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SYMPOSIUM

THE NUCLEAR POWER PLANT LICENSING PROCESS

LICENSING OF NUCLEAR POWER PLANTS BY THE ATOMIC ENERGY COMMISSION

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In light of the growing demands upon dwindling supplies of traditional sources of energy, it is manifest that alternative sources, particularly nuclear power, must be developed if the United States is to achieve its newly promulgated objective of energy independence. The Atomic Energy Commission (AEC), which under the Atomic Energy Act of 1954¹ is responsible for licensing the construction and operation of nuclear power plants, will play a major role in determining whether this goal is realized in the reasonable future.

It would be difficult to overstate the importance to the United States of nuclear power as a means of generating electricity. Although nuclear power today accounts for approximately six percent of the nation's electric energy production, that share is projected to reach more than 20 percent within a decade.² The nuclear fuel consumed in production of electrical power presently is the equivalent of 700,000 barrels of fuel oil per day; by the early 1980's the equivalence is predicted to be 2,500,000 barrels daily.³ Stressing the importance of nuclear power in meeting the nation's energy objectives, the President stated in his Energy Message of April 18, 1973: "Although our greatest dependence for

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^{1. 42} U.S.C. §§ 2011-2282 (1970).

^{2.} Remarks by AEC Commissioner William O. Doub, Planning Policy and Government Relations Conference of the American Institute of Planners, Washington, D.C., Feb. 26, 1974.

^{3.} Id.

energy until now has been on fossil fuels such as coal and oil, we must not and we need not continue this heavy reliance in the future. The major alternative to fossil fuel energy for the remainder of this century is nuclear energy."⁴

Absent dramatic technological developments in the next decade, the objective of energy self-sufficiency will not be achieved unless the potential of nuclear power is exploited fully. Realization of this potential in a timeframe consistent with national needs will require decisive action to eliminate or minimize the delays which until now have seriously impeded nuclear power plant construction. At present, the average estimated time from initiation of a nuclear power plant project until issuance of an operating license is nine to ten years, about one-third longer than the time required to begin generation from a fossil fuel plant.⁸ Although the causes of delay in nuclear plant construction are many and varied, a factor receiving universal recognition is the AEC licensing process. The importance of this problem, especially in the context of the current energy crisis and the national commitment to environmental preservation, was emphasized in the President's Energy Message of last April:

The increasing occurrence of unnecessary delays in the development of energy facilities must be ended if we are to meet our energy needs. To be sure, reasonable safeguards must be vigorously maintained for protection of the public and of our environment. Full public participation and questioning must also be allowed as we decide where new energy facilities are to be built. We need to streamline our procedures for licensing and inspections, reduce overlapping jurisdictions and eliminate confusion generated by the Government... During the coming year, we will examine various possibilities to assure that all public and private interests are impartially and expeditiously weighed in all Government proceedings for permits, licensing and inspections.⁶

Concern about revision of existing procedures for licensing the construction and operation of nuclear power plants emanates from representatives of widely disparate interests. This Symposium is designed to

^{4.} The President's Energy Message, Office of the White House Press Secretary, Apr. 18, 1973.

^{5.} Atomic Energy Commission, Report to the Director of Regulation by the Task Force for the Study of the Reactor Licensing Process 14 (Dec. 1973).

^{6.} The President's Energy Message, Office of the White House Press Secretary, Apr. 18, 1973.

identify aspects of the AEC licensing process which have contributed to delay in nuclear power plant construction and operation and to examine, from the viewpoints of several of the most significant of the concerned interests, remedial measures which have been proposed or should be considered. The objective is one of expediting the licensing process without diminishing the efficacy of AEC review of public safety and environmental considerations and without prejudicing adequate opportunity for public participation with respect to matters of legitimate public concern.

THE AEC LICENSING PROCESS

In addition to its responsibilities for managing a major industrial enterprise, conducting a massive research and development effort, and manufacturing the nation's nuclear armaments,⁷ the AEC has exclusive jurisdiction, from the standpoint of radiological health and safety and the national defense and security, over the regulation of nuclear power plants, including the issuance of licenses for the construction and operation of such plants.8 At the outset of the industrial development of atomic energy, the Commission recognized the ambivalence of its position as developer as well as regulator of the nuclear power industry, a factor which in recent years has become a focal point for public criticism and congressional concern. In response to this concern, the position of Director of Regulation was established in an attempt to minimize the conflicting nature of the Commission's statutory duties. Reporting directly to the Commission, the Director is independent of the AEC General Manager and is vested with the responsibility for supervising the agency's licensing and other regulatory functions.⁹

The licensing process begins with the filing of an application for a facility construction permit.¹⁰ Requiring several volumes of information, the application includes a detailed preliminary safety analysis report and an environmental impact report. The AEC staff reviews in depth the safety analysis, obtains any needed additional information, and resolves with the applicant's assistance any remaining questions concerning the safety and environmental impact of the proposed plant. Concurrently, the staff prepares and publishes its own independent draft

10. Id. § 50.23.

^{7. 42} U.S.C. §§ 2051-2140 (1970).

^{8.} Northern States Power Co. v. Minnesota, 447 F.2d 1143 (8th Cir. 1971), aff'd, 405 U.S. 1035 (1972).

^{9. 10} C.F.R. § 1.12 (1973).

environmental impact statement and obtains government agency and public comment in compliance with the National Environment Policy Act of 1969.¹¹

Late in the staff review process, the application is submitted to the Advisory Committee on Reactor Safeguards (ACRS), an independent statutory body composed of as many as 15 members representing a variety of scientific and technical disciplines. After an informal hearing at which both the applicant and staff are questioned on critical issues, the ACRS submits to the Commission its report, which, under the Atomic Energy Act, becomes a part of the applicant's record.¹²

After the staff's safety analysis is completed and the ACRS report submitted, a formal public hearing under the Administrative Procedure Act¹³ is held before an Atomic Safety and Licensing Board (ASLB). The ASLB consists of three individuals and is chaired by an attorney, the other two members usually possessing technical backgrounds.¹⁴ Although only the opportunity for a public hearing is required for operating licenses, the hearing is mandatory in the case of construction permits.¹⁵ The ASLB hearings are adjudicatory and culminate in an initial decision by the Board to approve, deny, or approve with conditions the requested license.

An appeal from an ASLB decision may be taken to the Commission. The Commission, however, has delegated its full appellate authority to a three-member Atomic Safety and Licensing Appeal Board¹⁶ in an effort to give added credibility to the agency's licensing decisions. The delegation, pursuant to which the Appeal Board has authority to affirm, reverse, or remand decisions of the ASLB, was designed to remove any possibility of public concern that licensing decisions are prejudiced by the Commission's responsibilities for development of the nuclear industry. Although Appeal Board decisions ordinarily are final, the Commission has retained the power to review, on a sua sponte basis, decisions in limited areas of major significance.¹⁷ Otherwise, decisions

 ⁴² U.S.C. §§ 4321-4347 (1970).
42 U.S.C. § 2232(b) (1970).
5 U.S.C. §§ 551-559 (1970).
42 U.S.C. § 2241 (1970).
16. 10 C.F.R. § 2.785 (1973).
17. Id. § 2.786.

of the Appeal Board are subject to judicial review under the provisions of the Administrative Procedure Act¹⁸ and the Hobbs Act.¹⁹

During the course of plant construction, a similar process is followed with respect to issuance of the further license required before the plant may be placed into operation. At this stage the staff and ACRS concentrate primarily on operating problems and questions that may have been left unresolved at the construction permit stage. An ASLB hearing is required on an operating license only when it is requested by a person whose interest may be affected by issuance of the license.

FACTORS CONTRIBUTING TO LICENSING DELAY

Delays in the licensing process can be traced to a number of causes. Some relate to the type of reactor plant purchased by the utility and to the quality of the input provided by the manufacturer and the architectengineer, as well as the utility, in preparation of the permit application. Early nuclear power plants evidenced marked dissimilarities reflecting not only differences in the plant designs of various manufacturers but also periodic design alterations necessitated by improved technology. For the AEC, each application for a construction permit proposing a new plant design required a complete and thorough staff analysis. The burden on the staff was exacerbated by the many inadequate or incomplete applications prepared hastily in attempts to establish priority on the AEC docket. As a result, a typical license file was crowded with correspondence from the staff to the applicant seeking additional information, together with dozens of amendments required by the staff before it was satisfied with the adequacy of the presentation in the application. The amendment process alone frequently consumed a year or more of the staff's time.

As plant designs have become more standardized and second and third plants have been proposed for existing plant sites, questions have arisen concerning the necessity of review by the ACRS of proposed plants presenting no substantial safety problems not previously evaluated fully. If the ACRS could be relieved of its statutory review responsibility in such cases, the time for processing applications could be reduced by two to three months and the ACRS would be able to devote more time to cases warranting more complete review. Since, however, the responsibilities of the ACRS are imposed by statute, implementation of this proposal would require an amendment to the Atomic Energy Act.

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^{18. 5} U.S.C. §§ 701-706 (1970).

^{19. 28} U.S.C. §§ 2341-2353 (1970).

In recent years clearly the most significant cause of delay in the licensing process has been the proliferation of issues raised in a growing number of interventions by private individuals and public interest organizations, particularly those dedicated to protecting the environment. Until 1970, the only issues raised in AEC licensing cases were those relating to radiological health and safety. The effectiveness of controls designed to guard against the release, operational or accidental, of radioactive effluents from nuclear plants, together with issues concerning the common defense and security, were of primary concern. Interventions based on nuclear safety considerations were rare, probably because the new nuclear technology was complex and there were few independent scientists and technicians willing and able to challenge the findings of the nuclear "establishment." In the relatively small number of cases in which intervention was attempted, the proposed issues generally involved non-nuclear matters, such as the effects of heated water effluents, or matters of broad public policy, such as the rights of small utility systems to share in the benefits of nuclear power plants being constructed by the larger utilities. During this period the AEC consistently maintained that its jurisdiction under the Atomic Energy Act did not extend to non-nuclear effects of nuclear facilities and that, unlike most regulatory agencies, it was not empowered to decide broad public policy issues.20

In 1970 two legislative enactments expanded substantially the number and type of issues which could be raised in the licensing process. The AEC was affected most by the National Environmental Policy Act (NEPA),²¹ which directed all federal agencies to establish procedures which would ensure that environmental amenities and values are "given appropriate consideration in decisionmaking along with economic and technical considerations."²² The requirement under NEPA that an environmental impact statement be prepared prior to the approval of any major federal project enlarged the scope of the AEC licensing process to include such matters as air, noise, and water pollution, ecological effects, aesthetics, sociological and cultural impacts, the need to preserve historical sites, and the necessity for a systematic balancing of environmental costs against the economic and social benefits of a project.

^{20.} This position was upheld by several appellate courts. See, e.g., Cities of Statesville v. AEC, 441 F.2d 962 (D.C. Cir. 1969); New Hampshire v. AEC, 406 F.2d 170 (1st Cir.), cert. denied, 395 U.S. 962 (1969).

^{21. 42} U.S.C. §§ 4321-4347 (1970).

^{22.} Id. § 4332(b).

In addition, Congress in 1970 amended section 105 of the Atomic Energy Act²³ to require review of antitrust aspects of any application for a nuclear power plant license. Initial review is by the Department of Justice; thereafter, if recommended by the Antitrust Division or re-

of Justice; thereafter, if recommended by the Antitrust Division or re-quested by an affected party, the AEC must conduct a hearing on anti-trust matters. The purpose of the amendment was to provide a forum in which the smaller utilities could assert their right to participate equitably in the benefits of large nuclear plants.²⁴ The impact of NEPA on the AEC and its licensing process was dev-astating. The Commission adopted an interim statement of policy in implementation of NEPA, based upon its interpretation of its responsi-bilities in light of other environmental legislation and its concern that development of capacity to meet the nation's energy requirements not be unduly delayed.²⁵ The policy was intended as a transition measure until full compliance with NEPA could be accomplished in orderly fashion without endangering the nation's energy objectives. Because of the obviously severe environmental impact of nuclear power plants, it is not surprising that the AEC's mandatory public hearings provided a ready public forum for the trial of issues involving the precise scope of NEPA's broad and imprecise directives. The AEC's interim policy statement was attacked by environmental intervenors in

interim policy statement was attacked by environmental intervenors in a number of cases on the grounds that it fell short of adequate compliance and that NEPA afforded no room for transitional measures providing less than complete and immediate compliance. When the intervenors' position was upheld by the Court of Appeals for the District of Columbia Circuit in a landmark decision in *Calvert Cliffs' Coordi*nating Committee v. AEC,²⁶ the Commission was compelled to revise completely its NEPA policies and procedures and to reorganize and supplement its regulatory staff to meet its responsibilities under the decision.²⁷ As a result, more than 17 months elapsed without issuance of a nuclear power plant construction permit or operating license.

In recent years, serious questions of nuclear safety have begun to take their proper place in license hearings. In large part, this new activity reflects the AEC's acquisition of an increasing fund of technical knowl-

^{23. 42} U.S.C. § 2135 (1970).

^{24.} See S. REP. No. 91-2147, 91st Cong., 2d Sess. (1970).

^{25. 10} C.F.R. Part 50, Appendix D (1973).

^{26. 449} F.2d 1109 (D.C. Cir. 1971).

^{27.} Appendix D of 10 C.F.R. Part 50 was revised September 9, 1971 (36 Fed. Reg. 18071-72) and amended on several subsequent occasions, most significantly June 15, 1972 (37 Fed. Reg. 11874).

edge resulting from ongoing safety research efforts and studied experience in the operation of licensed plants, as well as the broad availability of this information to the technical community and the public. The safety problems so identified have tended to become issues in license proceedings, with protracted hearings being necessary to examine the same complex issues in separate cases involving different reactors and applicants.

Much of the delay at the hearing stage has been due to the tactics employed by the adversary parties and their counsel. The new environmental issues and the rekindled interest in safety questions have brought to the AEC hearings the extensive resources of national environmental and public interest organizations employed in challenging particular aspects of a proposed plant or in opposing the growth of nuclear power in general. These organizations have been able to enlist the services of a number of highly capable and experienced trial attorneys, many of whom are dedicated to the representation of the public interest. The confrontation between intervenors' counsel and the equally qualified attorneys for applicants and the AEC staff has introduced into AEC hearings all the legal tactics and techniques which characterize prolonged litigation in the courts. It is customary for intervenors not only to raise a plethora of issues at the outset to maximize their opportunity for success but also to resist efforts by the hearing board to eliminate issues of questionable validity in prehearing conferences. The techniques of discovery are fully used to extract from the applicant and the staff information not otherwise available that will lend support to an intervenor's position. Although discovery may be considered a "fishing expedition" by the applicant and the staff, it is viewed by the intervenor's counsel as a perfectly legitimate effort to obtain relevant information which the AEC voluntarily should have made available to the public.

Disputes over the production of documents have caused weeks and even months of delay in license hearings. Controversy in early cases was exacerbated by the AEC's restrictive disclosure policy which interpreted the Freedom of Information Act²⁸ as exempting all internal staff documents from requirements of public disclosure. The disputes and resultant delays have diminished as the Commission has gradually revised its policies to permit disclosure of virtually all internal staff documents.²⁹

^{28. 5} U.S.C. § 552 (1970).

^{29. 10} C.F.R. § 2.744 (1973).

The "paper" battle continues unabated, however, with respect to documents which the applicant or the plant manufacturer classifies as "proprietary data," since the Commission's rules protect proprietary information from public disclosure.³⁰ Obviously, in certain situations relevant and sometimes essential information can be found in technical documents revealing trade secrets and technical "know-how" of considerable significance to the competitive position of the manufacturer. Hearing boards have attempted, without much success, to devise acceptable compromises, such as in camera examination, disclosure to counsel on a confidential basis, and off-the-record consideration. Conflicts continue to arise, nevertheless, over questions of proprietary status, the need for the evidence, the balancing of the interests involved, the appropriateness of confidentiality agreements, and the method by which evidence will be introduced and its status, once admitted.³¹

The examination of technical witnesses in contested license hearings has been extensive, frequently repetitive, and always time consuming. To some extent, the lack of an adequate number of qualified individuals to present adversary technical testimony has necessitated efforts by intervenor attorneys to extract supporting evidence from technical witnesses for the applicant and staff through vigorous and broadranging cross examination. The impact of this tactic has often been heightened by the permissive attitude adopted by many of the hearing boards towards the conduct and scope of cross examination.

Delay becomes most costly and painful to a utility when a plant has been substantially completed but is unable to become operative because of adversary proceedings on the operating license. The Atomic Energy Act mandates an opportunity for a public hearing at the operating license stage upon the request of any person whose interest may be affected. Hearings have been required in the vast majority of recent cases, in many instances as a result of controversies concerning environmental and safety issues which remained unresolved following review of the construction permit application. Recent initiatives by the Commission designed to resolve all substantial issues at an earlier stage in the licensing process are likely to call into question the need for adjudicatory hearings at the operating stage. The exigencies of the national energy problem should lend further impetus and urgency to the

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^{30.} Id. § 2.790.

^{31.} On November 15, 1973, the AEC announced that it was considering a number of alternative amendments to 10 C.F.R. § 2790 (1973) with respect to the availability of proprietary information. 38 Fed. Reg. 31543 (Nov. 15, 1973).

elimination of this most troublesome cause of delay-most troublesome, that is, in terms of the immediacy of its impact on energy supply.

AEC Actions to Improve the Licensing Process

In what appears to be a determined and concerted effort to attack the problem of licensing delays, characterized in the President's Energy Message as "unreasonable," the AEC either has taken or is considering a number of impressive steps calculated to reduce the overall project time for nuclear plants by as much as two years immediately and eventually by as much as four years. The first step taken was directed against the practice of filing applications prepared hastily and inadequately merely to establish precedence on the AEC docket. A revision of Commission procedures now requires that an application, including the applicant's safety analysis and environmental report, be submitted for a prefiling staff review of its adequacy.³² Only when the staff is satisfied as to quality and completeness is the application placed on the docket. This step properly places the responsibility for development of adequate information upon the utility and its contractors, rather than leaving it to the time-consuming process of staff inquiries and amendments to the license application. Although this might be viewed as an artificial device to shorten the AEC staff review time, it almost certainly will result in improved engineering effort at the preapplication stage and produce real time savings.

The single AEC initiative which is central to achieving the overall acceleration objective is the concept of plant design standardization. The Commission's policy endorsing standardization, adopted in March 1973,³³ was based upon the conviction that continuing changes in plant design with concurrent escalation in plant capacity had been a major cause of delay and that the continuation of such practices would present insuperable problems in light of the massive increase in the number of nuclear plants predicted for the balance of the century.

The AEC policy statement prescribed three standardization options which it was prepared to introduce into the licensing process. The first is the "reference system" approach, which contemplates the submission of standardized plant designs for AEC regulatory review. Once the design is approved, a utility can concentrate its attention on site-related

^{32. 10} C.F.R. § 2.101 (1973).

^{33.} Atomic Energy Commission, Statement on Methods for Achieving Standardization of Nuclear Power Plants (Mar. 5, 1973).

questions and simply incorporate the approved standard design by reference into its application. All major reactor manufacturers have submitted or are planning to submit reference designs for approval. Under the second option, the "duplicate plant" approach, the Commission will conduct a single review when a utility or group of utilities plans to locate identical plants at different sites. This option has already been selected by a number of utilities in their planning for future construction. The third option involves issuance of a "license to manufacture" authorizing a manufacturer to build a number of reactor plants at one central location and to move them to a number of different sites for installation and operation.³⁴ A typical application of this option is the proposal of Offshore Power Systems, Inc., to manufacture eight floating nuclear plants to be placed at offshore locations.³⁵ The efficacy of this approach as a time conserver has been questioned, since it will be necessary to obtain three, rather than two, licenses before a plant can become operative. Nevertheless, it would appear that a single license review of plant design, with individual utility license reviews limited to siterelated matters, should reduce future plant lead-times, conserve technical manpower, and actually enhance safety.

If a utility pursues one of the standardization options, questions of siting and site-related impacts become predominant in the license hearing process. Siting questions have already gained considerable importance and emphasis as a result of the introduction of environmental considerations into the hearing process. Soon after the *Calvert Cliffs'* decision, the AEC recognized the need for, and the feasibility of, the consideration of non-nuclear environmental issues at an earlier stage in the licensing process prior to completion of the more complex studies of nuclear safety considerations. Accordingly, procedures were revised to provide for conferences and hearings at a relatively early stage in the licensing process.³⁶ Whether these initiatives will accomplish their objective of avoiding delays by the consideration of independent problem areas in timely stages or will only compound the problem by prolonging the hearing process is not yet clear. It is manifest, however, that the identification and resolution of non-nuclear issues should be attempted before the final stages of licensing.

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^{34.} The AEC on November 2, 1973, published amendments to its regulations, adding a new Subpart E to 10 C.F.R. Part 2 and a new Appendix M to 10 C.F.R. Part 50. The amendments established procedures for licensing the manufacture of nuclear reactors to be operated at designated sites. 38 Fed. Reg. 30251 (Nov. 2, 1973).

^{35. 38} Fed. Reg. 34008 (Dec. 10, 1973).

^{36. 10} C.F.R. Part 50, Appendix A (1973).

Some initial steps have been taken to substitute rulemaking procedures for the repetitious treatment of generic nuclear safety problems in independent license hearings. Logically, the rulemaking approach to generic problems would appear to be one auspicious method of removing important and extremely complex safety issues from a trial-like atmosphere with its attendant unpredictability, instead treating them in a technically oriented forum where consideration would be more reasoned and less emotional. Nevertheless, the AEC's actual experience in the rulemaking proceedings it instituted in the matters of emergency core cooling systems for reactors and the permissible level of radioactive effluents from nuclear plants has failed to support this premise. The Commission's decision to employ adversary procedures in these proceedings has simply introduced into the rulemaking forum all the legal technicalities and frustrations which characterize the adjudicatory process. As a result, each of these proceedings involved about two years of controversial hearings and deliberations and an unjustified expenditure of technical and professional effort. New approaches will clearly be needed if generic rulemaking is to be a viable alternative. The difficult problem, of course, is to determine the extent to which public participation in the rulemaking process is required for a rule to withstand challenges to its validity in subsequent individual license proceedings.

FURTHER IMPROVEMENTS PROPOSED

The AEC on March 8, 1974, submitted to Congress proposed legislative amendments intended to eliminate some of the causes of delay in the nuclear plant licensing process.³⁷ Among the most significant proposals is the suggested amendment of the Atomic Energy Act to eliminate the mandatory requirement for review by the ACRS of each application for a construction permit or operating license. With the growing trend towards standardization and repetitive construction at a single site, it would seem timely to require ACRS review only when the AEC or the ACRS itself considers that such review is necessary.

Another proposal by the AEC involves elimination, in many cases, of the statutory requirement for an opportunity for public hearing at the operating license stage. Again, standardization of design and early and comprehensive determination of environmental issues at the construction permit stage should accommodate a procedure that would call for oper-

^{37.} For a description of the proposed legislation, see Shapar & Malsch, Proposed Changes in the Nuclear Power Plant Licensing Process: The Choice of Putting a Finger in the Dike or Building a New Dike, 15 WM. & MARY L. REV. 539 (1974).

ating license hearings only when required to decide substantial new or unresolved safety and environmental issues. There should be sufficient confidence in the AEC regulatory staff to rely upon it to represent adequately the public interest in the resolution of less substantial matters. The extraordinary safety record compiled by the nuclear power industry should be sufficient indication that such confidence is justified.

Other suggested new approaches may be somewhat more controversial. One such proposal is to couple a standardized plant design with a preapproved site.³⁸ This approach, which the AEC estimates would reduce the project period by as much as four years, contemplates a bank of sites approved in advance as suitable for construction of plants with specific characteristics; the only question remaining on a specific license application would be whether the standard plant's previously approved design characteristics fall within the parameters assumed in approval of the site. Such an approach obviously would place considerable burdens on a potential intervenor. To pose an effective opposition, he would be compelled to present separate objections to a standard reactor design and a plant site which would be in present and perhaps permanent isolation from each other, or risk the alternative of opposing issuance of a construction permit when practically no issue remained to contest.

AEC Commissioner Doub has proposed³⁹ that the Commission consider a policy change which could have an immediate effect in expediting the start of new plant construction. Prior to the enactment of NEPA, Commission policy permitted site clearing, excavation, and some foundation work at a construction site prior to issuance of a construction permit. Following the *Calvert Cliffs'* decision, however, the AEC reduced drastically the scope of authorized prepermit construction activity.⁴⁰ The natural result has been a delay of many months in the construction of greatly needed new nuclear power plants. Commissioner Doub now suggests that, in light of emergency exceptions from the environmental laws being approved for energy sources, it is timely that the AEC also consider some relaxation in its prohibitions. Exemptions would be granted only after satisfactory completion of the staff's environmental review and public hearing on any environmental issues. Notwithstanding the explicit recognition in the proposal of the need for prior consideration of environmental issues and compliance

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^{38.} See Address by AEC Commissioner William O. Doub, Atomic Industrial Forum Annual Conference, San Francisco, Calif., Nov. 12, 1973.

^{39.} Id.

^{40. 10} C.F.R. §§ 50.10(c)-(d) (1973).

with the procedural requirements of NEPA, objections may be expected from proponents of full and uncompromising adherence to NEPA principles.

It is widely recognized that the delay problem in the hearing process can be attributed largely to the complex technical nature of the subject matter. This fact has led a number of knowledgeable people representing the interests of intervenors as well as applicants to suggest seriously that public hearings be eliminated from the licensing procedures. Their position is that resolution of the serious problems of reactor safety should be taken away from the lawyers and given back to the technical community, which is best equipped to give these problems the high quality conservative technical analysis and professional decisionmaking demanded by the complex nature of the subject matter.

It is apparent that any new approach determined to be necessary or desirable must find public acceptance if the objective of expediting a substantially enlarged nuclear power capability is to be achieved. Commissioner Doub recently characterized the AEC's primary objective for the future as "achieving a high level of acceptability for an improving technology which has been and is being tested in the crucible of experience."⁴¹ He concludes that public acceptance of nuclear power has been enhanced by the process of public hearings and interventions. Controversies and contested hearings, with the concomitant exposure of facts concerning nuclear technology, clearly have a significant positive impact on public attitudes. These considerations should weigh heavily in the evaluation of any proposal to dispense with public hearings.

One step which could add immeasurably to the level of public confidence in the nuclear licensing system is the prospective enactment of legislation separating the regulatory functions of the AEC from its other functions and establishing a Nuclear Energy Commission as an independent agency.⁴² Despite the efforts by the AEC to divorce the Commissioners and promotional staff from licensing functions, the public impression has persisted that impartial and unbiased decisions cannot be expected from an agency with dual and conflicting responsibilities. The

41. Address by AEC Commissioner William O. Doub, Atomic Industrial Forum Annual Conference, San Francisco, Calif., Nov. 12, 1973.

^{42.} H.R. 11510, 93d Cong., 1st Sess. (1973), a bill to establish an Energy Research and Development Administration and to transfer the licensing and regulatory functions of the AEC to a new Nuclear Energy Commission, was passed by the House of Representatives December 19, 1973, and is in the process of hearings before the Senate Government Operations Committee.

proposed legislation could dispel this persistent lack of confidence. More importantly, however, there would be established a new regulatory agency with the sole responsibility of regulating the nuclear industry and which could direct its energies entirely to the resolution of the problems of licensing delays in nuclear plant construction.