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Atomic Energy - Indemnity Legislation - Anderson Amendments to the Atomic Energy Act of 1954

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COMMENTS

ATOMIC ENERGY—INDEMNITY LEGISLATION—ANDERSON AMEND-MENTS TO THE ATOMIC ENERGY ACT OF 1954—The Anderson Amendments¹ were enacted to encourage private industry to enter the atomic energy field by removing the risk of excessive liability² for a major nuclear reactor disaster.³ Such a disaster could result in liability far in excess of available insurance coverage.⁴ The solution provided by the new legislation has three aspects: (1) After private financial protection, geared to the amount of available insurance, is obtained by a person licensed by the Atomic Energy Commission,⁵ (2) the Commission will execute an agreement⁶ to indemnify (not insure) the licensee and "any other person who may be liable for public liability" to the extent of \$500 million. (3) When claims exceed this amount the fund is distributed pro rata among claimants, a reserve being set aside for claims arising from latent injuries. After the \$500 million has thus been exhausted, no further recovery is possible, for the act cuts off the liability of the licensee at this point.⁵

The adoption of an indemnity rather than an insurance⁸ approach to this problem has at least three important effects. The first of these is that substantive problems of liability are unaffected and thus left to the various determinations of state courts.⁹ This

¹ P.L. 85-256, 85th Cong., 2d sess. (Sept. 2, 1957), 71 Stat. 576, 42 U.S.C.A. (Supp. 1957) §2210, amending the Atomic Energy Act of 1954, 68 Stat. 919, 42 U.S.C. (Supp. IV, 1957) §§2011 to 2281. Section references herein are to the 1954 act, as amended. See 71 HARV. L. Rev. 750 (1958).

² S. Rep. 296, 85th Cong., 1st sess., p. 1 (1957).

³ AEC, TWENTY-SECOND SEMI-ANNUAL REPORT 43 (1957). Some companies have flatly stated that they will not put their costly reactors into operation until adequate protection is available. See, e.g., 103 Cong. Rec. 9560 (July 1, 1957).

⁴ Conceivable damages from the worst possible disaster have been estimated at from \$200 million to \$7 billion, including 3400 fatalities and injuries to 43,000 or more. 103 Cong. Rec. 9560 (July 1, 1957); and Hearings Before the Joint Committee on Atomic Energy, Governmental Indemnity, 84th Cong., 2d sess., p. 53 (1956). The maximum amount of private insurance presently available from both the stock and mutual pools is about \$60 million. Butler, "Liability Insurance for the Nuclear Energy Hazard," 60 Pub. Uttl.. Fort. 913 at 916 et seq. (1957). This figure is about four times the maximum coverage for a single risk ever before available. AEC Twenty-second Semi-Annual Report 44 (1957).

⁵ Section 170(a). See notes 29 and 30 infra.

⁶ Section 170(c).

⁷ Section 170(e).

⁸ This is contrasted with re-insurance or a compensation scheme. See Atomic Industrial Forum, Inc., Financial Protection Against Atomic Hazards 45, 47 (1957).

⁹ For analysis of the substantive problems associated with nuclear risks, see Cable and Early, "Torts and the Atom: The Problem of Insurance," 45 Ky. L. J. 3 (1956);

result does not necessarily follow from the decision to use an indemnity plan, as is demonstrated by the procedure employed on the European continent where indemnity is accompanied by the imposition of strict liability.10 It may well be, however, that state courts will impose liability without fault in the event of a nuclear reactor disaster, but this is not certain and holdings might vary.¹¹ Moreover, the expensive problems of duplicative litigation are evident in the context of a burn-up that spreads radioactive material over a multi-state area, particularly if the law of the state where the injury occurs is applied, as appears likely under existing conflicts rules. 12 These costs of litigation or settlement will be paid out of the limited funds available to meet liability claims with the necessary result that whenever claims reach the limit on aggregate liability, whatever is consumed in the process of litigation must reduce the amount available to compensate injured persons.

A second impact of the indemnity approach is that Congress has kept the government out of the insurance business, a decision which avoids both practical¹⁸ and political problems.¹⁴ That the present solution cannot appropriately be characterized as insurance is rather clear, for insurance connotes a scheme whereby

Becker and Huard, "Tort Liability and the Atomic Energy Industry," 44 Geo. L. J. 58 (1955); Atomic Industrial Forum, Inc., Financial Protection Against Atomic Hazards (1957); Mitchel, "Some Administrative and Legal Problems Related to the Widespread Use of High Level Radiation Sources," The Economics of Nuclear Power 397 (1957). It is quite likely that an entrepreneur will be exposed to liability without fault for engaging in an extrahazardous activity. Prosser, Torts 336 (1955), and sources cited above. Even under a test of fault the doctrine of res ipsa loquiter may, in effect, impose strict liability. Liability might also be founded on a theory of nuisance. Freedman, "Nuisance, Ultrahazardous Activities, and the Atomic Reactor," 30 Temp. L. Q. 77 (1957). The fact that the activity is being carried on pursuant to a federal license may avert strict liability [Prosser, Torts 343-344 (1955)], and certain other defenses, e.g., proximate causation, contributory negligence and assumed risk might protect the operator. Suppliers of parts might be held liable for furnishing a dangerous instrumentality. Moran v. Pittsburgh-Des Moines Steel Co., (3d Cir. 1948) 166 F. (2d) 908. In regard to liability of government contractors, see 2 Harper and James, Torts §29.4, p. 1618 (1956).

10 See Belser, "The Present Position of Reactor Owners in Europe in Respect to Third Party Liability and Insurance," paper presented to the Atomic Industrial Forum, N.Y., Oct. 30, 1957; comment, 6 Am. J. Comp. L. 79 (1957).

11 See note 9 supra.

12 GOODRICH, CONFLICT OF LAWS, 3d ed., §94 (1949). Defendants may be sued whereever they can be served with process, subject to forum non conveniens considerations, id. at \$11.

13 The process of setting up additional governmental machinery to conduct insurance business would be expensive and unnecessary. Hearings Before the Joint Committee on Atomic Energy, Governmental Indemnity, 84th Cong., 2d sess., p. 169 (1956).

14 This is anathema to the insurance industry, id. at 168, 169.

premiums are collected on an actuarial basis to accumulate a reserve out of which claims may be paid. The modest fee15 imposed for the government indemnity is intended only to defray administrative costs and will not be used to accumulate any reserve. 16 Moreover, the accumulation of such a reserve adequate to cover all nuclear risks would make premium costs prohibitive.¹⁷

The third consideration, which would probably also apply even had an insurance plan been adopted,18 is that Congress can nullify the indemnity by withdrawing its consent to be sued. While the indemnity agreements are contractual and Congress cannot repudiate its contractual obligations under the Fifth Amendment, 19 this limitation is not traversed when Congress simply refuses its consent to be sued.20 Moreover, the indemnity is in the nature of a gratuity which Congress is always free to repudiate.21 The significance of this consideration lies in the expectation that private insurance organizations will have accumulated sufficient experience and reserves in the next ten years to assume the entire burden of carrying nuclear risks,22 and that Congress may therefore wish to withdraw from this area. It was for this reason that the authority of the Commission to enter indemnification agreements expires on August 1, 1967, although no limit is imposed on the duration of agreements²³ it may make before that time. Since all persons covered by the act remain primarily liable, the effect of withdrawing the indemnity would be at least to expose them to the additional \$500 million liability which the government would otherwise have paid. It appears that

¹⁵ Section 170(f) authorizes the Commission to collect a fee of \$30 per year per 1000 kilowatts of thermal energy capacity for commercial licensees, and less in the Commission's discretion (based on prescribed criteria), no fee to be less than \$100 per year.

¹⁶ Hearings Before the Joint Committee on Atomic Energy, Governmental Indemnity

and Reactor Safety, 84th Cong., 2d sess., p. 14 (1956).

17 Ibid. The yearly premium for the maximum coverage currently available under both pools is about \$260,000. Butler, "Liability Insurance for the Nuclear Energy Hazard," 60 Pub. Util. Fort. 913 at 922 (1957).

¹⁸ Lynch v. United States, 292 U.S. 571 (1934).

¹⁹ Perry v. United States, 294 U.S. 330 (1935).

²⁰ Lynch v. United States, 292 U.S. 571 (1934), holding repeal of legislation under which individuals paid premiums to the government for war risk insurance could not validly repudiate such contract rights, but that Congress could nevertheless refuse to be sued on such claims.

²¹ Brown, "Vested Rights and the Portal to Portal Act," 46 Mich. L. Rev. 723 at 736 (1948). But cf. Lynch v. United States, 292 U.S. 571 (1934), which distinguished pensions from insurance because an agreement of the parties is not involved.

²² Hearings Before the Joint Committee on Atomic Energy, Governmental Indemnity, 84th Cong., 2d sess., p. 86 (1956).

²⁸ Section 170(c).

Congress could abolish even this limitation and restore full liability if it chose.²⁴

In light of these basic considerations the balance of this comment will attempt to pose some of the problems facing the Atomic Energy Commission, nuclear entrepreneurs, and the public under the provisions of the new law.

I. Coverage: Persons Indemnified

The act's coverage is designed to supplement, rather than provide an alternative to private insurance.25 This reflects a policy of limiting coverage to cases where private insurance is unable to furnish protection in adequate amounts, and, generally,26 only those who have obtained all the private insurance available can make indemnity agreements. The extent to which reliance is placed on private coverage is illustrated by the language of section 170(c) providing that the indemnity shall be for liability "in excess of the level of financial protection required." The committee report interprets this to mean that the government will not have to pay until claims exceed this amount even if the insurance company is not liable because of a "loophole" in its policy.²⁷ This eventuality is unlikely, however, since the statute and the private policies have been drafted to track each other as closely as possible, 28 so that generally speaking what is covered by one is also covered by the other. It does not take care of the problem presented by a breach of the insurance contract such as by failure to pay premiums.

In addition to obtaining the necessary private financial protection, a person must make an indemnity agreement before he is covered by the act, although, as will be indicated below, the agreement covers persons other than the indemnitee. The question who can make such agreements therefore becomes important. While the act requires an agreement of all facilities licensees,²⁹

²⁴ CORWIN, CONSTITUTION OF THE UNITED STATES OF AMERICA 1093 (1952).

²⁵ Hearings Before the Joint Committee on Atomic Energy, Governmental Indemnity, 84th Cong., 2d sess., p. 1 (1956).

²⁶ Section 170(b) authorizes the Commission to require a lesser amount. See below, "III. Financial Protection Required."

²⁷ S. Rep. 296, 85th Cong., 1st sess., p. 21 (1957).

²⁸ Butler, "Liability Insurance for the Nuclear Energy Hazard," 60 Pub. Util. Fort.

⁹¹³ at 918 (1957); S. Rep. 296, 85th Cong., 1st sess., pp. 16, 17 (1957).

29 These are licenses issued pursuant to §§103 and 104, authorizing the ownership and operation of facilities for the production or utilization of special nuclear materials and §185 which authorizes construction of such a facility.

the Commission has the discretion to decide whether materials licensees30 must make agreements.31 If it decides that they need not, then they will normally³¹² not be covered. Indemnity agreements are also available to AEC contractors whose activities involve the risk of a substantial nuclear incident,32 but the contractors, unlike licensees, are not required to furnish financial protection.³³ There are two basic reasons for this distinction. In the first place, it has been the practice of the Commission all along to make indemnity agreements with its contractors for nuclear risks.84 Secondly, the government would ultimately have to bear the cost of any insurance which it required its contractors to carry. Against this saving in government expense, however, must be balanced the better protection given the public by private liability insurance than by the old government indemnity contracts; for the private insurance policies do not except negligence or bad faith of the contractor from policy coverage as do the existing AEC indemnity contracts. 85 Moreover, even when a contractor indemnified under the old arrangement chooses to make the \$500 million indemnity agreement, total coverage is less than if he had private insurance. This follows because his liability in all cases is limited to \$500 million plus "the amount of financial protection required of the . . . contractor."38 But since the old

30 Licenses issued pursuant to §§53, 63 and 81, authorizing the possession and use

of special nuclear, source and by-product material.

312 See text following note 39 infra.

32 The term "substantial" is a translation of the distinction between facility and materials licensees, i.e., to restrict coverage to the situations where there is likely to be large potential for damage. 103 Cong. Rec. 9562 (July 1, 1957).

33 The Commission is authorized to require financial protection but has decided not to do so. BNA, Atomic Industry Rep. 4:29 (1958). The Commission has, nevertheless,

offered the indemnity to its contractors, ibid.

34 Hearings Before the Joint Committee on Atomic Energy, Governmental Indemnity, 84th Cong., 2d sess., pp. 76-85 (1956). Prior to the 1957 amendments the only financial qualifications the AEC required of its licensees under §182 was the ability to meet the normal costs of operating the facility and paying for materials. Hearings Before the Joint Committee on Atomic Energy, Governmental Indemnity, 84th Cong., 2d sess., p. 107 (1956), 10 C.F.R. 50.33 (Supp. 1957).

85 Hearings Before the Joint Committee on Atomic Energy, Governmental Indemnity,

84th Cong., 2d sess., pp. 76-85 (1956).

86 Section 170(e).

³¹ Production, §11(s), and utilization, §11(y), facilities are defined to include any equipment or device (excepting atomic weapons) capable of producing or using special nuclear material in such quantity or manner as to affect the health and safety of the public. Theoretically, then, mere materials licensees are less likely to pose a threat of catastrophic damage. The Commission is therefore given discretion in such cases so that financial protection will be required only when needed. However, no amount of byproduct material will automatically require a facilities license, so the Commission has complete discretion in this situation.

indemnity contracts do not appear to be "financial protection required" (since by hypothesis no financial protection is required of contractors) liability is limited to \$500 million. This is less than coverage of the smallest licensee, since the \$500 million is added to whatever financial protection the licensee furnishes.³⁷ The failure of the act to make clear the relationship between the two indemnities will undoubtedly raise other problems in the future.

As was previously suggested, an agreement once made covers many persons other than the indemnitee. The act provides that the AEC will contract to indemnify its licensees "and any other persons who may be liable."38 This provision was urged by contractors and suppliers who might be liable in connection with a nuclear incident and was therefore intended primarily to cover such cases as the manufacturer of a defective reactor part.³⁹ The provision could also apply to a materials licensee who decided not to make an indemnity agreement himself. The Senate Report indicates, however, that the language also covers trespassers (e.g., an airplane which crashes into the reactor causing a nuclear incident) and even saboteurs, so long as the sabotage does not constitute an act of war.40 The reason given for including such persons is the desirability of protecting the public in these circumstances; and policy arguments can be made for covering the unfortunate owner of the airplane. It may nevertheless be questioned whether, in protecting the public against the deeds of a malicious trespasser, it is also necessary to indemnify that wrongdoer and limit his liability. The question becomes particularly pertinent when it is realized that innocent injured third parties are not protected by the act at all, because of the inherent limitations of the indemnity approach, if no liability for an incident is found. Failure to cover the no-liability case is explained by its considerable improbability and the expectation that Congress would act ad hoc in such a situation. (It should be noted here that the required private insurance must be broad enough to

³⁷ The AEC temporary regulation, 10 C.F.R. §140.11 (Supp. 1957), requires each licensee (excepting materials licensees) to have and maintain financial protection for each nuclear reactor in the amount of \$150,000 per 1000 kilowatts of thermal energy capacity authorized in the license, provided that no reactor shall have less than \$250,000. 38 Sections 170(c), 11(r).

³⁹ Hearings Belore the Joint Committee on Atomic Energy, Governmental Indemnity, 84th Cong., 2d sess., p. 116 (1956).

⁴⁰ S. Rep. 296, 85th Cong., 1st sess., p. 17 (1957).

cover liability of all the "persons who may be liable," discussed above, before the Commission will permit an indemnity agreement to be made.)

Special coverage problems relating to the traditional immunity from suit of local governmental bodies and the federal government should be raised at this point. As to the former, the act authorizes the Commission to require waiver of such immunity as a condition to granting a license to operate a reactor.41 (As a licensee, of course, the local body must secure private financial protection and execute an indemnity agreement.) Several difficulties42 can merely be mentioned in this regard, viz., whether immunity exists at all-raising the distinction between governmental and proprietary functions;48 whether the particular body has sufficient legislative and constitutional authority to waive it, and, if so, whether such a requirement on the part of the Commission constitutes an unconstitutional condition.44

As to the United States, the committee hearings indicate a general assumption that the Federal Government would not become liable.45 The possibility does arise, however, under the Federal Tort Claims Act46 which permits suit in tort cases where a private person under the same circumstances would be liable. There are a number of exceptions to this, the most relevant to the present problem being ". . . an act or omission of an employee of the Government . . . in execution of a statute or regulation . . . based upon the exercise or performance or failure to exercise or perform a discretionary function or duty . . . whether or not the discretion involved be abused."47 This limitation received a broad construction in Dalehite v. United States,48 in which the United States Supreme Court held that decisions relating to the technical conditions under which certain fertilizer was packaged involved governmental discretion. A subsequent decision of the Supreme Court, however, has given greater recog-

⁴¹ Section 170(a). The provision is not mandatory.

⁴² The Commission is now studying these problems, BNA, ATOMIC INDUSTRY REP. 3:31 (1957).

⁴³ CORWIN, CONSTITUTION OF THE UNITED STATES OF AMERICA 107-108 (1952).

⁴⁴ See Western Union Telegraph Co. v. Kansas, 216 U.S. 1 (1910); Frost & Frost Trucking Co. v. Railroad Commission of California, 271 U.S. 583 (1926).

⁴⁵ Hearings Before the Joint Committee on Atomic Energy, Governmental Indemnity, 84th Cong., 2d sess., pp. 73, 74 (1956). 46 28 U.S.C. (1952) §§1346, 2671 to 2680.

⁴⁷ Id., §1346(a).

^{48 346} U.S. 15 (1953).

nition to the distinction between the use of governmental discretion to undertake a given activity and the relatively mechanical aspects of carrying it out.⁴⁹ Two recent district court decisions have evidenced a conflicting approach as to how far the exercise of discretion extends in the process of testing atomic weapons.⁵⁰ These cases indicate generally that if, e.g., the alleged negligence of a federal employee is in the determination of safety standards, rather than their proper administration, the government will escape liability.

Should the government be found liable, however, its relationship to the Anderson Amendment is somewhat unclear. As the operator of a reactor, the government can probably be presumed not to have made an agreement with itself, so that its liability is not limited. If its liability is in connection with another's agreement (an Air Force plane crashes into a covered reactor) the liability limitation might apply. The question would turn on whether the government is a "person(s)" within the provision of section 170(e) that the "aggregate liability for a single nuclear incident of persons indemnified . . . shall not exceed the sum of \$500,000,000. . . ."

II. Protection: Persons Entitled To Recover

While the act's protection of the public is broad, it is not unlimited. Section 170(c) provides that a "contract of indemnity shall cover public liability arising out of or in connection with the licensed activity." This language obviously includes any incident which occurs on the site of the licensed activity, and the Committee Report specifically includes any mishap that may arise while radioactive materials are being transported to or from that site.⁵¹ Does the phrase "in connection with the licensed activity" embrace an incident which occurs at the plant of the fuel elements fabricator or re-processor? While such an inclusion

⁴⁹ Indian Towing Co. v. United States, 350 U.S. 61 (1955); 5 J. Pub. L. 258 (1957). 50 Bulloch v. United States, (D.C. Utah 1956) 145 F. Supp. 824, noted in 35 Texas L. Rev. 590 (1957); and Bartholomae Corp. v. United States, (S.D. Cal. 1955) 135 F. Supp. 651, noted in 5 J. Pub. L. 258 (1956). Both cases denied recovery, but the latter on grounds that the question of taking certain precautions prior to testing involved governmental discretion, while the former insisted that actual carrying out of the tests is ministerial and requires the exercise of due care, recovery being denied for failure to prove causation. The Bartholomae case also rejected a theory that the damage involved a taking which requires compensation under the Fifth Amendment, the essence of the claim being in tort.

⁵¹ S. Rep. 296, 85th Cong., 1st sess., p. 18 (1957).

appears reasonable, can the language be further extended to cover an accident occurring in one of these independent plants arising out of work done for another customer (which has no indemnity agreement) but which is aggravated by fissionable materials on hand for use in the indemnified reactor? To state such questions is to emphasize that they are a matter of degree and must be determined on their facts as they arise.

Another limitation on the act's protection is the geographic requirement that the nuclear incident must occur "within the United States." This clearly excludes any nuclear incident abroad, whether it caused injury within the United States or liability to a United States citizen, e.g., an exporter.⁵³ The latter situation is particularly important in view of the fact that the first real demand for reactors will be in other countries, rather than in the United States with its relative abundance of fossil fuels.⁵⁴ Indemnity legislation is probably not the best answer to this problem which the Joint Committee preferred to handle through international agreements,55 but dependence on individual agreements following diplomatic negotiation is not conducive to the most rapid development of a market for American built reactors.

Less clear is the case of an incident occurring within the United States which causes damage abroad (e.g., Canada or Mexico) with resulting liability of the indemnitee. The Committee Report indicates that such a case would not be covered, grouping it with the foregoing situations as problems that "will require further investigation by the Congress at that time."56 Such an interpretation is difficult to square with the language of the act which simply states that the "nuclear incident" must be within the United States.⁵⁷ The Report is careful to point out in another connection that the site of a nuclear incident is "that event at the site of the . . . activity . . . rather than the site where the damage may perhaps be caused." Moreover, the act states that in-

⁵² Section 170(o).

⁵³ S. Rep. 296, 85th Cong., 1st sess., p. 16 (1957).
54 Wit, "Some International Aspects of Atomic Power Development," 21 LAW AND CONTEM. PROB. 148 (1956).

⁵⁵ Hearings Before the Joint Committee on Atomic Energy, Governmental Indemnity and Reactor Safety, 85th Cong., 1st sess., pp. 13, 14 (1957); Atomic Industrial Forum, Inc., FINANCIAL PROTECTION AGAINST ATOMIC HAZARDS 60, 61 (1957).

⁵⁶ S. Rep. 296, 85th Cong., 1st sess., p. 16 (1957).

⁵⁷ Section 11(o).

⁵⁸ S. Rep. 296, 85th Cong., 1st sess., p. 16 (1957).

demnitees are to be indemnified for "any legal liability arising out of, or resulting from, a nuclear incident," ⁵⁹ although the Report indicates that "any" was used only to remove all time restrictions on claims. ⁶⁰ The desirability of using this broad word for so narrow a purpose can be questioned, and the construction of the section will ultimately turn on whether a court will let the legislative history control the relatively plain meaning of the statute. ⁶¹

The act is quite liberal in covering all kinds of damage, 62 and it should be noted that protection is not confined to losses for which legal liability is found. That is, even property owned by one held liable in connection with an incident, if located off the site of the reactor, is protected provided it is also covered by the financial protection furnished by the licensee.63 This is important, for the risk of loss caused by a nuclear calamity is excluded from all insurance policies save those covering the nuclear activity itself.64 Nuclear liability policies, however, cover the operator's off-site property and the governmental indemnity adds needed depth to his protection. Since all other persons are covered by the government indemnity as well as the operator's financial protection, if the operator's off-site property were not included, he would be protected to a lesser extent than everyone else with respect to off-site property.65 This inclusion in the act was prompted by the plight of colleges operating small research reactors in proximity to the main campus,66 although the act's language is not confined to the college reactor situation. It covers the commercial operator in the same manner, no differentiation being made because the non-nuclear insurance problem is the same.

In addition to actual present damage, indemnity will also be paid on claims for the loss of use of property.⁶⁷ This could mean,

⁵⁹ Section 11(u). Emphasis added.

⁶⁰ S. Rep. 296, 85th Cong., 1st sess., p. 16 (1957).

⁶¹ Cf. generally Atomic Industrial Forum, Inc., Financial Protection Against Atomic Hazards 61 (1957).

⁶² Section 11(o).

⁶³ Sections 11(u), 170(c).

⁶⁴ In order to avoid pyramiding of claims, the insurance organizations have excluded nuclear risks from all policies except those covering on-site personnel and property and liability, the latter being intended to cover the risks excluded from all the other policies. Hence, the manner in which the federal indemnity is drawn, S. Rep. 296, 85th Cong., 1st sess., p. 17 (1957).

⁶⁵ S. Rep. 296, 85th Cong., 1st sess., p. 18 (1957).

⁶⁶ Ibid.

⁶⁷ Section 11(o).

in the event total damages exceed the aggregate limit on liability so as to require apportionment, that lost profits of the operator due to destruction of his off-site property would be allowed to dilute the personal injury claims of innocent third parties. The wisdom of including such relatively speculative damages when a ceiling is imposed on total liability appears questionable in view of the absence of any priority scheme in the act.

Finally, three relatively narrow exceptions to the kind of losses covered by the act should be noted: "claims arising out of an act of war," damage to property of persons indemnified which "is located at the site of and used in connection with the activity where the nuclear incident occurs," and "claims under State or Federal Workmen's Compensation Acts of employees of persons indemnified who are employed at the site of and in connection with activity where the nuclear incident occurs." The reason for the first exception is plain, and the latter two were established because separate insurance policies adequately cover such losses. While the phrase in these latter two exceptions, "in connection with the activity," might cause interpretative problems, when construed in the light of the reason for the exceptions, persons not covered by separate insurance are probably covered by the act.

III. Financial Protection Required

Although, as has already been observed, the coverage of the act extends to all persons who may incur liability in connection with a nuclear incident, the only persons who pay for this benefit are the licensee (and possibly a contractor) with whom the indemnity agreement is executed and the government; the others pay nothing. The amount of financial protection required of these licensees is the "amount of liability insurance available from private sources except that the Commission may require a lesser amount" taking into consideration such factors as (1) the cost and terms of private insurance, (2) the type, size and location of the licensed activity and other factors pertaining to the hazard, and (3) the nature and purpose of the licensed activity. These exceptions were allowed to permit the Commission to consider the degree of hazard and the economics of an activity, and to

⁶⁸ Section 11(u).

⁶⁹ S. Rep. 296, 85th Cong., 1st sess., pp. 17, 18 (1957); Stanley and Simmons, "Financial Protection for the Atomic Energy Industry," 45 Geo. L. J. 587 at 589, 590 (1957). 70 Section 170(b).

provide a possible inducement for non-profit research reactors by requiring little private protection.⁷¹

However, in the case of facilities "designed for producing substantial amounts of electricity and having a rated capacity of 100,-000 electrical kilowatts or more, the amount of financial protection required shall be the maximum amount available from private sources."72 If private insurance should become available in substantially greater amounts, premium charges could become so burdensome that it would be financially impossible to operate such a reactor. Such circumstances would result in the same general kind of problem that the indemnity legislation was designed to overcome in the first place, i.e., a financial barrier to private atomic enterprise development associated with the contingency of liability to third parties.78 The provision in question appears to represent a feeling that the potentially most dangerous facilities should, in order to maximize public protection, be given the least financial incentives.74 The appropriateness of the above limitation to achieve that policy seems dubious, however, since the inhibiting factor is geared to the amount of insurance available rather than the extent of the hazard. To illustrate, if the amount of insurance available remains limited, a reactor could be profitably operated on the outskirts of New York City, while if an unlimited amount of insurance should ultimately become available, it would become unprofitable to operate a reactor even in a sparsely settled area because of the large premium outlay.

Although the financial protection required of licensees is measured in terms of available insurance, this protection may be furnished by "private insurance, private contractual indemnities, self insurance, other proof of financial responsibility, or a combination of such measures." Any plan that involves reliance on the licensee's own assets raises a number of troublesome problems. A preliminary consideration, which the AEC must take into account in determining the adequacy of such protection, is the

⁷¹ S. Rep. 296, 85th Cong., 1st sess., p. 19 (1957).

⁷² Section 170(b).

⁷⁸ Hearings Before the Joint Committee on Atomic Energy, Governmental Indemnity, 84th Cong., 2d sess., pp. 1-3 (1956).

^{74 103} Cong. Rec. 9554-9555 (July 1, 1957). Representative Cole stated: "The Joint Committee thinks it is quite proper that these large reactors operators should be required as a matter of law to get the maximum amount of insurance that is available, whether it is \$20 million or . . . \$200 million. They must go out and buy and pay out of their own resources the coverage in the greatest amount that is available to them." Id. at 9563.

75 Section 170(b).

possible effect of a nuclear incident on these assets. The incident might cause extensive damage to off-site property that may not be compensated in full if claims exceed the aggregate limit on liability, and which the licensee itself would have to make good from undamaged assets. Moreover, many companies rely on their assets to meet workmen's compensation claims, and the consequences of a nuclear incident could be severe in this regard.76

Other problems can be suggested. Since, as previously indicated, private financial protection must cover everyone who might become liable, the Commission must decide how the licensee or contractor can show coverage of its suppliers, to say nothing of possible trespassers. This problem becomes extraordinarily complex when it is realized that such trespassers, who must be covered by indemnitee's financial protection, may also be liable to the indemnitee.77

IV. Limitation on Liability

Although repeatedly urged to recommend an open end indemnity, the Joint Committee did not do so for two major reasons. In the first place, an unlimited commitment of public funds would have been extremely difficult to get through Congress,78 which undoubtedly had a considerable impact on the second consideration, viz., that Congress is generally disposed to wait and deal with any disaster situation on an ad hoc basis. This philosophy is reflected in the frequently iterated suggestion that Congress can appropriate additional funds should the ceiling on liability be reached. 79 While adopting the aggregate limitation, Congress rejected a ceiling on individual claims, such as was employed in connection with the Texas City disaster.80 Such a limitation might

⁷⁶ See remarks of Sen. Anderson, Hearings Before the Joint Committee on Atomic Energy, Governmental Indemnity and Reactor Safety, 85th Cong., 1st sess., pp. 22, 23 (1957). 77 BNA, ATOMIC INDUSTRY REP. 3:371 (1957).

^{78 &}quot;In suggesting \$500 million, I was trying to see if we could not get some figure which would not frighten the country or the Congress to death and still solve the problem which the producers of parts face, and which the fabricator of the entire reactor faces, and which the operator of that reactor would eventually face once he puts it in operation." Hearings Before the Joint Committee on Atomic Energy, Governmental Indemnity, 84th Cong., 2d sess., p. 53 (1956).
79 103 CONG. REC. 13724 (Aug. 16, 1957).

⁸⁰ Fertilizer being shipped overseas by the Federal Government caught fire and exploded while being loaded, causing enormous loss of life and property in Texas City. The facts are set forth in Dalehite v. United States, 346 U.S. 15 (1953), which held that the Federal Tort Claims Act did not permit suit against the government under the circumstances. Congress subsequently appropriated funds for the compensation of claimants, with a \$25,000 ceiling on individual claims, on August 10, 1955. 69 Stat. 707, c. 864.

deprive a few seriously injured plaintiffs of adequate compensation, whereas Congress can benefit the larger numbers affected by

the aggregate ceiling with an additional appropriation.

Since the act serves to limit recovery on judgments validly obtained under state law, its constitutionality under the due process clause of the Fifth Amendment must be considered. Courts have dealt with both state and federal cases involving limitations on liability and have frequently upheld such legislation by finding that a valuable right was granted in return for the right given up. Thus, in the federal area the Warsaw Convention placing an upper limit on recovery in air disasters has been upheld since plaintiff need no longer prove negligence.81 Similarly the United States Supreme Court has upheld state workmen's compensation statutes limiting recovery since the employer was made absolutely liable.82 The Anderson Amendment could be brought within the principle of these cases by arguing that in return for the limitation on defendant's liability, Congress has substituted a \$500 million plus fund, which can reasonably be assumed to be larger than the available asset pool of most reactor operators, or at least a fair substitute therefor. Moreover, to the extent that assumption is correct, the denial of due process becomes illusory.

An even larger number of cases, however, can be found where liability was limited without any apparent grant of substitute rights. In the federal area the liability of shipowners has been limited under the admiralty power;88 liability is constitutionally cut off in the Bankruptcy Act;84 and Congress has abolished retroactively causes of action for portal-to-portal pay within the limits of due process, although that case is distinguishable because the causes also rested on rights that existed only by virtue of a federal statute.85 The Supreme Court's theory in such cases appears to be that the limitation was a reasonable and appropriate exercise of substantive powers granted Congress; 86 it cannot be

⁸¹ Warsaw Convention on International Air Transportation, 49 Stat. 3019 (eff. Oct. 29, 1934). Pierre v. Eastern Air Lines, (D.C. N.J. 1957) 152 F. Supp. 486. See Pickens, "Actions Arising Out of Airplane Mishaps," 42 Iowa L. Rev. 479 at 503-507 (1957).

⁸² New York Central R. Co. v. White, 243 U.S. 188 (1916).

⁸³ U.S. Rev. Stat. §4283 (1875), as amended 46 U.S.C. (1952) §183; In re Garnett, 141 U.S. 1 (1891).

⁸⁴ S. Rep. 296, 85th Cong., 1st sess., p. 15 (1957).

85 See cases cited in 29 U.S.C.A. (1956) §251. See also, Brown, "Vested Rights and the Portal to Portal Act," 46 Mich. L. Rev. 723 (1948).

86 See, e.g., In re Garnett, 141 U.S. 1 (1891); Second Employers Liability Cases, 223

U.S. 1 (1912), where the Court used this argument, inter alia, in sustaining congressional legislation which enlarged the liability of interstate carriers.

doubted that there are substantive powers to justify federal atomic energy regulation.⁸⁷

Fourteenth Amendment and state cases also provide fruitful analogies. The Supreme Court recently dismissed a due process objection to a California statute limiting recovery in libel suits against newspapers and radio stations to special damages unless retraction be demanded and refused, for want of a substantial federal question.⁸⁸ State statutes limiting liability for airplane, accidents have been upheld.⁸⁹ The generally unquestioned assumption that corporate liability is limited is not wholly irrelevant. The sweep of these cases cutting across many substantive areas seems rather conclusively to indicate that the act will be upheld.

V. Problems of Administration

The act wisely provides that "in administering the provisions of this section, the Commission shall use, to the maximum extent practicable, the facilities and services of private insurance organizations." These organizations, of course, will be reimbursed for their services, such expenses being charged to the fund. This provision has the practical advantage of avoiding needless duplication of machinery and may also serve to alleviate problems in the application of section 170(h). That section provides that "when the Commission makes a determination that the United States will probably be required to make indemnity payments... [it] shall collaborate with any person indemnified and may approve the payment of any claim under the agreement for indemnification, appear through the Attorney General on behalf of the person indemnified, take charge of such action, and settle or de-

⁸⁷ Estep, "Federal Control of Health and Safety Standards in Peacetime Atomic Energy Activities," 52 Mich. L. Rev. 333 (1954).

⁸⁸ Jefferson v. Chronicle Publishing Co., 344 U.S. 803, rehearing den. 344 U.S. 882 (1952). The Supreme Court also upheld Minnesota mortgage moratorium legislation as a reasonable exercise of the police power in Home Building and Loan Association v. Blaisdell, 290 U.S. 398 (1934); Corwin, Constitution of the United States of America 360 (1952). State courts have gone both ways on the constitutionality of such statutes; but where the statutes have been stricken down, a state constitutional provision assuring a remedy for libel has also been involved. California and other states have found neither that type provision nor the Fourteenth Amendment inconsistent with the legislation. See Werner v. Southern California etc. Newspapers, 35 Cal. (2d) 121, 216 P. (2d) 825 (1950), and annotation in 13 A.L.R. (2d) 277 (1952); 36 Ore. L. Rev. 70 (1956).

⁸⁹ Pickens, "Actions Arising Out of Airplane Mishaps," 42 Iowa L. Rev. 479 at 486, 487 (1957).

⁹⁰ Section 170(g).

fend any such action." (Emphasis added.) Since the "agreement for indemnification" does not appear to include the financial protection furnished by the licensee, 1 it is not clear at just what point claims may be administered by the Commission as opposed to the private insurer. 12 This is unfortunate for whenever damages reach the point where both private and government indemnities are needed, no useful purpose is served by distinguishing which source is paying a particular claim. As indicated earlier in this paragraph, to the extent the commission utilizes the private insurer as its agent in handling claims under section 170(g), this problem may be circumvented.

More serious problems will arise should apportionment of claims become necessary. While the Texas City disaster provided some useful experience in this area, it can hardly serve as precedent for administration of the act. There Congress simply appointed the Secretary of the Army to administer payments and imposed a ceiling of \$25,000 on individual claims. This procedure was facilitated by the fact that the funds were not in discharge of any legal obligation on the part of the government, that question already having been resolved in the government's favor. In addition, Congress had only to deal with a single geographically isolated disaster, the specific facts of which were readily available. Thus Congress did not have to rely on subsequent fact findings to determine whether payments need be limited.

Section 170(e) of the act deals with these problems and provides as follows:

"The Commission or any person indemnified may apply to the appropriate district court of the United States having venue in bankruptcy matters over the location of the nuclear incident, and upon a showing that the public liability from a single nuclear incident will probably exceed the limit of liability . . . , shall be entitled to such orders as may be appropriate for the enforcement of the provisions of this section, including an order limiting liability of the persons indemnified, orders staying the payment of claims and the execution of court judgments, orders permitting partial payments to

⁹¹ Section 170(d) gives the commission discretionary power to require financial protection in addition to its existing authority to indemnify its contractors.

^{92 71} Harv. L. Rev. 750 at 753 (1958). 93 69 Stat. 707, c. 864, August 10, 1955.

⁹⁴ See note 80 supra.

be made before final determination of the total claims, and an order setting aside a part of the funds available for possible latent injuries not discovered until a later time."⁹⁵

The section sets venue as the site of the nuclear incident, that is, where the mishap takes place rather than where damage is incurred. Individual claimants, however, may sue a defendant in any state where process may be served and property of the defendant remains subject to attachment.

Perhaps the most difficult problems raised by the section concern the handling of latent injuries. An estimate of their probable extent should be included in determining whether total claims will exceed the limit on liability.98 It is therefore possible that immediate claims will not be satisfied in full even if they do not exceed the limit. Once the reserve for latent injuries is set aside, further difficulties may be expected when the first claims are presented. To what extent can they be satisfied? And how long should the fund be maintained? The proper disposition of whatever may remain in the reserve on its termination presents still another unanswered question. Since the indemnity legislation does not substantively affect liability, state statutes of limitations are still a bar; yet the Committee Report indicated that it intended no time limit on filing claims. 98a Perhaps the peculiar characteristics of radiation injuries may lead to corresponding adjustments in this regard. All these considerations indicate that it will make a difference to claimants whether they are paid out of the funds available for immediate distribution or out of the reserve, yet the act provides no time limit within which the first category of claims must be filed. These many determinations will ultimately devolve upon the federal district courts.

Section 170(e) of the act suggests as a solution to these problems the use of a device akin to the equity receivership.99 This

⁹⁵ Section 170(e).

⁹⁶ S. Rep. 296, 85th Cong., 1st sess., p. 22 (1957).

⁹⁷ At least until and unless the appropriate federal district court issues an order as provided in §170(e).

⁹⁸ The act provides only that a reserve is to be set aside when describing the procedure for apportionment. In view of the policy of the act not to limit protection by time, "claims" as that word is used in §170(e) to describe the conditions for a petition for apportionment should include an estimate of latent injuries.

⁹⁸² Note 60 supra.

³⁹ Federal district courts are authorized to appoint receivers for property situated in different districts. 28 U.S.C. (1952) §§754, 959, 1692.

would require that all suits be brought against a receiver in a single court. Aside from providing highly desirable uniformity in the measurement of damages, 100 claims could be so co-ordinated as to enable fair and workable apportionment. In addition, by eliminating duplicative proof of the facts of a single incident, depletion of the indemnity fund as a result of the expense of litigation would be minimized. Moreover, by placing all of defendant's assets under the control of a federal district court and thereby eliminating the danger of obstructing attachments, the defendant's business may be maintained as a "going concern." A Connecticut court employed this device with considerable success in connection with the Ringling Brothers fire of 1944.101 With outstanding claims approximated at \$15 million,102 Ringling Brothers submitted to voluntary receivership. All claims were determined by arbitration under an agreement by which Ringling Brothers did not contest liability. So enabled to continue in business, Ringling Brothers paid off its obligations out of earnings during the next six years.

Arguably, the use of the equity receivership will result in the additional advantage of a single period of limitations in the administration of all claims connected with a single incident. This result may be reached on any one of three different theories. The proceedings being equitable in nature, a court would be justified in applying the doctrine of laches and disregarding state statutes of limitations. Alternatively, regarding jurisdiction as based upon federal question, resort may be had to a single federal period of limitation. On the other hand, assuming jurisdiction would have to be founded upon diversity of citizenship, compelling resort to state law, traditional conflicts doctrine generally classifies statutes of limitation as procedural, 103 so that the lex fori would control in all cases. While it is recognized that the advantages of the equity receivership are somewhat lessened by the appointment of ancillary receivers in other states, it may reasonably be assumed that nuclear reactors will be separately incorporated and the defendant's assets located in a single state.

¹⁰⁰ The greatest degree of uniformity would be achieved were the proceedings conceived of as equitable in nature. In this situation, there would be no requirement of a jury and all claims would be tried before the same judge.

¹⁰¹ Jacobs v. Ringling Bros.-Barnum and Bailey Combined Shows, Inc., 141 Conn. 86, 103 A. (2d) 805 (1954); 60 YALE L. J. 1417 (1951).

¹⁰² Ibid.

¹⁰³ Goodrich, Conflict of Laws, 3d ed., 240 (1949).

Conclusion.

The primary purpose of the indemnity amendments, to encourage private enterprise in the atomic energy field by providing protection from the danger of financial ruin¹⁰⁴ accompanying a nuclear disaster, appears to have been accomplished. 105 The legislation is also to be commended for measures designed to prevent serious accidents106 and in providing greater financial protection to the public than has heretofore existed. But, the serious shortcomings of the legislation in its present form are not to be overlooked. The limited character of the protection, particularly in view of failure to adopt a scale of priority, could result in serious inequities. In addition, the decision not to impose strict liability in conjunction with the indemnity makes possible unnecessary litigation at the expense of both indemnitors and claimants. Moreover, the failure to supply adequate administrative machinery is apt to present real difficulties, particularly in those cases where apportionment of claims becomes necessary. These problems can in large measure be alleviated by ad hoc congressional appropriations, and resort to the equity receivership.

Dudley H. Chapman, S.Ed.

¹⁰⁴ The philosophy underlying the act has been described as being to protect industry, not the public, the latter to be accommodated by ad hoc appropriations. Hearings Before the Joint Committee on Atomic Energy, Governmental Indemnity, 84th Cong., 2d sess., pp. 38, 39 (1956).

¹⁰⁵ Donovan, "Insurance Problems Created by the Peacetime Use of Atomic Energy," Ins. L. J. 623 (Oct. 1957).

¹⁰⁶ Section 29 formally establishes the Advisory Committee on Reactor Safeguards, a body which has already exercised its function of making safety recommendations with regard to specific license applications, on an informal basis. Sec. 170(i) calls for a Commission survey following any nuclear incident that will probably require payments under the government indemnity to determine its causes, the findings to be made public.