Legislative Readjustments in Federal and State Regulatory Powers over Atomic Energy

David F. Cavers
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Advancing technology has long had a habit of posing problems of federal-state relations for our federal union. It was competition between some of the early steamboats that produced Gibbons v. Ogden.1 The steam railroad gave rise to a lengthy succession of federal-state problems and far too many milestone cases to permit their mention here. The automobile created federal-state problems directly by introducing a major competitor to rail transportation and indirectly by its insistent demand for a nationwide network of highways and an abundant fuel supply. Electricity, whatever the source of energy tapped to generate it, and natural gas, once the technology of the long-distance pipeline had been mastered, also provided their share of new issues, some of which are yet to be resolved. Fortunately, the telegraph and telephone posed federal-state questions that proved relatively simple of solution, and the potentialities for inter-governmental conflict in radio and television were removed when the federal government grasped virtually all regulatory authority over them. In like fashion the federal government has disposed of most of the jurisdictional questions that the airplane might have prompted.

Looking back over the array of problems here barely indicated, one cannot but be impressed by the adaptability of our federal system. After a little groping and some backing and filling, we have usually succeeded in getting responsibility vested in the right place, whether the federal government, the state government, or both. The new problems of federal-state relations that are being posed by nuclear fission and radiation may be approached with some confidence in the light of these past successes. The difficulties, however, are not to be underestimated. The questions raised by atomic development cannot be resolved by variations on the inter-state, intra-state commerce scheme which has heretofore been used successfully. Moreover, the atom calls for the accommodation of two important sets of potentially conflicting governmental interests.

* Associate Dean and Fessenden Professor of Law, Harvard Law School.


1 22 U.S. (9 Wheat.) 1 (1824).
On the one hand, the use of atomic energy for peaceful purposes depends on a federal monopoly that is still maintained through the federal government's ownership of all special nuclear materials: U-235, U-233, and plutonium. This monopoly itself owes its existence to the close relation between the peaceful and the military uses of atomic energy and the federal government's concern with anything bearing directly upon the national defense. We have here a traditional interest of the federal government.

On the other hand, the use of atomic energy creates problems of protecting health and safety. The provision of such protection has always been a state activity, however poorly some of the states may now be equipped to discharge their new responsibilities. Here then we have a traditional interest of the state governments.

These are by no means the only governmental interests to be reckoned with in establishing a way of order for atomic energy, but their mention alone should make plain the distinctive character of the relationships that must be fashioned if damaging frictions and jurisdictional conflicts are to be avoided.

I shall first consider the existing allocation of authority under the Atomic Energy Act of 1954, a legal question that cannot yet be answered with assurance. I shall next report some of the developments among the states and consider certain pending proposals for changing the federal law so as to open the door to greater state regulatory action.

Before embarking upon these inquiries, one must keep in mind that we are now still at the threshold of the atomic age. The federal statute that has cleared the way for private initiative in nuclear development is only a little over three years old. Ten years hence we may still be in a developmental stage in the use of atomic energy, but by then the atomic production and power facilities that now exist will have multiplied both in number and in variety and size. Moreover, the industrial firms that obtain radioactive materials from these installations, firms now numbering over 4000, will certainly be several times that number in a decade. This prospect is encouraging for both the American and the world economies, but it means that we shall certainly have more legal questions to answer.

The problems of federal-state relationships involving atomic energy take a variety of forms, but virtually all emerge from two main physical sources:

(1) From "production" and "utilization" facilities using special nuclear materials, U-235, U-233, and plutonium, the three materials that alone can sustain a chain reaction. These facilities include all types of atomic reactors: power reactors, research reactors, and test reactors. They include "critical assemblies" constructed for the study of chain reactions. They also include isotope separation plants on which we must depend for urani-
um enriched in U-235, and chemical reprocessing plants to which we must
turn for U-233 and plutonium. Probably they should extend to the fabrica-
tion of fuel elements since this operation might, in negligent hands, produce
a critical mass.  

(2) From the use in industry, research, and medicine of radioactive
materials, chiefly isotopes that have been brought into being by irradiation
in reactors. Here the problems are essentially the same in character as those
caused by natural sources of ionizing radiation, chiefly radium, the use of
which antedated the discovery of fission by nearly half a century, leading
to the widespread employment of X-rays for a variety of industrial and
medical purposes.

These two sources of legal problems, roughly, reactors and radiation,
differ widely both in their number and in their potentialities for serious
harm.

Relative to the users of radiation in industry, research and medicine,
the number of reactors and of plants to reprocess special nuclear materials
will never be large. However, a serious nuclear incident in a reactor—even
a sizable research reactor—could contaminate the surrounding community
or country-side disastrously. Fortunately, the chance of this consequence
is remote, in part because reactors are likely to be in charge of skilled
operators.

This is not always going to be true of sources of radiation other than
special nuclear materials. These will be widely distributed among indus-
trial firms, universities, and hospitals. The public at large will not as a rule
be exposed to them, though this could occur in the case of a hot cell in which
deficiencies in design or equipment permitted the escape of radioactive
particles into the atmosphere in dangerous quantities. The number of ex-
posed employees, patients, and students can become considerable. As the
disturbing accident in Houston revealed last summer, we cannot safely
assume that these ultrahazardous substances will always be in careful, well-
trained hands.

When we turn to inquire how the law allocates responsibility with re-
spect to these two principal sources of danger, we find in the Atomic Energy
Act of 1954 an elaborate machinery for regulation through the device of
licensing by the Atomic Energy Commission, reinforced by the federal
government's retention of title to all our present and future supplies of

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8 Thus far, it should be noted, the AEC has not required fabricators of fuel elements to
obtain licenses for their plants (in statutory terms, their "utilization facilities"), although they
must have licenses for the special nuclear materials they obtain.

4 For the purpose of this distinction between reactors and radiation, I am ignoring the
obvious fact that reactors present radiation problems for personnel engaged in their operation
which are similar to, though greater in degree than, the radiation problems of conventional
industrial establishments using radioactive isotopes.

5 "Atomic Tragedy in Texas," Look, Sept. 3, 1957, pp. 26–29, digested in Reader's Digest,
special nuclear materials. Licenses are required under the act for the right to possess or transfer these materials\(^6\) or those radioactive "byproduct materials" that result from the fission of, or irradiation by, special nuclear materials.\(^7\) Licenses are also required to transfer or receive "source materials"—uranium and thorium—from which special nuclear materials are derived.\(^8\) Not only are these materials subject to license, but licenses must also be obtained for facilities producing or utilizing special nuclear materials, mainly of course, reactors.\(^9\) Finally, operators of the controls in such facilities must themselves be licensed.\(^10\) Not only do the licenses themselves impose a number of specific requirements, but compliance with the act and regulations under it is made a condition of every license.\(^11\)

Although licensing is the AEC's chief instrument of control, it is not always exercised by the issuance of licenses to individual corporations or human beings. In respect of some matters where individualization of control is less important, the Atomic Energy Commission is allowed by the act to issue general licenses, blanket authorizations that cover everyone falling within their terms.\(^12\) Whether the license is individual or general, however, it may be suspended or revoked on an individual basis after proceedings which include hearings and an opportunity to correct the deficiency that led to the revocation proceedings.\(^13\)

In contrast to this formidable network of controls which the federal law contemplates, we still find on the state side relatively little by way of specific legislation or administrative action. Of course, the states have long been exercising authority over health and safety conditions in industrial plants and over a much wider range of possible dangers to public health. Yet regulations have been issued to establish standards governing exposure to radiation in only a few states, chiefly California\(^14\)—which pioneered the field, issuing its regulation long before the AEC's regulation on radiation

\(^7\) Id. § 81, 42 U.S.C. § 2111 (Supp. IV 1956).
\(^8\) Id. § 62, 42 U.S.C. § 2092 (Supp. IV 1956).
\(^10\) Id. § 107, 42 U.S.C. § 2137 (Supp. IV 1956).
\(^12\) Id. § 63b, 42 U.S.C. § 2093(b) (Supp. IV 1956) (source materials); id. § 81, 42 U.S.C. § 2111 (Supp. IV 1956) (byproduct materials).
\(^13\) Id. § 186, 42 U.S.C. § 2236(b) (Supp. IV 1956), incorporating Administrative Procedure Act § 9(b), 60 Stat. 242 (1946), 5 U.S.C. § 1008(b) (1952), as to the correction of deficiencies.
protection,¹⁵ New York,¹⁶ Pennsylvania,¹⁷ and Texas.¹⁸ Massachusetts adopted a broad authorizing statute in 1955, but has issued no regulations under it;¹⁹ a few other states are in the same situation.²⁰ Several states now require registration of radiation sources.²¹

The act's declaration of policy, its supporting findings, and its statement of purpose,²² all emphasize the vital character of the federal government's concern with atomic development, but they have nothing to say concerning the interest of the several states. These provisions invoke the interstate commerce power as a basis of federal action,²³ but they carefully project the constitutional bases for AEC action well beyond that power.²⁴ Moreover, as one surveys the control scheme, no significant gaps are disclosed that might be filled by state regulation, apart from the pre-existing area for state control, typified by the use of X-rays, that has already been noted.

Near the end of the act, a short section—271—declares that "nothing in this Act shall be construed to affect the authority or regulations of any Federal, State, or local agency with respect to the generation, sale, or transmission of electric power." This seems rather clearly to relate to the familiar regulation of public utilities by state and federal commissions under which maximum rates for electricity are determined, conditions of service controlled, accounting methods prescribed, and security issues passed upon. Arguably, this reservation of state authority indicates by implication a

¹⁶ N.Y. SANITARY CODE, c. XVI, Ionizing Radiation; N.Y. INDUSTRIAL CODE, rule 38, Radiation Protection.
²⁰ Ore. Laws of 1957, c. 399 (regulations to issue after a two-year study); S.D. Sess. Laws of 1957, H.B. No. 826.
²³ Id. §§ 2c, f, 42 U.S.C. §§ 2012(c), (f) (Supp. IV 1956).
²⁴ Id. §§ 1–3, 42 U.S.C. §§ 2011–113 (Supp. IV 1956). Emphasis is placed on "the common defense and security," §§ 1a, 2a, b, d, e, g, h, 3c–e, 42 U.S.C. §§ 2011(a), 2012(a), (b), (d), (e), (g), (h), 2013(c)–(e) (Supp. IV 1956). The ownership of special nuclear material by the United States is also relied on. Id. §§ 2b, h, 42 U.S.C. §§ 2012(b), (h) (Supp. IV 1956).
contrary policy in other regulatory fields that were not expressly excepted from the act’s operation. However, this provision appears to have been designed to delimit the scope of the regulation authorized by the act by differentiating it from economic regulation. As such it would have no consequential bearing on the separate question whether, within the sphere of authority the act confers, federal power was to be exclusive.

There has been some speculation whether language appearing in section 53, sub-section b, and section 63, sub-section b, may not by implication reserve a role for the states. These subsections each authorize the AEC to “establish, by rule, minimum criteria for the issuance of specific or general licenses”; in the former subsection, for special material; in the latter subsection, for source material. Does the word “minimum” indicate a congressional intent to allow more rigorous criteria to be imposed by the state governments if they should be so minded? The context does not lend support to this view. It seems clear that Congress here is not prescribing for the AEC a policy of keeping regulation to a minimum as the Congress expressly did in section 104 which authorizes the licensing of reactors for therapy, research, and development. My own opinion is that the adjective “minimum” was used in sections 53 and 63 merely to characterize the nature of the regulation contemplated. In each case the AEC rule was to prescribe a standard below which the licensee was not permitted to fall, in other words, a minimum standard. In this sense, a state standard that was more restrictive than the federal would still be a “minimum” standard. So construed, the term throws no light on our question.

More illuminating as to congressional intention is the restrictive language in section 104 just mentioned, which requires the Commission to “impose the minimum amount of such regulations and terms of license as will permit the Commission to fulfill its obligations under this Act to ... protect the health and safety of the public.” This congressional policy—a continuation of the MacMahon Act’s still stronger policy of preserving research and development activities from licensing controls—cannot easily be squared with an assumption that the state governments were to remain free to impose whatever controls on the same operations they thought desirable. Though section 104 does not deal explicitly with state regulation, its purpose allows only one inference to be drawn readily from its silence.

This would not be the first time that the courts have been called upon

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25 In § 4(e) and § 7(a) of the Atomic Energy Act of 1946, 60 Stat. 760, 764, 42 U.S.C. §§ 1804(e), 1807(a) (1952), governing licenses for the manufacture of facilities and devices for, respectively, the production and utilization of fissionable material, the Commission is expressly forbidden to require licenses for these activities when they are undertaken “for the conduct of research or development activities” for either purpose.
to infer from their study of a silent statute whether in the light of the law's character and purpose, the Congress has preempted for the federal government the field the law regulated. The United States Supreme Court, in confronting this type of situation, has recently formulated three general tests to aid it in determining whether Congress intended, by its enactment, to leave no room for state legislation: (a) Is the scheme of control devised by the Congress pervasive in its application to the field? (b) Is the field of action one in which national concern is so dominant as to preclude enforcement of state laws on the same subject? (c) Would state action, if permitted, conflict with the administration of the federal control?

These tests were applied in Commonwealth of Pennsylvania v. Nelson in 1956; they led the Court to conclude that the Smith Act, together with the Internal Security Act of 1950 and the Communist Control Act of 1954, so occupied the field of legislation against sedition that no room was left to apply a state law to the same subject matter. This decision was rendered despite the declaration by the United States Department of Justice, appearing as amicus curiae, that the administration of the state laws had not in fact interfered with the enforcement of the federal. However, it is not easy to transpose the Nelson case tests from the special field of legislation out of which they arose into the problems of federal-state regulation posed by atomic energy. The concrete problems differ widely. And, while the Nelson case has evoked numerous differences of opinion in the anti-sedition legislation area, the present field—atomic energy legislation—seems to offer even more room for differences.

Although the congressional scheme of controlling the peaceful atom leaves no gaps, it is not easy to infer from its pervasiveness an intent to exclude all state authority. The second test—predominance of national concern—is less readily met; yet a recognition that state interest is substantial scarcely leads to the other extreme: to the conclusion that the Congress intended the states to share atomic energy regulations with the federal government to whatever extent the state legislators thought wise. The third criterion—the possibility of conflicts in administration—may therefore be controlling in resolving questions of authority for which the first two criteria may point to different answers.

In this connection, it should be recalled that, in revising the 1946 act,
Congress was embarking on a national program that was not only bold and ambitious but also, since the program was expected to induce private enterprise to embark its capital in new and economically hazardous ventures, vulnerable to the crippling consequences of inexpert and conflicting regulation.\textsuperscript{32} Reading the act in the light of these considerations, I find it difficult to believe that the courts would tolerate a state requirement that a licensee of the federal government, seeking to build a power reactor in a state, would have to satisfy the state authorities as well as the AEC that the proposed reactor was safe. Here there not only is national concern but the state action could seriously impair the administration of the federal controls. The safety requirements for a reactor must still be worked out as the design and construction of the reactor progresses; the regulatory body must watch over the process closely. There will be not one but a variety of alternative ways of building safety into the reactor. Which of these ways are necessary and which are best are matters for expert opinion in an area where experts are few. Surely the Congress cannot have meant that reactor builders should have to satisfy more than one set of judges as they moved ahead with their plans.

As one goes beyond the problem of assuring safe reactor design and construction, however, confidence that the congressional intent had been to assert exclusive jurisdiction begins to dwindle. It reaches a low ebb with respect to those byproduct materials which the AEC is now content to control by general licensing. Obviously, the use of radioactive isotopes merits closer scrutiny than such a control by general licensing can provide, and the state governments represent the normal source of authority to supplement the licensing control.

Perhaps we should recognize that we have not one, but at least two, fields as to which the question of preemption may be raised: the reactor safety field and the radiation protection field.\textsuperscript{33} In any event, a close analysis of the question of supersession of state power by congressional silence has begun to appear rather futile in the light of growing evidence that Congress does not intend to stay silent very much longer. It was a belief in the probability of congressional clarification of the present uncertainty that led me to direct the topic of this paper to the AEC's proposal of legislation to this end.


\textsuperscript{33} The qualification of this distinction stated in note 4 \textit{supra} is relevant here. The strongest evidence in the Atomic Energy Act on the question of congressional intent, the clause in \textsection 104a and b, confining the AEC's regulation of research and development reactors to a minimum, relates primarily to the reactor safety field, and so provides some basis in the statute itself for drawing a line between the two fields.
PREVIOUS LEGISLATIVE PROPOSALS

The first manifestation of congressional concern with the role of the states in the atomic energy program came at the start of the second session of the 84th Congress, when, on January 23, 1956, Representative Carl T. Durham, ranking Democrat on the Committee, introduced a short bill to add to the act a new section—274—entitled "Cooperation with States."\(^{34}\) This would have required the Commission to relinquish jurisdiction of health and safety in any "portion of the health and safety aspects of the Atomic Energy Commission" whenever the AEC received a certificate from the governor of any state that the state had an agency "competent to exercise jurisdiction" within that area.

The scope of the jurisdiction which this bill would require the AEC to cede is vague, and the resulting uncertainty is rendered more serious by the bill's provision vesting in the state governors an uncontrolled discretion to assert the competence of their own agencies. The bill would open the door to dangerous inroads in the AEC's authority. In this little-known field, where trained manpower for control posts is in short supply and where states are already competing for atomic industries, the risk that governors would certify too soon cannot be ignored.

Much more acceptable was the measure introduced late in the same session by Senator Clinton P. Anderson of New Mexico. His bill\(^ {35} \) would also add a new section 274, to be entitled "Executive Cooperation with States." After authorizing and directing Commission cooperation with the states in the formulation of health and safety standards, it authorizes the AEC to negotiate compacts or agreements with the states relating to these and other aspects of the atomic energy program prior to their submission to the Congress for approval. The bill provided that these agreements may delineate the "separate responsibilities of the Commission and of the States with respect to the health and safety aspects of activities licensed under this Act." As the Commission finds a state "competent to assume" powers of regulation over such areas, the Commission is authorized "to turn over such areas to the states for regulation." The bill also authorizes the AEC to join in work on interstate compacts and uniform state laws.

Since Senator Anderson's bill did not require the cession of jurisdiction except where the AEC itself was satisfied of the state's competency, risk of spotty regulation could be held in check. Conceivably, both the state agency and the AEC could retain separate responsibilities for particular activities in which both were concerned, but this is not wholly clear. Indeed, the idea that the AEC would "turn over" areas for state regulation suggests that at the same time the AEC would be withdrawing from them.

\(^{34}\) H.R. 8676, 84th Cong., 2d Sess. (1956).
\(^{35}\) S. 4298, 84th Cong., 2d Sess. (1956).
Neither bill attracted much attention, and the AEC's position concerning them remained obscure. When the AEC had first published proposed standards for radiation protection in the summer of 1955, it had called a conference of state representatives to consider the respective roles of the federal and state agencies. At the meeting spokesmen for federal agencies in various fields testified concerning the effectiveness of their cooperative arrangements with state officials, and state officials reported various problems which they had encountered in seeking to police the use of ionizing radiation. Though from time to time during the proceedings the question of preemption reared its head disquietingly, Mr. Harold L. Price, Director of the AEC's Division of Civilian Application, attempted to give it no definite answer, simply reiterating the Commission's readiness to cooperate with the states.

Last June, as the First Session of the 85th Congress was nearing its close, the AEC submitted to the Joint Committee a draft bill which reflected a considerable period of study as well as AEC consultation with state authorities through the medium of the Council of State Governments. Before turning to its consideration, however, I should report what the states had been doing.

STATE ACTIVITY AND THE AEC'S PROPOSED BILL

In the fall of 1954, the Committee on Atomic Energy established by the New England Governors' Conference formulated a bill that was embodied in the Committee's Report in July 1955. This bill, entitled "An Act to Coordinate Development and Regulatory Activities Relating to the Peaceful Uses of Atomic Energy," was designed as a model act for adoption in the New England states. It declared the enacting state's intent to cooperate actively in the federal program and to provide for the exercise of the state's regulatory authority—to the extent of its jurisdiction—so as to conform as nearly as possible to the Atomic Energy Act of 1954 and regulations issued thereunder, with the objective of creating "a single harmonious system of regulation within the State."

The New England bill contained only one provision with teeth: it required that any person seeking to set up a production or utilization facility for wholly intrastate operation obtain a federal license. This provision had a limited purpose: to make plain that the person who thought to escape

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88 Act to Coordinate Development and Regulatory Activities Relating to the Peaceful Uses of Atomic Energy §§ 1a, 2.
89 Id. § 2.
federal authority by confining his activities to a single state would not benefit by the tactic. No separate state licensing machinery was set up.

The bill also directed the various agencies of the state government having responsibilities with respect to atomic energy matters to study the problems thus presented. Where a study led an agency to recommend legislation or to formulate regulations, the bill sought to provide for the coordination of these proposals with others emanating from other state agencies and from the federal government. To this end and to direct developmental work in the state, the bill created a post in the office of the Governor for a Coordinator of Atomic Development Activities. He was to be kept "fully and currently informed" by the state agencies of all matters involving atomic energy, and, except in emergencies, no regulation could be effective unless the Coordinator had been given thirty days for its consideration.

Note that this measure provides only a framework for state action, a framework, moreover, designed for a period of uncertainty and change. The bill does not attempt to say what the states should regulate, if anything. However, in a number of the problem areas it identifies—for example, public utility regulation, workmen's compensation administration, and insurance—no conflict between federal and state authority need be expected. Only in the health and safety field is the likelihood of an overlap serious.

The New England Model Act, as it has come to be termed, has been adopted in Connecticut, Maine, Massachusetts, and New Hampshire, with variations from state to state. Even South Carolina accepted this Yankee measure although it omitted the office of Coordinator. Rhode Island set up a State Atomic Energy Commission. After a study of the problem, the Council of State Governments adopted the act with drafting improvements. The act as thus modified was included in the Council's program of Suggested State Legislation for 1957; the suggestion was followed in four states that year: Arkansas, Ohio, Tennessee, and Washington.

The need to clarify the position of the state agencies in the field of health and safety has continued, even in the states adopting the Model Act, and the rapidly spreading use of radiation by industry has made the prob-

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40 Id. § 3.
41 Id. § 4c. The Governor is authorized to waive this requirement in emergencies. Ibid.
43 Me. Rev. Stat. c. 52-A.
FEDERAL AND STATE REGULATION

The problem of inspection and standards a far from academic one. The four big states mentioned earlier, California, New York, Pennsylvania, and Texas, moved ahead with the issuance of substantive regulations covering uses of radiation that are covered by the AEC's regulations on Radiation Protection. Other states enacted statutes authorizing the issuance of like regulations. The AEC accordingly conferred further with the Council of State Governments in an effort to produce an amendment to the Atomic Energy Act providing a suitable basis for substantive state action. The proposal which eventuated also would add a new section 274 to the Atomic Energy Act. It comprises two operative sub-sections.

Sub-section a authorizes cooperation with the state in carrying out the Commission's responsibility for protecting the public from radiation hazards. Note that the Commission invites cooperation in the same breath that it asserts federal responsibility. This bill is not a surrender of jurisdiction but a sharing of it. The bill, like its predecessors by Representative Durham and Senator Anderson, authorizes AEC cooperation without requiring that this be formalized by the adoption of negotiated agreements. However, the sub-section does provide, as did its predecessors, for agreements between the United States and individual states or groups of states for provision of "such services to the Commission as the Commission deems necessary." The bill specifically authorizes the AEC to provide employee training and other services to the states "with or without charge." For our purposes, sub-section b is more important than sub-section a and equally inclusive in coverage. It would break the silence of Congress and remove the Atomic Energy Act as a possible barrier to state regulation. It permits state action "adopting, inspecting against, and enforcing standards, for protecting the health and safety of the public from radiation hazards incident to the processing and utilization of source, byproduct, and special nuclear material." This opens the door wide. It embraces standards governing the safety of reactors and other facilities using special nuclear materials as well as standards governing protection against radiation in the industrial use of radioactive isotopes. However, there are three quali-

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50 See notes 13–17 supra. California took action in 1950.
52 See statutes cited in notes 14 and 15 supra.
53 Neither in the bill nor in the "Analysis of the Proposed Amendment" that the AEC sent with the bill to the Joint Committee (hereafter cited as the "AEC Analysis") was it intimated that the Commission would pay for these services.
54 The AEC Analysis suggested a "modest program of assistance in training" two men for each state for one year over a four-year period at a total cost of about $400,000. The equal allocation of trainees by states, though perhaps politically expedient, does not make sense in functional terms.
55 Neither the proposed bill nor the AEC Analysis recognizes that the states now have concurrent jurisdiction with the federal government.
fications. First, the power to adopt and enforce standards is subject to the limitation that the standards are "not in conflict with those adopted by the Commission." Second, the states are denied the right to use the licensing power to control activities subject to AEC licensing. Third, sub-section b specifies that "state radiation standards shall not apply" to Government facilities or to those "operated under contract with or for the account of the Government."

Each of the three qualifications of the concession raises questions of interpretation and of policy. When is a state regulation "not in conflict with" a federal regulation from which it differs? The AEC, in submitting its proposal to the Joint Committee, gave an answer to this: a state might, if it chose, impose "more restrictive standards" than the AEC's but could not, by issuing less restrictive standards, relieve anyone from complying with the stricter AEC standards. In this way, as long as each jurisdiction is prescribing what the industry shall not do, conflict is easy to escape. If, however, a state regulation prescribes affirmatively how the industry must meet a particular problem, then if the AEC prescribes a different way of handling it, there would be a conflict and the AEC prescription would prevail. If the AEC were simply to leave the matter to the licensee's discretion, probably the state's affirmative requirement would not be deemed in conflict, though this is not clear. I should add that the AEC follows its explanation with a strong plea for cooperation to attain a consistent body of state and federal standards.

The AEC justifies its denial of concurrent licensing power to the states by declaring that "a dual licensing system" would be "a totally unnecessary burden . . . on the emerging atomic energy industry." This seems true with respect to some matters, as I shall note below, but, in areas where state action is welcomed and where the issuance of licenses is not itself a burdensome procedure, it seems unfortunate to deprive state authorities of such an effective instrument of control. Moreover, it is not always easy to tell when a license is required. The AEC explains, for example, that a registration requirement is not proscribed as a license. The qualification simply forbids "the imposition by the states of a right of prior approval." A state official presumably can advise a corporation installing radiation-using equipment that it will violate the state's standards and warn it that state injunction proceedings will be instituted as soon as the equipment is ready to be put in operation, but the state official may not require the corporation to obtain the state's formal approval. This does not seem a sensible line to draw. It might well tempt a state to challenge the constitutionality of the federal government's occupancy, pro tanto, of the field.

The AEC recognizes that the states may have reasons for employing the licensing device for purposes other than radiation protection, the "use
of their water resources and zoning” being instanced, and it does not seek to impair this authority. It should be noted, however, that this concession may require the AEC to make sure that radiation safety standards are not being used as conditions of the licenses issued in other fields.

The third qualification is easy of application where a facility is owned and operated by the federal government. However, the category of facilities operated “under contract with and for the account of” the Government is not easy of definition. The AEC indicates cautiously that the qualification “would apply primarily to cost-type contractors [italics added]... not to a very large number [but some?] of the lump-sum contractors of the Commission.” Might not another line of distinction prove more workable at the risk of some overlapping of authority?

The principal concern with the proposed sharing of authority springs from the already noted difficulty in envisaging two regulatory bodies exercising authority over the safety of the design and construction of reactors and, indeed, of other facilities using special nuclear materials. Moreover, recognition of concurrent state authority in this particular area does not entail the addition of only one more regulatory body to scrutinize the proposed plans and safeguards. If a state failed to coordinate its own agencies, jurisdiction might be asserted by the state’s public utilities commission, by its industrial commission or department of labor, by its public health commission, by its board of boiler inspection, and, if the reactor happened to be located within a city—as research reactors are likely to be—then by one or more city officials and boards. If, in the process, one could detect an admixture of politics with the natural concern for the safety of the citizenry, this would not be without precedent in the annals of state and local government.

A federal program, with world-wide implications, is at stake in the effort to develop safe and economic reactors. It does not seem unreasonable for the federal government to retain full authority over safety standards involving reactors and like facilities. I am therefore troubled by the proposed concession of authority to the states to set safety standards for reactors which are stricter than the federal, provided only that these do not impose conflicting affirmative requirements and do not entail prior state approvals.

The problem is not an academic one; state authority in the matter of reactor safety has already been asserted. In the protracted hearings, recently closed, in which the AEC has been considering the application of the Power Reactor Development Company for a construction permit to enable it to build a fast breeder reactor at Lagoona Beach, Michigan, the State of Michigan appeared on behalf of its Water Resources Commission and its Department of Health.66 The state did not join in the opposition to

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the reactor, which was conducted by the United Auto Workers as intervenor, but the state did declare:67

These hearings in this matter are not to be considered as a substitute for our procedures. The state of Michigan expects to work with the Power Reactor Development Company in relation to matters of health, safety and welfare at all times. We in the state feel that we are charged with a responsibility in that respect, and we intend to see that it is carried out not only in relation to the Lagoona Beach project, but in relation to any reactor project that may be subsequently located within the state of Michigan.

If, however, federal control over reactor safety remained exclusive as it now appears, would that deprive the states of all authority with respect to reactor location? Suppose the state—or a city—were to take the position that, regardless of findings of safety by federal experts, it wanted no reactors within its bounds, at least until the art had more fully matured. Should it be free to exercise this power to regulate the use of its own land?

My own view is that, as a matter of policy, this question should be answered "yes"—and I do not believe the act, as it stands, precludes a state or a subdivision of a state from taking such a position. The AEC, when it licenses a reactor, gives careful consideration to the suitability of the location from a safety standpoint, but there are factors in zoning or otherwise controlling the use of land which extend beyond physical safety. A city or a state might reasonably conclude that the apprehensions induced by even an objectively safe reactor would impair the amenities of existence and also property values within its bounds. The authority to reach this conclusion should be recognized by the Congress, as a matter of legislative policy, regardless of the probable constitutional power in Congress to override the state views.68

Apart from the special problem of reactor safety and the need for re-examining the qualifications in sub-section b, the proposed bill seems to me to represent a desirable effort to combine continued federal responsibility for health and safety with an active role for the states in assuring its real-

67 Ibid. The State's comment is "not to be taken as an approval or disapproval of the Lagoona Beach project... We are making studies in the fields of labor, workmen's compensation, public highways, public utilities, insurance, conservation, fire hazard, environmental hazards and so on."

68 The 1954 act, in § 182d, recognizes that reactors might have to be "rationed" as a consequence of a "limited opportunity" for the issuance of licenses, presumably because of a (now unlikely) shortage of nuclear fuel. The act manifests no intention to thrust reactors on unwilling communities. Of course, opposition to a federally owned reactor in a desired location might require the federal government to seize the land it needed under its eminent domain powers. If a state or city wishes to zone out reactors pronounced safe by the AEC, that should be its privilege; this is consistent with denying to the state the power to pass on the safety of particular reactors and to condition their construction in the state on its officials' decision as to the adequacy of the reactors' design and construction. Some care would have to be taken to preclude "zoning" regulations that sought to accomplish the latter control by indirection.
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ization. If the states will bring their manpower and knowledge of local industries and conditions to the task of inspection—after taking advantage of such opportunities for special training as the AEC will offer—they are likely to provide better coverage of radiation risks than an exclusively federal staff. Where the factor of independent state action seems less than obviously good is in the formulation and adoption of state safety standards.

The danger here is lack of uniformity, a burdensome diversification that does not reflect any genuine differences in need. Fortunately, we have in the National Committee for Radiation Protection and Measurement a strong force for unification of the substantive requirements of radiation safety. One can already see in the laws and rules adopted in a number of states, as well as in the AEC’s own regulations, the effectiveness in this respect of the model statute and model regulation in the Committee’s Handbook No. 61, “Regulation of Radiation Exposure by Legislative Means” and the series of technical standards governing permissible dosage, monitoring and the like to be found in its other Handbooks. However, the likelihood of diversity in rules and standards will grow as the number of enacting states multiplies and particularly as the Committee itself introduces changes. Moreover, on top of a diversity in the rules enforced may come still greater diversity in administrative and enforcement practice. Although the AEC presumably contemplates that cooperating state officials will turn information of violations over to the AEC to permit it to take whatever action seems indicated, there is nothing in the proposed bill to prevent the states from carrying out enforcement measures wholly on their own.

Perhaps, with or without enactment of the bill, the AEC may persuade state and local labor and public health inspectorates to report violations of AEC regulations directly to the AEC. This cooperation may be informal as is the mutual cooperation between state securities administrators and the SEC. Perhaps, however, assuring effective cooperation will require agreements of the sort worked out by the United States Department of Labor for the use of state agencies in the enforcement of the Fair Labor Standards

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60 The Handbooks are published for the Committee by the National Bureau of Standards. Section 5 of the Model Regulations for Radiation Protection proffered in Handbook 61, states that the recommendations of the Committee are to be used “as guides or standards or as a basis for calculations to obtain or maintain safe working conditions within the meaning of the regulations herein.” The Handbooks referred to are Nos. 42, 48, 49, 51, 52, 53, 54, 55, 56, 58, 59, and 60. 2 CCH ATOMIC ENERGY L. REP. § 10, 357.

61 The AEC Analysis reports AEC “discussion with several states looking towards an agreement to obtain inspection services from these states.” “Inspection by state agencies would be under the guidance of the Commission’s Division of Inspection.”

Act of 1938 and the Public Contracts Act of 1936. A regulation of the Secretary of Labor provides the legal basis for these agreements. A state agency enforcing child-labor, maximum-hour, or minimum-wage laws submits a plan for cooperation to the Secretary and the Administrator of the former act. If they find the plan "reasonably appropriate and adequate" to carry out their functions, the Department of Labor will provide the state with the funds for its execution—with safeguards against political exploitation. Federal officials specify inspection procedures and undertake control of all criminal enforcement actions.

If an arrangement analogous to this scheme of cooperation could be worked out for policing radiation hazards, the cooperating states would not have to adopt or enforce any regulations of their own. If this seemed too much of a surrender to federal authority, a state could adopt the federal regulations as state law or could authorize and direct whichever was the appropriate state body to adopt regulations identical to the federal. Although, in a few states, the incorporation into the local laws of a changing body of administrative or legislative rules from another source has been held to be an unconstitutional delegation of power, the more persuasive view would recognize this technique as a sensible and valid exercise of the rule-making body's own discretion. The adoption of this policy, moreover, would enable proceedings for enforcement to be instituted by the state authorities in the state courts instead of depending wholly on federal prosecution.

If state inspectorates are not to include specialists in radiation hazards, there may be difficulty in following the pattern of the agreements developed by the Labor Department since reimbursement would be complicated by the fact that a state inspector would be discharging both state and fed-

65 For an excellent treatment of the problem taking the view stated, see Mermin, "Cooperative Federalism" Again: State and Municipal Legislation Penalizing Violation of Existing and Future Federal Requirements, 57 Yale L.J. 1, 201 (1947). The author gives special emphasis to the large body of relevant experience provided by state and local laws penalizing, as state and local offenses, violations of existing and future OPA price and rationing regulations. These were attacked chiefly as unconstitutional delegations of legislative power and as intrusions into a field occupied by federal law. On these grounds, the Ohio Supreme Court ruled a Cleveland ordinance invalid in City of Cleveland v. Fiskura, 145 Ohio St. 144, 60 N.E.2d 919 (1945); but the contrary view was taken by the highest courts of New York, People v. Mallman, 293 N.Y. 887, 59 N.E.2d 790 (1944); and of Michigan, People v. Sell, 310 Mich. 305, 17 N.W.2d 193 (1945). The identity of the state to the federal regulations weakened the argument based on preemption.

In Brock v. Superior Court, 9 Cal. 2d 291, 71 P.2d 209 (1937), the court relied on the fact that there was "no automatic incorporation by reference of future federal laws" to uphold an intrastate licensing plan designed to conform to the federal interstate plan.
eral responsibilities in the same inspection. A grant-in-aid program conditioned on the state's maintaining an adequate number of adequately trained inspectors might be more appropriate. However, this is only one practical aspect of a complex relationship which will doubtless evolve gradually over the next decade. As it develops, it is likely to provide problems aplenty, not merely for the administrators at both levels of government, but for the lawyers and the political scientists who are concerned with federal-state relationships. If the development is to yield a sound federal-state system of control, these problems must be approached with a more lively concern for the functions to be performed by control than for the maintenance of familiar jurisdictional lines.