in during the hearing below. Pacific Gas & Elec. Co., 11 N.R.C. 447, 449 (1980) (Diablo Canyon Nuclear Plant, Units 1 & 2). In this licensing hearing, the state did not participate at all in the issues it challenged on appeal. (The appeals board did, however, allow the state the opportunity to file an amicus brief). If a government unit does present evidence or cross-examine witnesses on another party's contentions, it has "participated" in those issues during the hearings and should be permitted to appeal the issues.

^{56.} Contentions are important. In many instances, the scope of the hearings is governed by the contentions admitted. Theoretically, the licensing boards should exercise independent review, even absent specific contentions by intervenors. Gulf States Util. Co., 6 N.R.C. 760, 774 (1977) (River Bend Station, Units 1 & 2). In other words, as a legal matter it is the licensing board and not the staff that must determine that the major issues related to a nuclear power plant have been decided correctly. Public Serv. Co. of Indiana, 7 N.R.C. 313, 318 (1978) (Marble Hill Nuclear Generating Station, Units 1 & 2). In practice, however, few licensing boards venture far beyond the contentions submitted by intervenors.

No other federal regulatory agency has a contention requirement, although some of the other agencies require that an intervention petition set forth the basis of the petitioner's interest in the proceeding. For example, intervention petitions before the Federal Communications Commission must include a statement of any issues that the intervenor would like included within the hearing, in addition to issues already set forth by the Commission. 47 C.F.R. § 1.223(b) (1981).

^{57. 10} C.F.R. § 2.714(b) (1982).

Columbia Circuit.58 As noted above,59 an interested government agency need not state contentions; on the other hand, the government unit may, to a limited extent, be asked to identify the issues upon which it will participate at the hearing.60

A major source of controversy between intervenors and staff and the applicant is the degree of specificity necessary for contentions and the adequacy of the basis set forth for each contention. Often, prior to the special pre-hearing conference held to consider contentions, the staff will request a meeting with the intervenors in an attempt to stipulate about the admissibility of each intervenor's contentions. Such stipulations are not binding on a licensing board and may or may not also be entered into by the applicant. The applicant often attends these meetings, although intervenors need not allow the applicant to participate. Nor is there a requirement that intervenors consent to such a meeting with staff at all.

At these meetings the staff and the applicant will attempt to narrow the scope of the contentions by suggesting changes which, among other things, eliminate open-ended contentions.61 Staff also has a tendency to try to limit the scope of contentions that raise difficult questions or issues about which staff's technical consultants have not done research. The staff may also attempt to remove factual issues from contentions so that the contentions may be dealt with on a motion for summary disposition.⁶² Staff

^{58.} Business & Professional People for the Pub. Interest (BPI) v. Atomic Energy Comm'n, 502 F.2d 424, 428 (D.C. Cir. 1974).

^{59.} See supra note 55 and accompanying text.

^{60. 10} C.F.R. § 2.715(c) (1982). However, the language of § 2.715(c) makes clear that identifying such issues is not a requirement for admitting a government unit as an interested government unit to a licensing proceeding. Further, the pleadings of interested government units need not be as specific as is required for full parties. Section 2.714(b) of the rules requires parties to set forth prior to a special pre-hearing conference "a list of contentions which petitioner seeks to have litigated in the matter, and the bases for each contention set forth with reasonable specificity." Section 2.715(c) requires only that "the presiding officer may require such representative to indicate with reasonable specificity, in advance of the hearing, the subject matters on which he desires to participate." See Project Management Corp., 4 N.R.C. 383, 392-93 (1976) (Clinch River Breeder Reactor Plant).

^{61.} For example, if an intervenor submits a contention regarding accidents which contains a non-exhaustive list of examples, the staff will try to change the list to an

^{62. 10} C.F.R. § 2.749 (1982) provides that where there is no genuine, factual issue to be considered, any party may move for summary disposition of that contention. The standards for whether a party is entitled to summary disposition on the pleadings are those used by a court in a motion for summary judgment. Intervenors are advised in responding to summary judgment motions that they need not set forth all of their evidence in response to such motions but merely enough to clearly show the existence of genuine disputes about material facts. There has been some abuse of this process

(and the applicant) will use meetings with intervenors to learn as much as possible about the intervenors' case. These meetings also allow intervenors to learn about the types of objections to the issues they have raised that they can expect at the hearing.

A contention may be challenged by staff or the applicant as being an attack on a rule.⁶³ Such a challenge is also made in response to a contention that raises issues not covered by the Commission's rules. However, raising issues not covered by the rules does not constitute an attack on the rules themselves. In order for the licensing board to make the findings required by the AEA of 1954, it must sometimes consider special risks or harms not addressed by the rules.⁶⁴

There is no requirement that a petitioner plead any evidence in a valid contention. In reviewing the admissibility of a contention, the licensing board does not reach the merits of the contention. 65 However, a petitioner must plead some sort of minimal basis to indicate the potential validity of the contention. 66 Thus, intervenors must at least draft their contentions with the precision necessary to allow a determination to be made that the contention raises issues within the scope of the proceeding. 67

Normally, rejection of certain contentions by the licensing board may not be appealed until the licensing board has disposed

in the past, with the applicant or the staff attempting to circumvent the hearing process through the use of such pleadings as unsworn and unattested answers to intervention petitions as a basis for summary judgment. See Project Management Corp., 3 N.R.C. 430 (1976) (Clinch River Breeder Reactor Plant). Summary disposition has also been inappropriately used as a tactic by staff and applicants to force intervenors to set forth their entire case in response to motions for summary judgment. Although intervenors legally need only show that there are genuine disputed issues of fact, they are often forced to affirmatively prove their contentions in response to such motions.

^{63. 10} C.F.R. § 2.758 (1982) provides that rules may be challenged in a licensing proceeding only in special circumstances. Intervenors who raise issues in a licensing proceeding not covered by the rules are encouraged to institute a rulemaking proceeding, utilizing the Commission's rulemaking procedures, 10 C.F.R. § 2.802 (1982); see supra notes 230-31 and accompanying text. Before accepting such an invitation, intervenors should consider what effect such a rulemaking would have on the proceeding. Rulemakings are traditionally lengthy proceedings in which courts will grant a great deal of discretion to the agency. The Commission will rarely grant a stay of the licensing proceedings pending completion of the rulemaking proceeding.

^{64.} See Citizens for Safe Power v. Nuclear Regulatory Comm'n, 524 F.2d 1291, 1300 (D.C. Cir. 1975).

^{65.} Project Management Corp., 3 N.R.C. 430, 432 (1976).

^{66.} Mississippi Power & Light Co., 6 A.E.C. 423, 426 (1973) (Grand Gulf Nuclear Station, Units 1 & 2); Detroit Edison Co., 7 N.R.C. 381, 386-87, aff d, 7 N.R.C. 473 (1978) (Enrico Fermi Atomic Power Plant, Unit 2).

^{67.} Commonwealth Edison Co., 12 N.R.C. 683, 687 (1980) (Byron Nuclear Power Station, Units 1 and 2).

of the case.⁶⁸ However, rejection of an intervenor's petition for leave to intervene, request for hearing, or sole contention deprives that party of participation in the proceeding and is immediately appealable.⁶⁹ There may also be other limited circumstances where interlocutory review of such denials is appropriate, such as where probable and demonstrable environmental harm or deprivation of due process will occur if the contention is not heard during the licensing hearing in question.

F. Hearings on Intervention

In construction permit and operating license proceedings, special pre-hearing conferences are often held. These conferences are held to decide who shall be permitted to intervene upon which contentions, and to establish briefing and discovery schedules. To At or after the special pre-hearing conference the licensing board may on its own, or upon request of one of the parties, require parties whose interests are the same to consolidate the presentation of evidence, cross-examination, and even pleadings, To provided that the consolidation will not prejudice the rights of any party. Consolidation may include limiting examination and cross-examination to one representative. With respect to a government unit appearing as a full party and raising issues that are the same as another intervenor's concerns, the licensing board may consolidate the government unit with other parties as to those issues.

^{68. 10} C.F.R. § 2.730(f) (1982). Northern States Power Co., 8 N.R.C. 251, 252 (1978) (Tyrone Energy Park, Unit 1).

^{69. 10} C.F.R. § 2.714a (1982).

^{70. 10} C.F.R. § 2.751(a) (1982). The meetings must be open to the public, 10 C.F.R. § 2.751 (1982), and also must be transcribed, with a copy of the transcript placed in the local public document room. 10 C.F.R. § 2.750 (1982). Copies of the transcript may be purchased. *Id.* Historically, staff had provided in license and license amendment proceedings for a free transcript to be made available to intervenors. 10 C.F.R. § 2.750(c) (1982). However, this arrangement has recently been suspended by the Commission. 10 C.F.R. § 2.750 n.1 (1982). The procedure in which the Commission, in a licensing proceeding, would on request copy and serve without cost a party's testimony and related pleadings, 10 C.F.R. § 2.712(f) (1982), has also been suspended. *Id.* at n.1.

^{71. 10} C.F.R. § 2.715a (1982).

^{72.} Id.

^{73.} Care must be exercised in drafting contentions so that where there are differences in concerns between intervenors, they are made clear in the contentions.

^{74.} Some offices of state attorneys general may not permit other parties to appear on behalf of the state and some government offices are not permitted to represent private parties in an action. In such situations, consolidation of parties would not be appropriate. The NRC has recognized that the interests of municipalities are such

Acceptance of a contention by a licensing board is a good indication that a satisfactory resolution of the issues raised must be made in order for the licensing board to make the required statutory and regulatory findings. However, particularly when a contention is in a previously unexplored area for the Commission, the licensing board may require more information at the hearing about the legitimacy of the concern raised by the contention than it required when it admitted the contention.⁷⁵ Thus, even if a party's contentions have been admitted, the other participants are not necessarily bound to consider each contention if the party participates no further in the proceeding.

At the discretion of the licensing board, a non-party may make a limited appearance before a licensing proceeding on any issue. Limited appearance testimony can theoretically alert the licensing board or the parties to areas in which evidence may need to be sought, although the limited appearance statement is not itself evidence. Practically speaking, limited appearances accomplish little except to place on the record that a particular group supports or opposes a proposed plant.

IV REGULATORY OVERVIEW

Under the Atomic Energy Act of 195478 all persons possessing

that private parties cannot adequately represent them. Cincinnati Gas & Elec. Co., 10 N.R.C. 213, 216 n.4 (1979) (William H. Zimmer Nuclear Station), citing Nuclear Fuel Servs., 1 N.R.C. 273, 275 (1975) (West Valley Reprocessing Plant).

To the extent that a government agency participates in a proceeding or in a particular issue as an interested government agency, it may not be consolidated since rule 2.715a is limited to the consolidation of "parties." Further, such consolidation would thwart the interest served by having the government unit participate in the proceeding.

75. The Commission does not place a burden on an intervenor comparable to that placed on a civil litigant who must establish a prima facie case. Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, 435 U.S. 519, 554 (1978). At the same time, the Commission may properly refuse to consider a contention where the intervenor has raised an issue of a type never before considered by the Commission and, despite repeated requests by the licensing board for additional information regarding the bases for the contention, the intervenor has refused to provide any additional detail beyond the bald statement of the contention. *Id.* at 553-54.

76. 10 C.F.R. § 2.715(a) (1982).

77. See Iowa Elec. Light & Power Co., 6 A.E.C. 195, 196 n.4 (1973) (Duane Arnold Energy Center). The Commission has held that as a practical matter, a limited appearance is not a substitute for such rights of participation as the ability to present evidence and cross-examine witnesses. Duke Power Co., 9 N.R.C. 146, 150 (1979) (transportation of spent fuel from Oconee Nuclear Station).

78. 42 U.S.C. §§ 2011-2284 (1976 & Supp. V 1981). The AEA of 1954 replaced the

radioactive materials must obtain a license⁷⁹ issued by the NRC,⁸⁰ which prescribes the quantity and type of material that may be possessed. NRC licenses exist for the possession and use of byproduct, source, and special nuclear material.⁸¹

To operate a nuclear power plant, an applicant must obtain both a construction permit and an operating license.⁸² To modify

AEA of 1946, 42 U.S.C. §§ 1801-1819 (1976). That earlier act granted to the federal government a legal monopoly over the use of atomic power. Extensive hearings were held in 1953 before the former Joint Committee on Atomic Energy on the wisdom of developing commercial nuclear power. The Committee concluded, on the basis of the hearings, that the government monopoly on nuclear power should be ended in favor of allowing some private utilization of atomic energy. See Atomic Power Development and Private Enterprise: Hearings Before the Joint Comm. on Atomic Energy, 83d Cong., 1st Sess. (1953). The Joint Committee, in drafting the AEA of 1954, established a system where the government voluntarily ended its monopoly in exchange for total control (through licenses) of the use of radioactive material.

For one interpretation of the legislative history of the Atomic Energy Act, see Duke Power v. Carolina Envtl. Study Group, 438 U.S. 59, 63-64 (1978).

79. 42 U.S.C. § 2131 (1976).

- 80. Until 1974 the use of nuclear material was both regulated and promoted by the Atomic Energy Commission. With the Energy Reorganization Act of 1974, as amended, 42 U.S.C. §§ 5801-5891 (1976 & Supp. V 1981), the Atomic Energy Commission's promotional functions were transferred to the Energy Research and Development Administration (*Id.* at § 5801(b)) (now the Department of Energy) and the regulatory functions were assumed by the newly created Nuclear Regulatory Commission. As used herein "NRC" refers to both the Nuclear Regulatory Commission and the Atomic Energy Commission.
- 81. A "by-product" material is any radioactive material (other than special nuclear material) made radioactive in the process of producing special nuclear material. 42 U.S.C. § 2014(e) (1976 & Supp. V 1982); 10 C.F.R. § 30.4(d) (1982). "Source" material is uranium or thorium or a combination of the two materials, above a certain quantity. 42 U.S.C. § 2014(z) (1976); 10 C.F.R. § 40.4(h) (1982). "Special nuclear" material means plutonium, uranium 233, enriched uranium 233 or 235 or any other artificially, radioactively enriched material. 42 U.S.C. § 2014(aa) (1976); 10 C.F.R. § 70.4(m) (1982).
- 82. This two-step process is based in part upon the two-step process utilized in the Federal Communications Act of 1934 to license television and radio stations. 47 U.S.C. § 319 (1976). The Federal Communications Act is a source of analogies in situations where there is limited guidance under the AEA of 1954, although there is some limit to the Communications Act's usefulness for this purpose.

For a discussion about the requirements necessary to obtain a construction permit and an operating license, see generally Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, 435 U.S. 519, 525-27 (1978).

The two-step licensing process for nuclear power plants has come under attack from all quarters. Many intervenors object to it because it allows significant safety issues to be deferred until the operating license proceeding, where the chances of a neutral hearing are minimal in view of the sums of money already expended in construction. Many industry members are unhappy about the two-step scheme because it may require an applicant to commit to one design for a plant at the construction permit stage that it would like to modify during construction.

A Department of Energy task force on nuclear licensing recommended that the AEA of 1954 be amended to authorize the NRC to grant combined construction and

the design for a power plant or to continue to build a nuclear plant after the original construction permit, the applicant must secure an amendment to the original license.⁸³ In addition, a license may be suspended, revoked, or modified by the Commission at any time.⁸⁴

Construction permits and operating licenses for nuclear power plants may be issued pursuant to either section 103 or section 104 of the AEA of 1954.85 As a practical matter there are few real differences between these sections. Section 104 licenses are intended for experimental or research facilities and section 103 licenses are for commercial facilities. Although both licenses permit a nuclear power plant to carry on the same activities, a section 104 license is to be issued with as few regulatory controls as possible.86

Although section 104 covers only "medical therapy, research, and development licenses," sixty-four of seventy nuclear reactors operating in 1979 were licensed under section 104.87 Section 104 was adopted in 1954 by Congress to encourage the development of economically competitive commercial nuclear power.88 It pro-

operating licenses (COLs) and to provide for an expedited procedure for commencement of operation of those facilities which have obtained a COL. REPORT OF DOE TASK FORCE ON NUCLEAR LICENSING AND REGULATORY REFORM 24-25 (1982). There is merit to this combined license proposal. However, care must be exercised, so that:

- 1. Any environmental effects of construction and safety issues of operation are dealt with in a hearing before construction begins.
- 2. Procedures are developed to ensure that money spent on construction not be considered in the expedited operation stage (which, according to the task force, would not involve a public hearing).
- 3. Before the plant goes on line, it should be inspected in order to ensure that it has been constructed in total conformity with the approved design and Commission regulations, and that any new health and safety issues are discovered and dealt with.
 - 83. 10 C.F.R. § 30.37 (1982). See also 10 C.F.R. § 2.109 (1982).
 - 84. 10 C.F.R. § 2.206 (1982).
 - 85. 42 U.S.C. § 2131 (1976).
 - 86. 42 U.S.C. § 2134(b) (1976).
- 87. Northern Indiana Pub. Serv. Co., 10 N.R.C. 733, 744 (1979) (Bailly Generating Station, Nuclear I) (separate opinion of Comm'r Gilinsky). Commissioner Gilinsky has criticized the Commission's failure to convert § 104 facilities to § 103 facilities. A Commission determination to grant a license to a power plant under § 104 rather than § 103 was virtually unassailable. In the only reported case of a challenge to the propriety of the Commission utilizing § 104 to license a power plant, the court held that the scope of review of the appeal was limited only to whether the Commission acted reasonably and whether the facts supported the Commission's findings. Cities of Statesville v. Atomic Energy Comm'n, 441 F.2d 962, 969 (D.C. Cir. 1969). See Universal Camera Corp. v. NLRB, 340 U.S. 474, 490-91 (1951).
- 88. See Cities of Statesville v. Atomic Energy Comm'n, 441 F.2d 962, 970 (D.C. Cir. 1969).

vides that for facilities licensed under that section the Commission "shall impose the minimum amount of such regulations and terms of license as will permit the Commission to fulfill its obligations under this chapter."89

A section 103 facility is one to which the Commission has granted a commercial license upon a showing that the license is in the public interest and that the facility meets certain health and safety standards. Since 1970, due to an increasing concern for the safety of nuclear power plants, most plants have been licensed under section 103 of the AEA of 1954. Section 104's significance to nuclear power plants is limited today, especially in view of the 1970 amendment to that section. However, the section may have contributed to the pro-nuclear atmosphere that characterizes many NRC proceedings. Technically, those facilities that possess a section 104 license are still to be regulated as section 104

[W]henever the Commission has made a finding in writing that any type of utilization or production facility has been sufficiently developed to be of practical value for industrial or commercial purposes, the Commission may thereafter issue licenses for such type of facility pursuant to section 103.

42 U.S.C.S. § 2132 (Law. Co-op. 1978).

The test of the practical value of a nuclear power plant, necessary to receipt of an operating license, was a function of both the plant's technical feasibility and the competitiveness of the proposed nuclear power plant with conventional power plants. Cities of Statesville v. Atomic Energy Comm'n, 441 F.2d 962, 970 (D.C. Cir. 1969), citing Determination Regarding Statutory Finding of Practical Value, 31 Fed. Reg. 221 (1966).

90. 42 U.S.C. § 2133 (1976).

^{89. 42} U.S.C. § 2134(b) (1976). Although the Commission was to subject power plants licensed under § 104 to a minimum amount of regulation, it was still bound to set forth by regulation standards for issuing any license or permit under the AEA of 1954, based upon the need to protect the public safety. Power Reactor Dev. Co. v. International Union of Elec., Radio & Mach. Workers, 367 U.S. 396, 404 (1961). However, prior to a 1970 amendment to § 102 of the AEA of 1954 (42 U.S.C. § 2132), which determines whether a facility is to be licensed under §§ 103 or 104, the section set forth that the Commission could issue licenses pursuant to § 103 only on a showing that the facility was to be of practical value for commercial or industrial purposes. Former § 102 read as follows:

^{91.} For the text of former subsection (b) of § 104 of the AEA of 1954, see 42 U.S.C.S. § 2134 (Law Co-op 1978). Former subsection (b) provided for the issuance of licenses to research and development facilities "leading to the demonstration of the practical value of such facilities for industrial or commercial purposes." Id. The 1970 amendment to subsection (b), however, authorizes the Commission to issue licenses for § 103 facilities (industrial and commercial facilities) pursuant to § 104, if the facility's construction or operation has been licensed pursuant to § 104(b) prior to the amendment. 42 U.S.C. § 2134(b) (1976).

^{92.} See supra text accompanying notes 88-89. See also Cities of Statesville v. Atomic Energy Comm'n, 441 F.2d at 995 (Bazelon, C.J., concurring and dissenting). Bazelon's opinion contains a good critique of the practices of the Commission with regard to § 104 at the time.

facilities.⁹³ However, as a practical matter the Commission has not distinguished between section 103 and section 104 facilities.⁹⁴ Therefore, intervenors should be wary of any licensee argument that the licensee is entitled to less stringent standards because it possesses a section 104 license.

V Construction Permits

Of all the aspects of the nuclear licensing process, participation by intervenors in the construction permit stage has the greatest potential for impact. Applicants have invested less time and less money at this early stage so there is less momentum to overcome. Although no applicant has ever been denied a construction permit, intervenors have had a significant impact, as noted above, in ensuring that needed safety modifications are made and in some situations forcing the applicant to reconsider the wisdom of its proposed project.

An applicant seeks a construction permit prior to construction of a nuclear power plant. Staff review of an initial safety study, the Preliminary Safety Analysis Report (PSAR), precedes the construction permit process. To grant a full-fledged construction permit, the licensing board must first find that the applicant has met a number of standards, set out in the AEA of 1954 and the Commission's rules. An additional requirement before a construction permit or any other license can be granted is that all coowners of the proposed facility must be co-applicants for the NRC licenses for the facility. To hold otherwise, the Commission reasons, would put a cloud on significant areas of the Commission's regulatory authority.95 The licensing board must then make a safety finding that issuance of the license will be consistent with the AEA of 1954 and the Commission's rules. The staff may permit the applicant to engage in limited pre-construction site preparation activity even before the board completes construction permit findings, once permit proceedings have reached a certain stage.96 Moreover, even before submitting an application for a

^{93. 10} C.F.R. § 50.21(b)(1) (1982).

^{94.} A potential issue in any NRC proceeding today involving a facility that possesses a § 104 license is whether that license should be converted to a § 103 license.

^{95.} Public Serv. Co. of Indiana, 7 N.R.C. 179, 200-01 (1978) (Marble Hill Nuclear Generating Station, Units 1 & 2). This decision overrides the decision of the licensing board in Omaha Pub. Power Dist., 5 N.R.C. 437 (1977) (Fort Calhoun Station, Unit 2).

^{96.} Authorization for pre-construction activity is possible after the licensing board

construction permit, an applicant may seek Commission approval of a potential site for the reactor.

A. Preliminary Safety Analysis Reports (PSARs)

Before a request for a construction permit is permitted to be docketed, each applicant for a construction permit must file a PSAR. The PSAR contains preliminary designs of the reactor and emergency plans.⁹⁷ The PSAR is often summary; it may simply refer to plans for another facility which have previously been filed with the Commission.⁹⁸ By offering applicants the opportunity to seek approval for standardized features, the once-significant and time-consuming pre-docketing staff review⁹⁹ has become more cursory.

Outside of questions of the adequacy of the PSAR and the thoroughness of staff's review of the document, the review of PSARs has not been a fertile area for intervenors who oppose a nuclear reactor. Licensing boards have determined that the staff's discretion in review of the PSAR is virtually unfettered. 100

B. Early Site Review

Since 1977, in an effort to speed up the licensing process for nuclear power plants, the Commission has allowed utilities to seek review of the suitability of the proposed location of a nuclear power plant in advance of all other issues. ¹⁰¹ In this way a utility can "bank" a site, reserving the approved site for possible future use before actually seeking a construction permit. All utilization facilities licensed under section 103 of the AEA of 1954, and certain research facilities under section 104, are eligible for early site

has made the findings required by 10 C.F.R. § 51.52(b), (c) (1982) and all National Environmental Policy Act matters have been resolved.

^{97. 10} C.F.R. § 50.34 (1982).

^{98. 10} C.F.R. § 50.34 n.5 (1982).

^{99. 10} C.F.R. §§ 2.101-.102 (1982).

^{100.} See 10 C.F.R. pt. 50, app. M, N & O (1982). Licensing boards have held that staff review of the PSAR is not subject to licensing board jurisdiction. New England Power Co., 7 N.R.C. 271, 278-79 (1978) (NEP, Units 1 & 2). However, boards are sometimes willing to take certain steps in response to questions raised about staff review. For example, in the face of staff's unreasonable delay in submitting its environmental review, the board indicated it would be willing to suspend the proceeding and issue a ruling noting the unjustified failure of the staff to meet its deadline. Offshore Power Sys., 8 N.R.C. 194, 207 (1978) (Floating Nuclear Power Plants).

^{101.} Early site review is a regulatory extension of Potomac Elec. Power Co., 1 N.R.C. 539 (1975) (Douglas Point Nuclear Generating Station, Units 1 and 2), in which the applicant requested and obtained a partial initial decision on all site-related issues in the construction permit proceeding.

review.¹⁰² Intervenors must be vigilant about this growing trend of obtaining permission to construct a nuclear plant in a piecemeal way in order to minimize public scrutiny.

A Department of Energy task force has recommended an early site review process. The recommendation does not clearly indicate how the task force would alter the current early site review process, except that the task force would permit an applicant who had obtained a site permit to perform certain limited construction activities before seeking a combined construction permit-operating license. ¹⁰³ It is not clear whether the task force would combine the current limited work authorization proceeding. With the early site review proceeding. If so, the recommendation does not change existing practice much, since NRC approval for both a site and for limited work may be requested before seeking a construction permit.

In addition to the traditional issues of site appropriateness for construction and operation of a nuclear power plant, intervenors, at the early site review proceeding, may also question the meaningfulness of the early site review in light of subsequent developments and the fairness of an early site review to intervenors. Staff may decline to prepare and issue¹⁰⁵ a Site Report if early review would not be in the public interest. Factors the staff should consider include the likelihood that such early findings about the site would not retain their validity, the objections of government agencies to an early review, and the possible effect on the public interest that such an early, and sometimes conclusive, review would have. 106 Factors relevant to considering the continuing viability of the site review include the proposed length of time between site approval and projected submission of the full application for a construction permit, the projected demographic changes in the area, and the geographic volatility of the region. Finally, one effect on the public interest that should be considered is the ability of public interest groups and state or local units of government to adequately intervene in the site review proceeding if an early review is conducted. In any event, at the time of seeking a construc-

^{102. 10} C.F.R. pt. 50, app. G (1982).

^{103.} REPORT OF THE DOE TASK FORCE ON NUCLEAR LICENSING AND REGULATORY REFORM 28-29 (1982). See supra note 82.

^{104.} Limited work authorizations are discussed infra in Part IV(C).

^{105.} In view of the discretion that is afforded staff by the licensing board in its determination whether to issue its Staff Site Report, intervenors should confer often with the staff about staff's review.

^{106. 10} C.F.R. pt. 50, app. Q, para. 7 (1982).

tion permit for a site approved in advance, a review should be undertaken of the continuing vitality of the original site approval.

C. Limited Work Authorizations

Certain preliminary work may be done at a facility construction site even before the construction permit issues. Limited work authorizations are of concern to intervenors opposing a plant if the work may have its own environmental effects. Also, allowing the applicant to spend money and undertake site preparation begins to build momentum in favor of granting the entire construction permit.

A limited work authorization (LWA) may be granted in two steps to permit the applicant to engage in certain pre-construction activities. ¹⁰⁷ The Director of Nuclear Reactor Regulation may issue a first-step LWA (an LWA-1)¹⁰⁸ after the staff has completed a final environmental impact statement and the presiding officer in the proceeding has made the findings¹⁰⁹ required prior to the issuance of a construction permit and has determined that there is reasonable assurance that the proposed site is a suitable location for the size and type of reactor proposed in light of the health and safety considerations of the AEA of 1954 and of the Commission's regulations. ¹¹⁰ An LWA-1 permits the applicant to conduct preliminary activities such as creation of access roads, site preparation and excavation for construction, construction of ancillary support facilities (fences, transmission lines, etc.) and construction of non-safety-related facilities. ¹¹¹

The Director may issue the second-step LWA (an LWA-2) if the licensing board finds that "there are no unresolved safety issues relating to the additional activities that may be authorized pursuant to this paragraph that would constitute good cause for withholding" such additional authorization. The LWA-2 authorizes the applicant to install the foundations for safety-related facilities. 113

^{107.} For a discussion of the limited work authorization, see Public Serv. Co. of Oklahoma, 8 N.R.C. 102, 120-23 (1978) (Black Fox Station, Units 1 & 2).

^{108. 10} C.F.R. § 50.10(e)(1) (1982).

^{109.} See 10 C.F.R. § 51.52(b), (c) (1982).

^{110. 10} C.F.R. § 50.10(e)(1), (e)(2)(i), (e)(2)(ii) (1982).

^{111. 10} C.F.R. § 50.10(e)(1) (1982).

^{112. 10} C.F.R. § 50.10(e)(3)(ii) (1982).

^{113. 10} C.F.R. § 50.10(e)(3)(i) (1982); 10 C.F.R. § 50.10(e)(1) (1982).

D. Standards

Although standards exist that must be met by an applicant before it is entitled to a construction permit, the Commission has, as a practical matter, rendered these standards meaningless. It has never found that an applicant for a construction permit has failed to meet its standards. Nevertheless, an understanding of the necessary standards is important to intervenors for two reasons. Requiring the applicant to meet certain standards before receiving a construction permit forces the applicant and the staff to evaluate many features of the proposed facility, thus ensuring a more thorough review. In addition, understanding the standards better enables intervenors to resist ever-present attempts by staff and the applicant to shift the burden to intervenors of showing that the plant is unsafe. Thus, intervenors in NRC proceedings should be ever-mindful of the standards that must be met and should remind the applicant and the staff of these standards as appropriate.

To grant a construction permit for a nuclear power plant the Commission need merely find the application "acceptable." However, under the AEA of 1954 a nuclear power plant is considered a "utilization facility," and the Commission may impose additional requirements on plants it will license as utilization facilities by adding to the definition of utilization facility. Although the Commission's power to determine what constitutes a utilization facility is not unfettered, the courts normally apply a narrow standard of review to the Commission's determination, primarily inquiring whether the interpretation is consistent with previous Commission decisions and whether it bears a reasonable relationship to the language and purposes of the statute. In a challenge to the Commission determination that the definition of utilization facility included such equipment as the transmission lines from the reactor (which subjected that equipment to Com-

^{114. 42} U.S.C. § 2235 (1976 & Supp. V 1981); 10 C.F.R. § 50.23 (1982).

^{115. 42} U.S.C. § 2014(cc) (1976). The definition of a utilization facility in the AEA of 1954 includes any equipment or device, except a nuclear weapon, peculiarly adapted for making use of atomic energy in such amounts as to be of significance to the common defense and security, or in such manner as to affect the health and safety of the public.

^{116. 42} U.S.C. § 2014(v), (cc) (1976). The Commission has excluded nuclear reactors designed or used primarily for the production or formation of plutonium or uranium 233 from the definition of utilization facilities. 10 C.F.R. § 50.2(b) (1982). A "production facility" is, inter alia, a nuclear reactor used mainly for the formation of plutonium or U-233. 10 C.F.R. § 50.2(a) (1982). See also 42 U.S.C. § 2014(v) (1976). As used herein "utilization facility" and "nuclear power plant" are synonymous.

mission regulation), the First Circuit sustained the Commission finding on the basis that the finding was consistent with prior Commission interpretations and bore a reasonable relationship to the language and purpose of the AEA of 1954.¹¹⁷

By regulation, the Commission has established additional criteria that the applicant must meet in order to receive a construction permit.¹¹⁸ Although intervenors should be aware of these stan-

- 117. Public Serv. Co. of New Hampshire v. Nuclear Regulatory Comm'n, 582 F.2d 77 (1st Cir.), cert. denied, 439 U.S. 1046 (1978). See Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, 435 U.S. 519, 539 (1978), where the Supreme Court held that the Commission acted within its authority in determining that the environmental effect of the back-end of the nuclear fuel cycle must be considered as part of the analysis of whether to grant a construction permit.
 - 118. Some of these additional criteria are:
- a. The issuance of the permit must not be inimical to the common defense or to the health and safety of the public. 10 C.F.R. § 50.40(c) (1982); see 42 U.S.C. §§ 2133(d), 2134(c) (1976);
- b. The applicant must show that it is technically qualified to design and construct a nuclear plant. 10 C.F.R. § 50.40(b) (1982);
- c. All requirements of the National Environmental Policy Act (NEPA) must be met. 10 C.F.R. § 51.20 (1982);
- d. The applicant must take steps to assure that radiation exposure will be as low as is reasonably achievable. These steps include the applicant's submission, as part of its construction permit application, of preliminary information about its plans for keeping radioactive discharge in effluent "as low as is reasonably achievable." 10 C.F.R. § 50.34a (1982) (10 C.F.R. pt. 50, app. I (1982) is to be used for guidance).

This requirement is an attempt to carry out the general principle that all holders of NRC licenses should "make every reasonable effort to maintain radiation exposures, and releases of radioactive materials in effluents to unrestricted areas, as low as is reasonably achievable." 10 C.F.R. § 20.1(c) (1982). Part 20 of the regulations deals with radioactivity in effluents discharged to the environment and sets permissible doses, levels, and concentrations of radiation to the general public and to nuclear workers. For a case involving the adequacy of these standards, see Crowther v. Scaborg, 312 F. Supp. 1205 (D. Colo. 1970).

This requirement also enables the Commission to make the finding required by section 103(d), 42 U.S.C. § 2133(d) (1976), that the issuance of the license not "be inimical to the common defense and security or to the health and safety of the public," and the finding implicitly necessary under section 182, 42 U.S.C. § 2232(a) (1976), that issuance of the construction permit is consistent with the common defense and security and will adequately protect the health and safety of the public;

- e. When an applicant has not initially supplied all of the technical information required (such as that required by 10 C.F.R. §§ 50.34, 50.34a, 50.36, 50.36a (1982)) to complete the application and to support the issuance of a construction permit, the Commission may issue a construction permit if it finds that:
 - (1) The applicant has described the proposed design for the facility, including but not limited to the "principal architectural and engineering criteria for the design," and has identified the significant health and safety features of the plant. 10 C.F.R. § 50.35(a)(1) (1982);
 - (2) The applicant has agreed to provide any further information needed to complete the application. 10 C.F.R. § 50.35(a)(2) (1982);
 - (3) Unresolved safety issues have been identified and the applicant has estab-

dards, so far little litigation has ensued over their content.

Applicants have the burden of proving that their proposal meets the standards set out for a construction permit (or an operating license). Therefore, an intervenor in construction permit proceedings should not have to put on any evidence regarding a particular contention. As a practical matter, intervenors cannot just raise contentions and do nothing else. Although the actual burden placed on the intervenor is unclear, if an intervenor fails to participate in evidentiary hearings and if that intervenor's contentions do not raise what the licensing board considers to be serious matters, the board will probably dismiss the contentions. 119 The courts have held that in order for issues raised by intervenors to be considered, the intervenors must participate in the proceedings in a meaningful way. In Vermont Yankee, 120 the Supreme Court criticized intervenors who raised several contentions about the need to consider alternatives to construction of the power plant. The intervenors did not provide specifics about the nature of their objections. In sustaining the Commission's refusal to consider the intervenors' admitted contentions, the Court commented on the absence of further participation by the intervenors: "it is still incumbent upon intervenors who wish to participate to structure their participation so that it is meaningful, so that it alerts the agency to the intervenors' position and contentions."121 In Seacoast Anti-Pollution League v. Nuclear Regulatory Commission, 122 the court found that the agency had no obligation to investigate

lished a research program to resolve these questions. 10 C.F.R. § 50.35(a)(3) (1982); and

⁽⁴⁾ On the basis of (1), (2), and (3) above, there is reasonable assurance that unresolved safety issues can be resolved by the latest completion date specified in the construction permit, 10 C.F.R. § 50.35(a)(4)(i), and 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) (1982).

In practice, when the Commission staff finds an issue at the construction permit stage that raises difficult and unresolved questions, it often will declare the problem to be a safety issue to be solved on a generic basis during construction. This is one of the practices criticized by the Kemeny Commission. President's Comm'n on Three MILE ISLAND, REPORT OF THE PRESIDENT'S COMM'N ON THE ACCIDENT AT THREE MILE ISLAND (Oct. 1979).

^{119.} Boston Edison Co., 3 N.R.C. 156, 157 (1976) (Pilgrim Nuclear Generating Station, Unit 2).

^{120.} Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, 435 U.S. 519 (1978).

^{121.} Id. at 553.

^{122. 598} F.2d 1221, 1231 (1st Cir. 1979).

every alternative site raised by intervenors who themselves did not participate in the investigation of these alternative sites.

These cases may stand for nothing more than the proposition that when an intervenor asks a licensing board to consider contentions of a novel nature the intervenor must participate more actively than merely asserting the contention. 123 Meaningful participation is especially important when intervenors request a licensing board to "embark upon an exploration of uncharted territory,"124 as was the question of energy conservation as an alternative to nuclear power in the late 1960s and early 1970s. 125 In Seacoast Anti-Pollution League, 126 the intervenors had asked the Commission to consider alternative sites outside of the utility-applicant's service district after construction on the original site had begun. Intervenors will find that all contentions should be elaborated upon to ensure a meaningful review of the issues by staff and the Board.

Required Safety Finding

The definitiveness of the safety finding that the Commission must make to issue a construction permit to the applicant is a frequently litigated issue. The applicant or the staff will often challenge an intervenor's safety-related contentions proffered at the construction permit stage on the ground that the contentions raise issues more properly considered at the operating license stage. The Commission and applicants consistently maintain that because nuclear power is a developing technology and since the applicant must also obtain an operating license, a definitive finding of safety need not be made at the construction permit stage.

The seminal case on the definitiveness of the finding necessary at the construction permit proceeding is a 1961 United States Supreme Court case, Power Reactor Development Co. v. International Union of Electrical, Radio & Machine Workers, 127 which held that a definitive safety finding is not necessary at the construction permit stage. The Commission had issued to the appli-

^{123.} But see Boston Edison Co., 3 N.R.C. 156, 157 (1976) (Pilgrim Nuclear Generating Station, Unit 2) in which the Commission stated that if an intervenor does not participate in an evidentiary hearing its admitted contentions could be dismissed. See also supra note 119 and accompanying text.

^{124.} Vermont Yankee, 435 U.S. at 553.

^{125.} Even though intervenors lost the case, energy conservation as an appropriate alternative to building a nuclear plant is now considered in licensing proceedings.

^{126. 598} F.2d 1221, 1224-25 (1st Cir. 1979).

^{127. 367} U.S. 396, 407 (1961).

cant a section 104 construction permit for an experimental breeder reactor. Consistent with its general practice at that time, the Commission issued the permit on the basis of its approval of the general design proposed by the applicant. The Court of Appeals set aside the Commission's order and remanded the matter for a more definitive safety finding, analogous to that given at the operating license stage.¹²⁸

The Supreme Court, in reversing the lower court, began its analysis by noting that although section 104(b)¹²⁹ of the AEA of 1954 provides that some safety finding must be made at the construction permit stage, neither section 182 nor section 185¹³⁰ of the AEA of 1954 on its face indicates what safety findings must be made.¹³¹

The Court then examined Commission rule 50.35, which described the safety finding required to be made by the Commission as "to provide reasonable assurance that a facility of the general type proposed can be constructed and operated at the proposed location without undue risk to the health and safety of the public "132 The Court accorded great deference to the Commission interpretation¹³³ of the construction permit finding required by the AEA of 1954, particularly in view of the apparent acquiescence of the Joint Committee on Atomic Energy with the Commission's interpretation.¹³⁴ Finally, the Court found it significant that the design for this reactor was new and that indeed the entire field was "fast-developing and fast-changing." 135 The Court thus concluded that the Commission had, in granting a construction permit to the applicant, made the necessary safety findings at the construction permit stage that a reactor of the general type contemplated could be built and operated without undue risk to the public.

^{128.} International Union of Elec., Radio & Mach. Workers v. Atomic Energy Comm'n, 280 F.2d 645, 651-52 (D.C. Cir. 1960).

^{129. 42} U.S.C. § 2134(b) (1976).

^{130. 42} U.S.C. §§ 2232, 2235 (1976 & Supp. V 1981).

^{131.} Power Reactor, 367 U.S. at 406.

^{132.} Id. at 407.

^{133.} Id. at 402-03. The Commission stated that a "more severe safety test" would be imposed when construction of the reactor was completed because "[t]he degree of 'reasonable assurance'... for purposes of the provisional construction permit would not be the same as we would require in considering the issuance of the operating license." Id. (emphasis in text).

^{134.} Id. at 407-09. The Court treated the Committee's failure to change the Commission's interpretation as its tacit approval.

^{135.} Id. at 408.

The continuing vitality of the *Power Reactor* decision is a matter of some debate. The case has never been reversed or modified and its fundamental assumption, the existence of a definitive safety finding at the operating license stage, still remains. However, many of the other assumptions upon which the case was decided are no longer accurate. The applicable Commission regulation, 50.35, has been changed and now requires a Commission finding that, "taking into consideration the site criteria . . . the proposed facility can be constructed and operated at the proposed location without undue risk to the health and safety of the public."136 Furthermore, although there are continual changes in the nuclear power field, it is no longer the young and "fast-developing and fast-changing"137 field it was when the Power Reactor case was considered. It should also be noted that the permit at issue was one that was to be granted under section 104 of the AEA of 1954.138 Finally, the Atomic Energy Commission (which issued the permit) has since been abolished and its regulatory duties transferred to the NRC, reflecting Congressional concern about the inconsistency between the regulatory and promotional functions of the former Commission. 139

Deferring consideration of a matter until the operating license proceeding will as a practical matter deny intervenors much real hope of getting a fair hearing on that issue. This author's experience indicates that by the time of the operating license proceeding, an applicant will have spent in excess of one billion dollars and many work-years on a reactor. No government agency wants the responsibility as Justice Douglas stated, of being "the architect of a 'white elephant.' "140

VI **OPERATING LICENSES**

To operate a plant the applicant must apply for and receive an operating license. It is extremely unlikely that the Commission

^{136. 10} C.F.R. § 50.35(a)(4)(ii) (1982).

^{137.} See supra note 135.

^{138.} See supra text accompanying notes 86-94.

^{139. 42} U.S.C. § 2011 (1976). The Commission must now concede that issuance of the construction permit to the applicant in Power Reactor may have been a mistake. Shortly after the facility began operation it suffered a partial meltdown and has not operated since. See Morningside Renewal Council v. Atomic Energy Comm'n, 482 F.2d 234 (2d Cir. 1973), cert. denied, 417 U.S. 951, 952 (1974) (Douglas, J., dissenting).

^{140.} Power Reactor, 367 U.S. at 417 (Douglas, J. dissenting).

will refuse to grant an operating license, no matter how unsafe a proposed plant is; the NRC simply will not deny a utility that has invested hundreds of millions of dollars in a project the opportunity to operate its investment. However, intervention in operating license proceedings can still be of benefit. Intervention can ensure that the staff's review, required before a plant is allowed to go online, is thorough.

In applying for an operating license an applicant has three options. It can apply for a low-power operating license, a temporary operating license, or a full operating license.

A. Low-Power Operating Licenses/Temporary Operating Licenses

Requesting a low-power operating license is done more as a matter of politics than of policy. With a low-power operating license an operator is entitled to load fuel into the reactor, ¹⁴¹ begin operating the plant at about five percent of its rated capacity, ¹⁴² and conduct tests necessary to bring the plant to full power. The licensee may also file petitions with the Commission to amend the license to allow staged increases in the operating level of the plant. ¹⁴³ No special statutory authority exists for the issuance of low-power licenses. Instead, the Commission relies upon its general authority to issue operating licenses. ¹⁴⁴ Therefore, the applicant must meet the same standards in order to obtain a low-power license as to obtain any operating license. If any party opposes the applicant's request for a low-power testing license, the hearing officer must make the findings required in section 50.57(a) of the rules before it can issue such a license. ¹⁴⁵ Low-power operating

^{141. 42} U.S.C.A. § 2242(a) (West Supp. 1983).

^{142.} *Id*.

^{143.} Id. The Commission may grant a temporary operating license or an amendment to such a license upon finding that the requirements of the law are met, that there is reasonable assurance that the public health and safety and environment will be adequately protected during the period of temporary operation, and that denial of such a temporary operating license will result in delay between the dates of construction completion and the receipt of a final operating license. 42 U.S.C.A. § 2242(b) (West Supp. 1983). A utility will often, under color of a low-power operating license, bring its plant to within 90 percent of full power.

^{144. 42} U.S.C. § 2235 (1976 & Supp. V 1981); 10 C.F.R. § 50.57 (1982).

^{145. 10} C.F.R. § 50.57(c) (1982). An issue that will probably become the subject of litigation is the burden that must be met before a low-power operating license is issued. 10 C.F.R. § 50.57(c) provides that before a low-power operating license is issued, the presiding officer must allow other parties to the proceeding the opportunity to be heard on relevant contentions. Because low-power operating licenses entitle an applicant to actually operate a facility, albeit at a reduced level, most of the conten-

licenses have become popular since the accident at Three Mile Island's Unit 2, in order to minimize delays in starting up the reactor by enabling the applicant to begin operating the reactor gradually. Loading the fuel into the reactor brings it one step closer to coming on-line.

Pending final action by the Commission on an operating license, an applicant may petition the Commission for a temporary operating license.¹⁴⁶ The request may only occur at the completion of final staff report on safety and the report under NEPA, upon which the final environmental impact statement is to be based.¹⁴⁷ The temporary operating license is issued for a limited time (although it may be renewed), and may be revoked if the applicant fails to operate the plant in a manner consistent with the terms of the license or suspended if the applicant fails to proceed expeditiously to obtain its permanent operating license.¹⁴⁸

B. Standards for Full Operating Licenses

In order to obtain an operating license, the applicant must demonstrate that it has met certain standards. Operating license standards, like construction permit standards, have little significance, but the benefits to intervenors of a thorough knowledge of the standards are the same: the applicant and staff must make some effort to comply with the specific mandates set out in the standards.

To be entitled to an operating license an applicant must show that:

1. It has constructed the plant in conformity with its amended application for a construction permit;¹⁴⁹

tions that are at issue in the proceeding should be resolved prior to the issuance of low-power operating licenses since most of the same issues are raised at low levels of operation as at full power. The only issues that may not be appropriate to consider at a low-power operating license hearing are those issues from which the answers are to come from the fuel loading or low-power testing itself. Emergency preparedness plans, however, are appropriately required prior to issuance of the low-power operating license (which will enable the plant to operate in excess of five percent of its rated capacity), because it is itself an operating license. 10 C.F.R. § 50.47 (1982). Rule 50.47 requires the NRC to find, before any operating license is issued, that the onsite and offsite nuclear power reactor emergency preparations provide "reasonable assurance that adequate protective measures" can be taken in the event of an emergency, but does not distinguish between low-power and full-power operating licenses. The same emergency preparedness considerations exist at low power as at full power.

^{146. 42} U.S.C.A. § 2242(a) (West Supp. 1983).

^{147.} *Id*.

^{148. 42} U.S.C.A. § 2242(b), (c) (West Supp. 1983).

^{149. 42} U.S.C. § 2235 (1976 & Supp. V 1981); 10 C.F.R. § 50.57(a) (1982). This is

2. The plant has been constructed in conformity with the AEA of 1954 and the regulations of the Commission;¹⁵⁰

a requirement to which little attention has been given by intervenors in the past. The application consists not only of the written application itself (as amended) but those written documents as augmented by the testimony received at the construction permit hearing. The importance of the commitments made at the construction permit hearing is evidenced by the language of the construction permit itself, which requires that the plant be built in a manner consistent with the application as supplemented by the oral testimony. Typical of construction permits was the one for the proposed Bailly Nuclear Power Plant, Northern Indiana Pub. Serv. Co., NRC Docket No. 50-367 (1974), which requires the applicant to construct the plant "as described in the application and the amendments thereto (the application) filed in this matter by the applicant and as more fully described in the evidence received at the public hearing upon that application." Construction permit at paragraph 2 (construction permit granted May 1, 1974).

The oral testimony is also important, because it is relied upon by the licensing board to determine whether the applicant has met the standards necessary for issuance of a construction permit. The appeals board has described the role of the licensing board as determining, based on the record as a whole, whether the applicant has met the requirements for issuance of a construction permit pursuant to 10 C.F.R. § 50.35(a) (1982):

Whether every one of the first three of these findings will be possible in a given case obviously will depend in large measure upon whether the applicant has furnished the information explicitly required by either provision of 10 C.F.R. Part 50—such as Section 50.34(a) which specifies what must be set forth in the PSAR [Preliminary Safety Analysis Report] submitted as part of the permit application. If it has been supplied, the licensing board's task becomes one of determining whether, on the basis of the totality of the record before it (which will include not merely the revelations in the application itself but, as well, all other information elicited either during the prehearing review or in the course of the hearing itself), the fourth Section 50.35(a) findings can be made. Gulf States Util. Co., 6 N.R.C. 760, 777 (1977) (River Bend Station, Units 1 and 2).

Hence, if an applicant has deviated from its application, as supplemented by the information provided during the construction permit hearing without seeking an amendment to its construction permit, it has not met the standard set forth in section 185 of the AEA, 42 U.S.C. § 2235 (1976 & Supp. V 1981). That Congress attached no small importance to the commitments made in the construction permit is evidenced by the fact that for construction permits alone it has required that such statements be made under oath or affirmation. 42 U.S.C. § 2232(a) (1976).

The regulation corresponding to section 185 of the AEA of 1954 is 10 C.F.R. § 50.57 (1982). That regulation requires that before issuing an operating license the Commission must find that construction of the plant is "substantially completed, in conformity with the construction permit and the application as amended" It is not clear from the wording of the regulation whether the NRC interprets § 185 to require work on the plant to be substantially completed and done in conformity with the construction permit and the application as amended or to require that the plant be completed in substantial conformity with the construction permit and the application as amended. The latter reading of the rule is less plausible in view both of the comma following the term "substantially completed" and the fact that such a reading would put the regulation at odds with the statute.

150. 42 U.S.C. § 2235 (1976 & Supp. V 1981); 10 C.F.R. § 50.57(a)(1) (1982). The applicant must comply with the rules and regulations of the Commission existing at the time of the application for an operating license. Hence, if the Commission re-

- 3. The facility will operate in conformity with the amended application, the AEA of 1954, and the regulations;¹⁵¹
- 4. The proposed activities will serve a useful purpose proportionate to the quantities of special nuclear material or source material to be utilized;¹⁵²
- 5. It is properly equipped to observe and has agreed to observe safety standards established by rule to protect health and minimize danger to life or property;¹⁵³
- 6. It has made the appropriate arrangements for financial protection and indemnity;154
- 7. The issuance of the license is in accord with the common defense and security and will provide adequate protection for the health and safety of the public;155
- 8. With reasonable assurance, the activities can be conducted without endangering the health and safety of the public, and such activities will be conducted in compliance with NRC

quires new or modified structures, systems, or components, by way of regulation, the applicant must comply. 10 C.F.R. § 50.109 (1982). Not all such changes or modifications are imposed on applicants by regulation. The NRC Office of Inspection and Enforcement issues bulletins of developments of security or safety significance (I & E Bulletins) and requires construction permit or operating license holders to make certain modifications. The authority of the Office of Inspection and Enforcement to require such modifications is found at 10 C.F.R. § 1.64 (1982). I & E Bulletins must also be complied with by a construction permit holder before an operating license can be issued.

- 151. 42 U.S.C. § 2235 (1976 & Supp. V 1981); 10 C.F.R. § 50.57 (1982).
- 152. 42 U.S.C. § 2133(b)(1) (1976); 10 C.F.R. § 50.42(a) (1982).
- 153. 42 U.S.C. § 2133(b)(2) (1976).
- 154. 10 C.F.R. § 50.57(a)(5) (1982). For the requirements for financial protection and indemnity, see 10 C.F.R. pt. 140 (1982).
- 155. 42 U.S.C. § 2232(a) (1976); 10 C.F.R. § 50.57(a)(6) (1982). In Citizens for Safe Power v. Nuclear Regulatory Comm'n, 554 F.2d 1291, 1295 (D.C. Cir. 1975), the court held that where the Commission found that the requirements of NEPA and the requirements and regulations of the AEA of 1954 were satisfied, the Commission did not err in not explicitly stating that it weighed the risks and the benefits of the plant. Because of the unusual facts of the appeal, Citizens for Safe Power is of limited applicability in other proceedings. For example, the petitioners in Citizens stipulated, inter alia, that the plant had been built and would operate in conformity with the AEA of 1954 and the regulations, and that the plant's operation would not pose substantial health and safety risks to the public. Id. at 1295-96. The petitioner's only contention on appeal was one of procedure: that the determinations of "reasonable assurance" concerning public health (10 C.F.R. § 50.57(a)(3)) and "not inimical" to public security (10 C.F.R. § 50.57(a)(6)) were not made properly. Id. at 1298. The court rejected the view that a facility which meets the requirements of the AEA of 1954 and of the regulations automatically satisfies the "reasonable assurance" and "not inimical" tests; thus, an operating license would not be issued without a weighing of risks and benefits under NEPA. Id. at 1299.

regulations;156

- 9. It has filed such additional information as is necessary to bring its original application up to date;¹⁵⁷ and
- 10. Good cause has not been shown why issuance of the license would be contrary to the provisions of the AEA of 1954. 158

There is no requirement that an operating license hearing be held. It is held only if a petitioner files a successful intervention petition or if the Commission determines that such a hearing is in the public interest.¹⁵⁹

Operating licenses specify both conditions and a maximum term. The operating license must contain those conditions identified in section 50.54 of the rules. 160 Further, the license is for a limited duration, not to exceed forty years. 161

Practically speaking, once a plant is completed, the NRC will not deny it permission to operate. However, the public scrutiny afforded to a vigorously contested operating license proceeding will prompt the applicant to construct the facility more carefully. Faults in construction may delay issuance of the operating license

^{156. 10} C.F.R. § 50.57(a)(3) (1982). This regulation apparently constitutes the administrative interpretation of section 185 of the AEA of 1954. The Court of Appeals for the District of Columbia in Nader v. Nuclear Regulatory Comm'n, 513 F.2d 1045, 1052 (D.C. Cir. 1975), stated that this administrative interpretation of the AEA of 1954 was "squarely sustained" by the Supreme Court in *Power Reactor*, 367 U.S. at 406-16. Contrary to the appellate court's conclusion, the Supreme Court did not sustain this administrative interpretation. *Power Reactor* dealt with construction permits (not operating licenses) and with another regulation (10 C.F.R. § 50.35), which applies to construction permits rather than operating licenses. In discussing the construction permit regulation the court noted only that there was general agreement between the parties to that controversy about the findings that must be made for the issuance of an operating license. 367 U.S. at 407. Whether this interpretation is consistent with the statute was not brought into issue by the parties and the Supreme Court did not decide it.

^{157. 42} U.S.C. § 2235 (1976 & Supp. V 1981); 10 C.F.R. § 50.55(d) (1982).

^{158. 42} U.S.C. § 2235 (1976 & Supp. V 1981).

^{159. 42} U.S.C. § 2239(a) (1976); 10 C.F.R. § 2.102 (1982). The determination of the need for a hearing in the public interest is to be made only after the application for a license is made. Carolina Light & Power Co., 11 N.R.C. 233, modified, 11 N.R.C. 514 (1980) (Shearon Harris Nuclear Power Plant, Units 1, 2, 3 & 4).

^{160. 10} C.F.R. § 50.54 (1982).

^{161. 42} U.S.C. § 2133(c) (1976); 10 C.F.R. § 50.51 (1982). The time period for a nuclear power plant generally commences with the issuance of the construction permit rather than the operating license. 10 C.F.R. § 50.51 states that the time period for which the license will be issued may be specified in the construction permit.

No commercial nuclear power plant yet has operated for as long as 40 years. Twelve nuclear plants received their provisional operating licenses and four received their full-term licenses during the 1960s. 2 NUCLEAR REGULATORY COMMISSION, PROGRAM SUMMARY REPORT, No. 1, NUREG 0380 1-2 (Jan. 20, 1978).

until corrected and could cast the applicant in an unfavorable public light.

VII LICENSE AMENDMENTS

A. Construction Permit Amendments

After a construction permit issues and before the applicant seeks an operating license, certain events may necessitate an amendment to the construction permit. The expiration of the latest completion date of a construction permit is one such event. 162 In addition, modifications in the design of a plant should (but often do not) form the basis for a construction permit amendment. Regardless of the context, the sufficiency of an application includes both legal and substantive components, both of which should be considered by intervenors. To be legally sufficient, an application must be in the proper form and make all the required statements. 163 To be substantively sufficient, the applicant must supply all the necessary information that is required in its application for an extension of a license. 164

Intervenors can play an important role in ensuring that new developments are fully considered in license renewal proceedings, that modifications to the design of a plant are sought in the form of license amendments, and that the proposed amendments are thoroughly reviewed by the staff and the licensing board. The following discussion considers four frequently encountered topics in construction permit amendment proceedings.

When Construction Permit Amendment Proceedings Should Be Held

a. Expiration of Original Construction Permits

(1) Generally

Construction permits are required to state a latest completion date for the facility. ¹⁶⁵ On that date the construction permit expires, all rights the utility possessed under the construction permit are forfeited, ¹⁶⁶ and the utility must apply for an amendment to its

^{162. 42} U.S.C. § 2235 (1976 & Supp. V 1981); 10 C.F.R. § 50.55(b) (1982).

^{163. 10} C.F.R. §§ 50.90, 50.91 (1982). See generally 10 C.F.R. §§ 2.101, 50.30, 50.33, 50.34, 51.20 (1982).

^{164.} Id.

^{165. 42} U.S.C. § 2235 (1976 & Supp. V 1981); 10 C.F.R. § 50.55(a) (1982).

^{166. 42} U.S.C. § 2235 (1976 & Supp. V 1981); 10 C.F.R. § 50.55(b) (1982).

construction permit. A permit extension proceeding is important to ensure that changing events since the issuance of the initial construction permit are considered. Also, for those facilities for which a construction permit has been granted but little construction has taken place, the permit extension proceeding is an appropriate forum for reconsidering the wisdom of the plant's construction.

Section 185 of the AEA of 1954 provides that the Commission may, upon a showing of "good cause," extend the permit, but no definition of good cause is given. 167 Section 50.91 of the rules, 168 which governs license amendments, including extending the latest completion date, sheds some light on the issue. It provides that in deciding whether to issue an amendment the Commission shall be guided by the same considerations that govern the initial issuance of a construction permit. Hence, what constitutes good cause at the construction permit proceeding—the amendment cannot be issued without the required findings being made by the Commission, as set forth in sections 103(d) and 182 of the AEA of 1954 and section 50.35(a) of the rules. 169

(2) The Timely Application Rule

An unresolved question is whether a utility, upon filing a timely application for extension of the latest completion date of the construction permit, is entitled to continue construction on the plant pending final action by the Commission on the utility's application. The NRC apparently takes the position that a timely application extends the date of the original permit until final action on the application by the agency. According to regulation 2.109, if an application for renewal of a license has been filed at least 30 days prior to the expiration of the existing license, that license will continue in effect until the new application has been finally determined. The NRC position is based upon section 9 of the Administrative Procedure Act, which provides: "When the licensee has made timely and sufficient application for a renewal or a new license in accordance with agency rules, a license with reference to an activity of a continuing nature does not expire until the appli-

^{167.} Id.

^{168. 10} C.F.R. § 50.91 (1982).

^{169. 42} U.S.C. §§ 2133(d), 2232 (1976); 10 C.F.R. § 50.35(a) (1982).

^{170. 10} C.F.R. § 2.109 (1982).

cation has been finally determined by the agency."171

Although the validity of section 2.109 has never been challenged, its counterpart rule, section 30.37 (for other licenses issued by the Commission), has.¹⁷² In *Illinois v. Nuclear Regulatory Commission*, ¹⁷³ plaintiff questioned the Commission's reliance on the timely application rule. The applicant operated a low-level nuclear waste disposal site. The site was first licensed in 1967 and an application for renewal of its license was submitted in 1968. The applicant continued operation at the site under color of its prior license by virtue of section 30.37(b).¹⁷⁴ Nine years later, when the complaint was filed, the Commission had still not acted on the operator's application. The plaintiff contended that the Commission's failure to act on the renewal application violated the AEA of 1954 and abused the discretion of a duty owed plaintiff by the NRC.¹⁷⁵

After suit was filed, the NRC began to review the application. The site, having reached its licensed capacity, stopped accepting additional waste pending review of an application to expand the site. The court found the case was moot and did not rule on the validity of rule 30.37.¹⁷⁶

Both section 9 of the Administrative Procedure Act and section 2.109 of the Commission's rules are restricted to activities "of a continuing nature." Neither provision makes clear what activities of a continuing nature are. Although case law suggests that such activities include the ability of an applicant operating under temporary authority to continue its activities pending review of an application for a permanent license, 178 the courts provide no clear answer to the question of when an activity is one of a continuing

^{171. 5} U.S.C. § 558(c) (1976).

^{172. 10} C.F.R. § 30.37(b) (1982). Section 30.37(b) is essentially the same as section 2.109 except that it is not limited to activities of a continuing nature.

^{173.} No. 77 C 4190 (N.D. Ill. June 16, 1978).

^{174.} Memorandum in Support of Plaintiff's Motion for Summary Judgment at 2 (Mar. 10, 1978) (Illinois v. Nuclear Regulatory Comm'n, No. 77 C 4190 (N.D. Ill. June 16, 1978)).

^{175.} Id. at 4.

^{176.} Illinois v. Nuclear Regulatory Comm'n, No. 77 C 4190 at 4-5 (N.D. Ill. June 16, 1978).

^{177. 5} U.S.C. § 558 (1976); 10 C.F.R. § 2.109 (1982).

^{178.} The leading case is Pan-Atlantic S.S. Corp. v. Atlantic Coast Line R.R., 353 U.S. 436 (1957). In that case the majority held that under the Administrative Procedure Act a freight carrier granted temporary operating authority could continue its activities while the Interstate Commerce Commission reviewed its application for permanent authority. See also County of Sullivan v. Civil Aeronautics Bd., 436 F.2d 1096 (2d Cir. 1971).

nature. Resolution of the question may turn on the factual circumstances of each case: the relative harm to the procedural rights of parties opposing a particular application and any potential environmental harm from allowing continued construction, balanced against the harm to the applicant of halting construction pending completion of review of the application. Potentially relevant considerations include how far construction has progressed, whether construction is currently taking place, and the speed with which the agency is acting on the petition.

Few cases discuss what activities are *not* of a continuing nature. One case, however, suggests that an activity which cannot by its nature continue indefinitely is not one of a continuing nature. The Fifth Circuit, in affirming the Army Corps of Engineers' denial of the extension of a landfill permit in *Bankers Life & Casualty Co. v. Callaway* 179 stated:

A possible alternative ground for our holding is that filling land is not an activity of a continuing nature, but is instead a project that will end as soon as all the land is filled in. Radio broadcasting, in contrast, could conceivably go on indefinitely. Since section 558(c) applies only to activities of a continuing nature, it would not extend [the applicant's] rights under the fill permit. 180

Bankers Life must be contrasted with a district court decision in which the court held that an activity is of a continuing nature if authority to conduct the activity has not been revoked during its original period—that is, if it is still a valid activity at the time the extension application is filed.¹⁸¹ As already mentioned, the Commission deems an application timely under both sections 2.109 and 30.37 of the rules if it is filed at least thirty days prior to expiration of the existing license. 182 Since the NRC normally takes much longer than thirty days to decide whether a license should be granted, the thirty-day period is insufficient in most cases to protect the rights of intervenors from the prejudice that may occur from allowing an applicant to continue construction while the application is being reviewed. As a result, the NRC rule as applied may violate section 9 of the Administrative Procedure Act, which requires agencies to decide applications for licenses as soon as possible and protects the public from any ill effects of continued

^{179. 530} F.2d 625 (5th Cir. 1976), cert. denied, 429 U.S. 1073 (1977).

^{180.} Id. at 634 n.13.

^{181.} Navajo Freight Lines v. United States, 320 F. Supp. 318, 321 (D. N.M. 1970).

^{182.} See supra text accompanying notes 170-71 and note 172.

activity pending review.183

b. Design and Other Modifications: When an Amendment Should Be Sought

Although the AEA of 1954 and the regulations are not explicit about the circumstances under which an amendment to a construction permit should be sought, they do afford some guidance. Section 189 of the AEA of 1954, which governs amendments to construction permits, states only that public notice may be dispensed with when an amendment to a construction permit does not involve a significant hazards consideration. Therefore, section 189 contemplates that construction permit amendments must be sought even when a modification involves

183. By allowing applicants to continue construction or operation while their license renewal application is pending, there is little incentive for applicants to have the hearing proceed expeditiously or to submit their applications more than 30 days in advance of the expiration of the existing license. An example of such abuse is the one cited above, involving the low-level nuclear waste facility that operated with an expired permit for almost 10 years by virtue of the timely application rule. See supra text accompanying notes 173-75. A current example is the UCLA research reactor. On February 28, 1980, 30 days before the expiration of its existing license (the last day to submit an application for renewal), the Regents of the University of California applied to the Commission for renewal of its license to operate the reactor, located on the UCLA campus. The Regents of the Univ. of California, No. 50-142 (1980). See 45 Fed. Reg. 28,028 (1980) for the notice of this renewal application. The UCLA reactor has been allowed to continue in operation while the licensing proceeding, now in its third year, continues. The University continues to drag its feet, even subjecting itself to rare criticism from a licensing board for its recalcitrance in failing to provide timely discovery to intervenors. The Regents of the Univ. of California, No. 50-142 (Dec. 27, 1980), (Mar. 10, 1981), (May 29, 1981) (unpublished orders).

Alternatives to address this problem include requiring applicants to submit applications for license renewal further in advance than 30 days. A second option is to limit the scope of the timely application rule so that if a hearing proceeds beyond the expiration date of the license and the expiration is occasioned by the applicant, the applicant may not avail itself of the timely application rule. A third option is to limit the timely application rule to delays caused by the NRC.

184. 42 U.S.C. § 2239 (1976); 10 C.F.R. § 50.58 (1982). In the only NRC proceeding to consider the issue of when a construction permit amendment exists, NRC Commissioner Bradford's dissent notes that the language of § 189 of the AEA of 1954 is such that even when minor deviations from the construction permit exist, it is necessary to seek an amendment to the construction permit:

Section 189 upon petition requires a hearing on a CP [construction permit] amendment even when a finding has been made that no significant hazards exist. This indicates a Congressional intent that even minor deviations from the CP [construction permit] which were not significant to safety would require a license amendment.

Northern Indiana Pub. Serv. Co., 10 N.R.C. 733, 754 (1979) (Bailly Generating Station, Nuclear 1) (dissenting views of Comm'r Bradford). 185. 42 U.S.C. § 2239(a) (1976).

no significant hazard. In practice, neither the NRC staff nor applicants take this requirement seriously where the applicant proposes a design change. Of the eighty-eight construction permits outstanding in 1979,¹⁸⁶ no construction permit amendment had been sought for a design change; nor, apparently, did the staff ever insist that an amendment for a design change be sought.¹⁸⁷

The Commission has read narrowly the requirement that an applicant seek a construction permit amendment, deeming it necessary to seek one only in the face of a major structural or design change. This Commission interpretation was recently twice rebuffed by the courts. In an unpublished opinion, *Illinois v. Nuclear Regulatory Commission*, 188 the Court of Appeals for the District of Columbia reversed an NRC determination that a utility proposal to alter the length of the foundation piles upon which the plant would rest did not necessitate a construction permit amendment. 189

In the only court decision to date that attempts to establish standards for when a proposed change requires an amendment, Sholly v. Nuclear Regulatory Commission, 190 the court held that an NRC order which authorized the operators of the crippled Unit 2 of the Three Mile Island Nuclear Generating Station to vent radioactive gases from the reactor containment building was an amendment to its operating license within the scope of section 189(a) of the AEA of 1954. The court determined that the NRC order amounted to an amendment because it granted the licensee authority to do something it otherwise could not have done under its existing authority. 191 More generally, the court indicated that any significant change in the operation of a power plant is a change

^{186.} Northern Indiana Pub. Serv. Co., 10 N.R.C. at 735.

^{187.} Id. Staff often find out in haphazard ways about design modifications that the applicant has made. They sometimes learn of modifications during routine inspections or at operating license proceedings, and are sometimes informed of the modifications by the applicant—after the changes have been made. Id.

^{188.} No. 80-1163 (D.C. Cir. July 1, 1981) (per curiam).

^{189.} Id. at 1. The Commission had held that the proposed shift from the use of long foundation piles to short piles was not a change for which a construction permit amendment need be sought because the change was merely the resolution of an issue left open at the time of the issuance of the construction permit. Although the Court of Appeals concluded that the change amounted to the type of modification for which Congress contemplated the seeking of an amendment and the holding of a hearing on the subject, id., the Court noted that "neither the Commission nor the courts have ever delineated precisely the nature of a change requiring hearing [sic] under section 189(a) . . . " Id. at 4.

^{190. 651} F.2d 780, 790-91 (D.C. Cir. 1980), cert. granted, 451 U.S. 1016 (1981).

^{191.} Id. at 791.

requiring an amendment. 192 The reasoning in this case applies both to construction permit and to operating license amendments. 193

Scope of Construction Permit Amendment Proceedings

Licensing boards have asserted several times that they may not consider matters beyond those embraced by the notice of hearing published in the Federal Register for a particular proceeding. 194 If the staff has written the notice of hearing and will participate as a partisan in the hearings, this interpretation of the scope of the hearing is inappropriate; it is comparable to a party in litigation asking the opposing party to decide a motion. On the other hand, if the Commission writes the notice of hearing, a licensing board may be without power to consider issues beyond its scope. However, if the notice is drafted so that it would deprive the licensing board of an opportunity to hear all those matters necessary to determine whether an applicant is entitled to a license or permit or amendment, the licensing board should decline to issue the permit. In practice, it is unlikely that a licensing board would take such a strong stand against the Commission. 195

3. When Construction Permit Amendment Hearings Must Be Held

The D.C. Circuit has seemingly settled the issue of whether a hearing for an amendment to a construction permit must be held if one is requested. In Brooks v. Atomic Energy Commission, 196 the Commission, without notice or opportunity for a hearing, extended construction permits for the nuclear plants in issue. The court reversed the Commission and ordered a hearing on the issue of construction permit extensions, rejecting the argument that section 189(a) of the AEA of 1954 permits the Commission to dispense with hearings when it determines there is no significant

^{192. &}quot;Congress apparently contemplated that interested parties would be able to intervene before any significant change in the operation of a nuclear facility." Id.

^{193.} See the discussion of Operating License Amendments, infra notes 200-04.

^{194.} Portland Gen. Elec. Co., 9 N.R.C. 287, 289-90 n.6 (1979) (Trojan Nuclear Plant). See also Northern Indiana Pub. Serv. Co., 12 N.R.C. 558, 565 (1980) (Bailly Generating Station, Nuclear 1) (construction permit extension proceeding).

^{195.} If a licensing board does decline to consider an issue because it holds the issue to be beyond the scope of the hearing, intervenors could petition the Commission or ask the licensing board to request that the Commission amend the notice of hearing so that the additional issues may be heard at the licensing hearing.

^{196. 476} F.2d 924, 925 (D.C. Cir. 1973).

hazards consideration.¹⁹⁷ The court's holding requires that a hearing be held upon demand of any interested person: "The language of this section clearly seems to require that the Commission grant a hearing upon request of any interested person in a proceeding amending a construction permit." The court reasoned that the legislative history of section 189(a) indicates a Congressional intent not to do away with the hearing except in the absence of such a request.

B. Operating License Amendments

From time to time operating licenses are amended.²⁰⁰ The regulations governing license amendments, 10 C.F.R. §§ 50.90-.91, are of no assistance in determining when an operating license amendment must be sought. However, elsewhere in the regulations²⁰¹ a licensee is granted permission to make changes or conduct tests and experiments without seeking a license amendment in only two narrow circumstances:

- 1. To make facility or procedural changes set forth in the safety analysis report; and
- 2. To conduct experiments not described in the preliminary safety analysis report.

All other modifications (including operating license amendments) require "prior Commission approval."²⁰² Further, even the two changes detailed above require prior Commission approval if the change or test involves a change in the technical

^{197.} Id. at 926-28. Section 189 reads in pertinent part:

In cases where such a construction permit has been issued following the holding of such a hearing, the Commission may in the absence of a request therefor by any person whose interest may be affected issue an operating license or an amendment to a construction permit or an amendment to an operating license without a hearing, but upon thirty days' notice and publication once in the Federal Register of its intent to do so. The Commission may dispense with such thirty days' notice and publication with respect to any application for an amendment to a construction permit or an amendment to an operating license upon a determination by the Commission that the amendment involves no significant hazards consideration

⁴² U.S.C. § 2239(a) (1976). See also 10 C.F.R. § 50.58 (1982).

^{198.} Brooks, 476 F.2d at 926.

^{199.} Id. at 927.

^{200.} The standards that govern when an operating license amendment is to be granted are the same as those which govern the initial construction permit issuance, "to the extent applicable and appropriate." 10 C.F.R. § 50.91 (1982).

^{201. 10} C.F.R. § 50.59(a)(1) (1982).

^{202.} Id.

specifications in the license or an unreviewed safety question.²⁰³

Any change, test, or experiment made at a facility for which a licensee has not sought a license amendment must be recorded by the licensee and attached to a safety evaluation that substantiates that the test or experiment does not involve an unreviewed safety question. These records are submitted at least annually to the NRC regional office.²⁰⁴

Controversy surrounds a sentence of section 189(a)²⁰⁵ of the AEA of 1954 which pertains to license amendments. The two questions that arise are whether in the face of a finding of "no significant hazards consideration" the Commission may dispense with a hearing even though one has been requested, and whether the Commission's discretion to find no significant hazards consideration is absolute.²⁰⁶

Sholly v. Nuclear Regulatory Commission²⁰⁷ is the most current case to deal with the question of whether a staff finding of no significant hazards consideration precludes a hearing in the face of a request to modify a license. The Sholly case involved the crippled Unit 2 of the Three Mile Island nuclear plant. As a result of the accident, radioactive hydrogen gas built up inside the reactor. The NRC staff concluded that this radioactive gas could be vented from the reactor at a faster rate than the rate normally permitted. The staff also determined that the venting would not constitute a

The Commission may dispense with such thirty days' notice and publication [in the Federal Register] with respect to any application for an amendment to a construction permit or an amendment to an operating license upon a determination by the Commission that the amendment involves no significant hazards consideration.

206. Requests for license amendments are numerous; the Commission acts on an average of 400 per year. Sholly v. Nuclear Regulatory Comm'n, 651 F.2d 792, 793 (D.C. Cir. 1980), cert. granted, 451 U.S. 1016 (1981) (statement on Denial of Rehearing en banc). From 1977 to 1980, the staff determined that over 1500 operating license amendments displayed no significant hazards consideration. Id. at 794.

Both of the issues noted in the text also arise in construction permit amendment proceedings. See supra notes 196-99 and accompanying text. However, they merit additional discussion here because they arise so frequently in the operating license amendment context.

^{203.} An unreviewed safety question exists if:

a. The probability of occurrence or the consequences of an accident or safety equipment malfunction increases;

b. The possibility for an unanalyzed type of accident or malfunction is created; or

c. The margin of safety for any technical specification is reduced. 10 C.F.R. § 50.59(a)(2) (1982).

^{204. 10} C.F.R. § 50.59(b) (1982).

^{205.} Section 189(a) reads:

⁴² U.S.C. § 2239(a) (1976).

^{207. 651} F.2d 780 (D.C. Cir. 1980), cert. granted, 451 U.S. 1016 (1981).

significant hazard. Four days after the NRC issued its order to allow the venting, petitioners demanded reconsideration of the determination. However, the NRC staff had already concluded that because no significant hazards consideration was presented, a hearing was not required.²⁰⁸ On appeal, the court reversed the Commission, affirming per curiam its earlier decision in *Brooks v. Atomic Energy Commission*, ²⁰⁹ and concluding that a finding of no significant hazards consideration is only relevant to determining whether notice and publication must be given:²¹⁰

The plain language of Section 189(a) dispels any notion that by a finding of no significant hazards consideration the NRC may dispense with the hearing requirement. The fourth sentence makes no mention of the hearing requirement's being lessened, but makes reference only to the requirements of notice and publication.²¹¹

Respondents filed a motion for a re-hearing en banc that was denied, with four judges dissenting.²¹² The dissenting judges disagreed with the panel's interpretation of section 189 without stating why. They also concluded that reliance on *Brooks* was inapposite, noting that the *Brooks* court did not address the issue of whether a hearing was necessary when a no significant hazards finding had been made.²¹³

The dissenting judges in *Sholly* were somewhat disingenuous. The court in *Brooks* had made it clear, in rejecting the very argument at issue in *Sholly*, that a hearing is mandatory except in the absence of a request for one.²¹⁴ The court had based its holding both on the basis of legislative history—"the legislative history of the 1962 Amendments [to the AEA of 1954] indicates that it was Congress' intent to lessen the mandatory hearing requirement only when there was no request for a hearing"²¹⁵—and the plain

^{208.} Id. at 782-83.

^{209. 476} F.2d 924, 926 (D.C. Cir. 1973).

^{210.} Sholly, 651 F.2d at 788. The panel in Sholly acknowledged that in a footnote in Union of Concerned Scientists v. Atomic Energy Comm'n, 499 F.2d 1069, 1084 n.36 (D.C. Cir. 1974), dictum suggested that a license amendment can be made without an opportunity for a hearing. The Sholly court criticized the statement as being without support, contrary to Brooks, and far-reaching, and consequently placed no reliance on the footnote. Id. at n.18.

^{211.} Sholly, 651 F.2d at 787.

^{212.} Sholly, 651 F.2d 792 (D.C. Cir. 1980) (denial of rehearing). The dissenting judges only took issue with the panel's discussion about whether a hearing must be granted for a license amendment upon request in the face of a "no significant hazards consideration" finding.

^{213.} Id. at 794-95.

^{214.} Brooks, 476 F.2d at 926.

^{215.} Id. at 927.

language of the statute—"[t]he language of this section clearly seems to require that the Commission grant a hearing upon the request of any interested person in a proceeding amending a construction permit."²¹⁶

However, a recent addition to section 189 of the AEA of 1954 overrides the Court of Appeals decision in *Sholly* with respect to operating license amendments.²¹⁷ The new section 189(a)(2)(A) provides that even though a hearing on the operating license amendment has been requested, the amendment may be issued without a hearing upon a finding of no significant hazards consideration:

[t]he Commission may issue and make immediately effective any amendment to an operating license, upon a determination by the Commission that such amendment involves no significant hazards consideration, notwithstanding the pendency before the Commission of a request for a hearing from any person. Such an amendment may be issued and made immediately effective in advance of the holding and completion of the required hearing.²¹⁸

No case has directly dealt with the staff's discretion to make the finding that a proposed amendment involves no significant hazards consideration. However, *Brooks* suggests that this discretion is not absolute. In *Brooks*, the court noted that the Commission, in extending the latest completion date for construction of the subject reactor, made no statement about whether the change involved a significant hazards consideration.²¹⁹ Because one of the changes prompting the amendment was the redesigning of reactor containment components, the court opined that "surely" the Commission must make the significant hazards determination.²²⁰

VIII OTHER PROCEEDINGS

Finally, there are two additional procedural options of interest

^{216.} Id. at 926. The opinion goes even further and suggests that if intervenors have already formally expressed interest in a proceeding, fairness and the language of section 189 of the AEA of 1954 dictate that they be given advance notice of the action and an opportunity for a hearing. Id. at 927.

^{217.} The Supreme Court granted certiorari in Sholly, 451 U.S. 1016 (1981), and on Sept. 9, 1982 granted the motion of respondents for further deferral of oral argument, 73 L.Ed.2d 1398 (1982). Thus, it remains to be seen how the Court will handle Sholly in light of this recent amendment.

^{218. 42} U.S.C.A. § 2239(a)(2)(A) (West Supp. 1983) (added Jan. 4, 1983).

^{219.} Brooks, 476 F.2d at 926.

^{220.} Id.

to intervenors opposing a nuclear reactor: the petition to show cause and the rulemaking proceeding. Each of these proceedings is discussed below.

Any person may file a request to modify, suspend, or revoke a license "or for such other action as may be proper" with the Director of Nuclear Reactor Regulation, the Director of Nuclear Material Safety and Safeguards, or the Director of Inspection and Enforcement.²²¹ This request is known as a petition to show cause. Within a "reasonable time" after receipt of such a request the director concerned will either deny the request in writing, stating the reasons for the denial, or institute the requested proceeding²²² by serving an order to show cause on the licensee.²²³ Within twenty-five days of the director's decision, the Commission may review that decision to determine if the director has abused his discretion.²²⁴

In practice, few petitions have ever been granted. The very person who decides the petition is the director of the staff that earlier served as a proponent of the license now being disputed. Further, a director has a great deal of discretion in deciding such petitions.²²⁵ However, a provision for Commission review which was added in 1977 may subject such petitions to a higher degree of scrutiny.²²⁶

Regulation 50.100 sets forth an alternate procedure for modifying, suspending, or revoking a construction permit or an operating license.²²⁷ It provides a second option because subpart B of part 2 of the NRC regulations discussed above does not enable the Commission to initially act,²²⁸ whereas section 50.100, which is limited to construction permits and operating licenses for nuclear power plants, does.²²⁹

^{221. 10} C.F.R. § 2.206(a) (1982).

^{222. 10} C.F.R. § 2.206 (1982).

^{223. 10} C.F.R. § 2.202(a) (1982).

^{224. 10} C.F.R. § 2.206(c)(1) (1982). See Northern Indiana Pub. Serv. Co., 7 N.R.C. 429, 433 (1978), for the factors considered in determining whether the director has abused his discretion.

^{225.} Id.

^{226. 42} Fed. Reg. 36,240 (1977); 10 C.F.R. § 2.206(c)(1) (1982). The Commission may on its own motion review the director's decision, and this review power does not limit the Commission's supervisory power over the staff or its power to consult with the staff regarding institution of proceedings under this section.

^{227. 10} C.F.R. § 50.100 (1982).

^{228. 10} C.F.R. §§ 2.200-.206 (1982).

^{229.} For a case describing the standards to be employed under 10 C.F.R. § 50.100 (1982), see Petition for Emergency and Remedial Action, 7 N.R.C. 400 (1978).

Finally, any person may petition the Commission to issue, amend, or repeal a regulation.²³⁰ The petitioner may request at the same time that the Commission suspend all or part of any licensing proceeding to which the petitioner is a party, pending disposition of rulemaking proceedings.²³¹

IX Conclusion

A nuclear licensing proceeding is not an appropriate forum for all groups and agencies seeking to raise issues about a proposed nuclear facility. For many organizations, however, intervention can accomplish many objectives. Such participation can ensure that the NRC staff and the applicant more carefully review the proposed action than they otherwise might. Such participation may also serve as a valuable vehicle for educating the public about the issues that surround the proposed facility. Finally, although the Commission itself is highly unlikely to stop a proposed facility, forcing the decision-making to take place in the open may ultimately result in the applicant cancelling the construction of its facility.

Those who seek to participate in NRC proceedings should know the necessary steps and possible options in the intervention process. Construction permit proceedings present the greatest opportunity for impact. At the construction permit stage the applicant has invested fewer dollars and less time than at any other NRC proceeding. There are, however, other NRC proceedings, notably operating license hearings and amendment proceedings, in which intervenors can have a positive impact. Intervenor awareness of and participation in these other proceedings facilitate full consideration of all relevant issues, in light of increased knowledge about nuclear power. Moreover, although facility shutdown becomes more unlikely as proceedings progress to the

^{230. 10} C.F.R. § 2.802(a) (1982).

^{231. 10} C.F.R. § 2.802(d) (1982). However, the Commission rarely grants such a stay. The standard of review of Commission action on a rulemaking petition (unlike other proceedings) is not the substantial evidence test, but rather whether an action is "arbitrary, capricious, an abuse of discretion or otherwise not in accordance with law." Nader v. Nuclear Regulatory Comm'n, 513 F.2d 1045, 1051 (D.C. Cir. 1975) (citing § 10(e)(B)(1) of the Administrative Procedure Act, 5 U.S.C. § 706(2)(A) (1976)). Further, in rulemaking proceedings the procedural rights afforded by the Administrative Procedure Act are to be regarded as the maximum procedural rights the courts are willing to impose upon an agency in a rulemaking proceeding. Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, 435 U.S. 519, 545-49 (1978).

operating license and amendment phases, intervenors can still play an important role in ensuring that both the Commission and the applicant comply fully with NRC standards and take account of changed circumstances.