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INTRODUCTION

The Price-Anderson Act insulates the civilian nuclear power industry against massive tort liability, a protection unique to that industry. In 1977, future civilian development of nuclear power was seriously threatened when the United States district court for the Western District of North Carolina declared the liability limitation provision of the Price-Anderson Act unconstitutional. Recently the United States Supreme Court reversed that decision in *Duke Power Co. v. Carolina Environmental Study Group, Inc.*

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1. 42 U.S.C. § 2210 (1976). This protection has existed for the nuclear industry since 1957.


This Note first briefly reviews the Price-Anderson Act and the district court and Supreme Court holdings. It then analyzes the due process and equal protection aspects of the Supreme Court opinion, which


5. Before addressing the merits of the case, the Supreme Court devoted an extensive portion of its opinion to issues of subject matter jurisdiction, standing, and ripeness. Three justices wrote concurring opinions, agreeing with the judgment reversing the opinion of the district court, but noting they would not have reached the merits, and instead would have remanded to the district court with instructions to dismiss the complaint.

The Supreme Court obtained the necessary federal subject matter jurisdiction from the general federal question statute, 28 U.S.C. § 1331(a) (1976). Countering Justice Rehnquist's assertion that the complaint stated only a claim against Duke Power under state law, the majority determined the complaint could be read as stating a claim against the Nuclear Regulatory Commission directly under the due process clause of the fifth amendment—the Price-Anderson Act being the instrument of the taking. 438 U.S. at 68-72. The Court further required only that the cause of action not be "so patently without merit as to justify . . . the court's dismissal for want of jurisdiction." Id. at 70, quoting Bell v. Hood, 327 U.S. 678, 683 (1946). This requirement was easily met.

On the standing issue, the Court required a "distinct and palpable injury," and a “fairly traceable” causal connection between the claimed injury and the challenged conduct. Id. at 72. The Carolina Environmental Study Group had asserted two categories of injury: 1) immediate environmental damage due to leakage of small amounts of radiation and discharge of heated effluent, and 2) potential damages "which may result from a core melt or other major accident in the operation of a reactor." Id. at 73. It found the requisite causal link in the district court's finding of a "substantial likelihood" that two of the plants would be neither completed nor operated absent the Price-Anderson Act. Id. at 74-75. The Court found the "immediate" effects of the radiation leakage and thermal pollution of lakes in the vicinity of the disputed power plants satisfactory for the injury requirement. Id. at 73.

The Court did not require, however, a demonstration of a connection between the claimed injuries and the constitutional right being asserted—the so-called "nexus requirement" of Flast v. Cohen, 392 U.S. 83 (1968), a case dealing with general taxpayer standing. The Duke Power Company and the Nuclear Regulatory Commission had asserted such a requirement as necessary for standing. Since the Court stated that only an accident causing damage in excess of the Price-Anderson liability would meet the subject matter jurisdictional requirement, id. at 78 n.23, the Carolina Environmental Study Group and the individual plaintiff's standing could be sustained only by either not invoking the Flast nexus requirement or by finding that the putative damages based on the possibility of a nuclear accident were sufficiently concrete to satisfy the injury requirement. The Court chose the former route to find standing, stating that the Flast rule did not necessarily apply to any cases outside the area of taxpayer standing. Id. at 78-81.

In finding the issues ripe for adjudication, the Court was persuaded that "we will be in no better position later than we are now" to decide this question. Id. at 82, citing The Regional Rail Reorganization Act Cases, 419 U.S. 102, 143-45 (1974). “[D]elayed resolution would foreclose any relief from the present injury suffered by appellees . . . ” and "would frustrate one of the key purposes of the Price-Anderson Act—the elimination of doubts concerning the scope of private liability in the event of a major nuclear accident. In short, all parties would be adversely affected by a decision to defer definitive resolution. . . ." 438 U.S. at 82.

The Court's somewhat tortuous route through the standing and ripeness issues may have been primarily concerned with the problems an alternative route would have raised for the latter. If the Court had chosen to find injury for standing purposes in the threat of a future accident, it could have avoided the necessity of abandoning the Flast nexus requirement; however, such a choice would have complicated the ripeness issue, since the injury would have been based on an uncertain future event. The Court may have thought this
potentially change established constitutional law. Specifically, the Court expanded the scope of economic regulation presumed constitutional, established that congressional promotion of certain industries does not violate due process, and suggested that a law which is rationally related to the legislative purpose, without regard to the classification created by the law, does not deny equal protection to the burdened class. Finally, the Note considers the public policy aspects of the Price-Anderson Act, concluding that Congress should either remove the liability limitation or place the burden of loss from a nuclear accident on the general public.

I

BACKGROUND

A. The Price-Anderson Act

Congress passed the Price-Anderson Act at the insistence of major nuclear contractors who argued that it would not be economically feasible to develop nuclear power for generating electricity without a limitation on potential liability. The district court, the Supreme Court, and the legal commentators agree that Congress had two purposes in passing the Price-Anderson Act: to provide a mechanism to compensate the victims of nuclear catastrophe, and to promote the development of nuclear power. The latter purpose was by far the more important. The clearinghouse for all claims resulting from a nuclear accident would be the United States district court with bankruptcy ju-

problem insurmountable; hence its choice of injury. However, precedent exists for finding ripeness in the situation where an uncertain future event raises merely the possibility of a diminution in property values. Cf: The Regional Rail Reorganization Act Cases, 419 U.S. 102 (1974), where a diminution would be found only if implementation of a "Final System Plan" were delayed, a possibility only if unforeseen or unanticipated events occurred.

The Court's analysis did not convince the three concurring justices. Justice Stewart "could accept with some difficulty" the proposition that federal subject matter jurisdiction existed. 438 U.S. at 94. He was of the opinion, however, that the Carolina Environmental Study Group and other original plaintiffs lacked standing because there was no relationship between the injury alleged for standing purposes and the injury alleged for subject matter jurisdiction. Justice Rehnquist, joined by Justice Stevens, found that subject matter jurisdiction was lacking. Id. at 95-102. Justice Stevens also filed a separate opinion, stating there was no subject matter jurisdiction, no standing, and no issue ripe for adjudication. Id. at 102-03.

7. Id. at 222.
risdiction over the venue of the accident. The Act provides that the nuclear defendant must waive defenses based on lack of negligence, contributory negligence, assumption of risk, and, in some cases, statute of limitations. A subsection of the Act makes the ambiguous promise that if an accident occurs causing damages exceeding the liability limit, Congress will "review" the situation and take "appropriate" action.

Under the Act, nuclear plant owners are liable for damages up to $560 million resulting from a nuclear accident. To assure that owners have available $560 million for damage claims, the Act mandates that any reactor of at least 100 megawatt capacity be covered by the maximum possible insurance available from private sources, and by an indemnity agreement with the Nuclear Regulatory Commission for further financial protection.

B. The Case

The Duke Power case was commenced in 1973 when the Carolina Environmental Study Group, Inc. and the Catawba Central Labor Union, along with a large group of individuals who lived in close proximity to the proposed nuclear power plants, filed suit in the district court for the Western District of North Carolina against the Duke Power Company and the Atomic Energy Commission (AEC), seeking a declaration that the Price-Anderson Act's liability limitation was unconstitutional. This lawsuit was the latest in a series of attempts to halt construction of two nuclear power plants owned by the Duke

12. Id. § 2210(n)(2)-(o)(1). If the total claim may exceed $560 million, the judge can limit the total amount paid to claimants without court approval to 15% of the liability limit.
13. Id. § 2210(e). This has, of course, no bearing on the constitutionality of the Price-Anderson Act. If it did, it would be the first time a law was saved by Congress' statement that it would correct the unconstitutionality later.
14. Id. § 2210(c).
15. The amount of indemnity provided by the federal government is determined by subtracting from $560 million the amount available from private sources. Id. § 2210(a)-(e). Coverage at this date is as follows: $140 million from private insurance, $315 million from "retrospective premiums," and $105 million from the federal government. "Retrospective premiums" are charges levied on each reactor in the event of an accident, at the approximate rate of $5 million per reactor. Thus, they increase as the number of reactors increases. This means the $560 million limit will increase as soon as the number of reactors is large enough to absorb the $105 million now promised by the federal government plus one (twenty-two new reactors).
17. 431 F. Supp. at 204-05.
18. Id. at 205. See, e.g., Carolina Environmental Study Group, Inc. v. United States, 510 F.2d 796 (D.C. Cir. 1975).
Power Company.\textsuperscript{19}

In Carolina Environmental Study Group, Inc. \textit{v. United States Atomic Energy Commission},\textsuperscript{20} the district court held that the liability limitation provision of the Price-Anderson Act violated the due process clause of the fifth amendment\textsuperscript{21} and the equal protection component of that clause.\textsuperscript{22} The due process clause was violated in three aspects: 1) the amount of the limit was not rationally related to potential losses from nuclear accidents;\textsuperscript{23} 2) the liability limit irrationally encouraged irresponsibility among nuclear plant owners and operators;\textsuperscript{24} and 3) the Act abolished state tort law remedies without providing potential nuclear victims with a \textit{quid pro quo}.\textsuperscript{25} Further, equal protection of law was lacking because the burden of nuclear damages exceeding $560 million was given to persons chosen without rational relation to the Act's purposes.\textsuperscript{26}

The Supreme Court reversed the district court, holding the Price-Anderson Act did not violate the due process clause and suggesting it did not deny equal protection.\textsuperscript{27} Applying a minimum rationality standard of review,\textsuperscript{28} the Court rejected each of the district court's three due process holdings. First, the liability limitation is not irrational, as Congress, to promote the nuclear power industry,\textsuperscript{29} had to choose some figure for maximum liability and the Court deferred to Congress' judgment concerning the actual amount.\textsuperscript{30} Second, the liability limit does not encourage irresponsibility, since nuclear safety is supposed to be ensured by independent regulation.\textsuperscript{31} Third, the assurance of a $560 million fund for recovery by nuclear victims is a reasonably just substitute, and therefore the \textit{quid pro quo}, for the common law rights abrogated by the Act.\textsuperscript{32} Although the equal protection argument was not pursued on appeal,\textsuperscript{33} the Court made clear it would not allow further

\textsuperscript{19} These are the McGuire and Catawba reactors located in North Carolina and South Carolina. 431 F. Supp. at 205.
\textsuperscript{21} \textit{Id.} at 222-24.
\textsuperscript{22} \textit{Id.} at 224-25.
\textsuperscript{23} \textit{Id.} at 222.
\textsuperscript{24} \textit{Id.}.
\textsuperscript{25} \textit{Id.} at 223.
\textsuperscript{26} \textit{Id.} at 225.
\textsuperscript{28} \textit{Id.} at 82-84.
\textsuperscript{29} This is a permissible legislative objective. \textit{Id.} at 84. See text accompanying notes 69-75 infra.
\textsuperscript{30} 438 U.S. at 86-87.
\textsuperscript{32} The Court assumed \textit{arguendo} that a \textit{quid pro quo} was necessary, but explicitly refused to hold that it was. However, some of the Court's language strongly implies that a \textit{quid pro quo} is not necessary. 438 U.S. at 88-89.
\textsuperscript{33} The equal protection arguments were not briefed. Brief for Appellee at 21 n.26,
challenge to the Act on that theory by declaring any classification establishing the liability limit rationally related to the promotion of the nuclear industry.34

II
ANALYSIS OF THE OPINION

The Supreme Court's opinion in *Duke Power* is an example of judicial deference to congressional legislation.35 Three aspects of the decision, however, may have great impact upon the future development of constitutional law. First, the Court expanded the concept of economic regulation to increase the scope of legislation courts presume constitutional.36 Second, the Court established that congressional promotion of a selected industry is a permissible legislative goal not violative of the due process clause.37 Third, the Court's unprecedented treatment of the equal protection issue—focusing upon the general rationality of the Act rather than the rationality of the classification the Act creates—could mean the end of equal protection challenges to legislation not based upon suspect classes or fundamental rights.38

While not explicitly so stating, the Supreme Court analyzed the due process issue using principles of substantive due process.39 The Court observed that the liability limitation provision of the Price-Anderson Act is "a classic example of economic regulation."40 At that point the due process claim was as good as decided, since the Court has not invalidated an economic regulation on substantive due process grounds since 1937.41 The seeming simplicity of this formulation obscures the Court's expansion of the concept of economic regulation and lessening of a *quid pro quo* requirement.42

A. The Liability Limitation Provision as Economic Regulation

Since 1937, the Supreme Court has invariably held constitutional statutes it has characterized as economic regulations. Prior to 1937, the Court was hostile to the concept of economic regulation; it invalidated

Duke Power Co. v. Carolina Environmental Study Group, Inc., 438 U.S. 59 (1978), though perhaps explaining the Court's confusing treatment of the issue, this does not explain why the Court dealt with the issue at all.
34. 438 U.S. at 93-94.
35. The Court stated the Act was "a classic example of economic regulation." *Id.* at 83.
36. See text accompanying notes 42-63 infra.
37. See text accompanying notes 69-75 infra.
38. See text accompanying notes 64-75 infra.
39. 438 U.S. at 82-87; *Substantive Due Process Attack, supra* note 4.
40. 438 U.S. at 83.
42. It is doubtful that a *quid pro quo* requirement exists. See note 32 supra.
fifty-five federal statutes on substantive due process grounds. Since then, however, no economic regulation has been struck down on these grounds. Justice Black explained the turnaround in *Ferguson v. Skrupa.* He wrote that the Court had “returned to the original constitutional proposition that courts do not substitute their social and economic beliefs for the judgment of legislative bodies, who are elected to pass laws.”

The Court’s deference to legislative economic regulation is based primarily on the feeling that the Court is relatively less competent than legislatures in making judgments concerning economic adjustments. The Constitution does not embody any particular economic theory, and legislatures are better able to decide which economic theory, or mixture of theories, should be applied to achieve the greater good. Thus, the characterization of legislation as economic regulation endows the legislation with a presumption of constitutionality which the Court will not invalidate unless no rational relation exists between the legislation and its purpose.

Courts have defined economic regulations as laws which alter or abolish business practices for what the legislature considers the common good. *Ferguson v. Skrupa,* relied upon by the Court in *Duke Power,* specifically limited its holding to “laws regulatory of business and industrial conditions.” The business aspect of economic regulation can be seen in other areas as well. For example, in a 1949 labor relations case, Mr. Justice Black explained the Court’s rationale for deferring to legislative judgment: to allow legislatures to regulate “injurious practices in their internal commercial and business affairs.”

Other post-1937 cases also focus on business practices.

The liability limitation provision of the Price-Anderson Act does not regulate a business practice as traditionally defined by the courts. Rather, the Act’s liability limit controls the industry’s common law tort

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44. See note 41 supra.
46. Id. at 730.
47. Id. at 731-32; See L. TRIBE, AMERICAN CONSTITUTIONAL LAW 446-47 (1978); LOCKHART, supra note 41, at 547.
48. See note 47 supra.
49. 438 U.S. at 83.
50. 372 U.S. at 731 (quoting Williamson v. Lee Optical Co., 348 U.S. 483, 488 (1955)).
liability. If any incentive is created by a liability limitation, it is to reduce safety precautions. If the Act changed a business practice of the nuclear industry, its tendency would be to decrease nuclear safety as was contended by the district court. When the Supreme Court concluded that the Act does not induce fewer safety measures in nuclear plants, it tacitly admitted that the liability limit does not affect a business practice of the nuclear industry.

Additionally, while previously upheld economic regulations restricted business for the general public's benefit, the Act's liability limitation provision explicitly burdens the general public for the nuclear industry's benefit.

The Supreme Court in *Duke Power* defined economic regulation differently from the "business practice" focus. Instead, it used the definition in *Usery v. Turner Elkhorn Mining Company*, which held that economic regulation represents a legislative attempt to structure and accommodate the "burdens and benefits of economic life." The Court in *Usery* did not explain, nor cite authority for, this departure from the previous "business practice" definition. Since the statute under review, an extension of remedies available to miners with job-related disabilities, could have been characterized as a regulation of the business practice of mine operators, the broader definition is arguably dictum. *Duke Power*, therefore, presents an interesting constitutional development. That which was unsupported dictum two years ago emerges as a very important rule of constitutional law. Deference previously limited to legislation affecting business practices now extends to legislation limiting aggregate tort liability.

The extension of judicial deference to legislation affecting the burdens and benefits of economic life is potentially troubling because much legislation fits that definition. Any law which removes a burden from A and places it on B adjusts the burdens and benefits of economic life regardless of whether it alters a business practice of A. If one substitutes "corporations" for A and "product liability claimants" for B,
the vast scope of this new formulation is evident. The Court has cleared the way for the legislative abolition of whatever common law rights private citizens now have to require businesses to pay damages for injuries caused by the enterprise.

In sum, the rationale for the Court's deference to classic economic regulations does not support the new definition adopted in Duke Power. The liability limitations provision alters the rights of the nuclear industry with respect to the rights of potential nuclear victims. Courts are particularly competent to resolve such issues. If the Price-Anderson Act's liability limitation were not an economic regulation, the Court would balance the benefit provided by the Act against the burden it imposes. This is the same balancing the Court used to resolve the quid pro quo issue.

B. The Rationality Test Applied

1. Promotion of Nuclear Industry as a Permissible Legislative Objective

An economic regulation must be rationally related to a permissible legislative objective or it contravenes the due process clause. In Carolina Environmental Study Group, Inc., the district court found the liability limit not rationally related to the objectives of the Act for two reasons: 1) the amount of the limitation is not rationally related to the potential damages, and 2) the Act is a disincentive to safety. It is not surprising that the Supreme Court disposed of these contentions rather easily, given the Court's attitude toward economic due process claims. The liability limit is rationally related to the promotion of nuclear power. It does not have to be rationally related to potential losses. In addition, Congress has not left nuclear safety exclusively to the operators of nuclear power plants, but has provided through other legislation an elaborate regulatory framework for the federal government to

60. See text accompanying notes 46-49 supra.
61. For example, the litigation which prompted Baker v. Carr, 369 U.S. 186 (1962) was a confrontation between an individual's right to vote and a state's right to prescribe qualifications for its voters. "It is emphatically the province and duty of the judicial department to say what the law is." Marbury v. Madison, 5 U.S. (1 Cranch) 137, 177 (1803).
62. L. Tribe, supra note 47, at 452-54.
63. 438 U.S. at 87-93.
65. 431 F. Supp. at 222.
66. 438 U.S. at 84.
67. Id. at 93.
To meet the rationality standard, however, the promotion of nuclear power must be a legitimate legislative goal. The Supreme Court did not discuss this issue, but the legitimacy of the legislative purpose was implicit in the opinion. Furthermore, the Court did not limit the legitimacy of promotion to only the nuclear industry. If Congress enacts legislation to facilitate the promotion of any industry by limiting tort liability, Duke Power may be construed as supporting such legislation.

Liability limits for certain industries had been suggested prior to Duke Power. One commentator called for liability limitation for mass immunizations. Other liability limitations have been the subject of litigation in state courts. Businesses argue that the trend toward increased liability for industrial concerns is far too costly and should be reversed. The language in Duke Power enlarging the scope of "economic regulation" to include limiting an industry's tort liability and the assumption that this goal is legitimate appears to give constitutional protection to legislation of this type. Business lawyers and lobbyists will not miss the opportunity to call for the severe limitation of industrial tort liability, since this would be rationally related to the promotion of American industry in general.

69. Another possible line of attack would be to assert that rights under state tort law are "fundamental" rights, such as voting or free travel within the United States. Rights under state tort laws have never previously been considered to be "fundamental," however, and there is no reason to believe the Court would do so now. 438 U.S. at 88 n.32. See also L. Tribe, supra note 47, at 1000-128.
70. 438 U.S. at 86.
71. No language in the opinion distinguishes the nuclear industry from any other industry. It appears a decision by Congress that an industry is important enough to favor with such legislation will be accorded judicial deference. However, the Court could distinguish such future cases on the facts unique to atomic energy—the early contemplation of government monopoly, id. at 63, the strict regulation by the Nuclear Regulatory Commission, id. at 87, and "the uniqueness of this form of energy production." Id. at 64 (The language is used only in reference to the "impossibility... [of] ruling... out the risk of a major nuclear accident resulting in extensive damage." Id. This could apply to many activities, from storage of liquid natural gas to shipments of chlorine on trains.)
72. See note 64 supra. The quid pro quo concept could be a limiting factor, however. See note 92 infra.
74. In Wright v. Central DuPage Hospital, 63 Ill. 2d 313, 347 N.E.2d 736 (1976) a liability limit of $500,000 per case in medical malpractice cases was struck down on state constitutional grounds, which have no direct parallel in the federal Constitution. A similar limit of $150,000 was upheld in Idaho. Jones v. State Board of Medicine, 97 Idaho 859, 555 P.2d 399 (1976).
75. The Chilling Impact of Litigation, BUS. WEEK, June 6, 1977, at 58.
2. The Act as a Quid Pro Quo for Tort Rights

The district court held that the Price-Anderson Act also violated due process because it fails to provide a *quid pro quo* for the tort law rights it abrogates. The Supreme Court, while explicitly refusing to decide whether a *quid pro quo* is necessary, substituted its own test for that of the district court and held that the Price-Anderson Act does provide an adequate *quid pro quo*.

The district court opined that due process is violated where an act limiting liability fails to provide "reasonable, certain, and adequate provision for obtaining compensation," and held that this was not provided by the Price-Anderson Act. The test was originally used in *Cherokee Nation v. Southern Kansas Railway*, and was resurrected in the *Regional Rail Reorganization Act Cases*. In *Cherokee Nation*, the issue was whether plaintiffs were entitled to full compensation for their property under the just compensation clause of the fifth amendment before their property rights were disturbed. The Court concluded that if there were reasonable, certain, and adequate provisions for obtaining compensation, prior payment was not necessary. The *Regional Rail Reorganization Act Cases* employed the *Cherokee Nation* test to determine whether there had been an unconstitutional "taking" of property.

*Duke Power* did not cite or discuss the cases relied upon by the district court. Rather, the Supreme Court adopted a test requiring that the act in question be a "reasonably just substitute" for the common law rights it replaces. The Court apparently derived this test from *New York Central Railroad v. White* and *Cowell v. Benson*. In both of these cases the Court approved legislative modifications of common

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77. 438 U.S. at 88.
78. *Id.* at 89-93.
79. 431 F. Supp. at 224.
80. *Id.*
81. 135 U.S. 641 (1890). Congress had allowed the railway a right-of-way across Cherokee lands. The parties failed to agree on compensation, and appraisers were appointed. The railway had to post a bond of double the appraiser's average figure, and the amount of the compensation was to be determined by a trial in district court.
82. 419 U.S. 102 (1974). Congress provided that owners of certain railroad property convey their interests to the Consolidated Rail Corp. in exchange for corporate securities. It was argued that this was a taking of railroad property without adequate compensation as required by *Cherokee Nation*.
83. "[N]or shall private property be taken for public use, without just compensation."
84. 135 U.S. at 659.
85. 419 U.S. at 118.
86. 438 U.S. at 88.
87. 243 U.S. 188 (1917).
88. 285 U.S. 22 (1932).
law remedies. The cases cited by the district court were based on alleged "take-
ing" of private property without just compensation; those cited by the Supreme Court were substantive due process challenges to legislation modifying common law remedies. Thus, the cases supporting the Supreme Court's test are more on point, although they are not direct authority for the test.

The *Duke Power* test for the existence of an adequate *quid pro quo* allows the Court more latitude than the traditional "rational relationship" due process test used with economic regulations. A liability limit could bear a rational relationship to the promotion of a specific industry without being "reasonably just" as applied to the industry's tort victims. Thus, the reasonably just substitute rule could protect victims of industrial torts if Congress decides to enact liability limitations similar to those in the Price-Anderson Act for other industries.

The Court's analysis of the *quid pro quo* issue indicates the reasonably just substitute test is a balancing test. Since the Price-Anderson Act remedy substitutes for state tort law remedies, the test balances the position of potential nuclear victims under the Act against their position under state tort law.

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90. See *Substantive Due Process Attack*, supra note 4.

91. The Court mentions "reasonably just substitute" three times. 438 U.S. at 88-93. The first time the Court uses the language, *Id.* at 88, the signal *cf.* accompanies its discussion of the analogous facts of *New York Cent. R.R.* and *Crowell*. *Cf.* means "[c]ited authority supports a proposition different from that in text but sufficiently analogous to lend support. Literally, "cf." means 'compare.' " *The Harvard Law Review Ass'n, A Uniform System of Citation* 7 (12th ed. 1976). The other statements of the reasonably just substitute test are not accompanied by reference to authority. 438 U.S. at 91, 93. A recent computer search revealed no other instance where any federal court has used the phrase "reasonably just substitute" in any context.

92. See text accompanying notes 70-75 *supra*. This will occur only if the Court later holds that a *quid pro quo* is necessary, a holding the Court explicitly refused to make in *Duke Power*. 438 U.S. at 88. The Court's language implies that a *quid pro quo* is not necessary. *Id.* at 88 n.32.

93. 438 U.S. at 87-93. *See Substantive Due Process Attack*, supra note 4, at 774-76.

94. 438 U.S. at 87-93. Since the challenge was to the liability limit, one can argue the balance should be struck between the position of an individual under the Act with and under the Act without the liability limit. However, the Court held the entire Price-Anderson Act substituted for the tort law remedy. The Court's rationale is consistent with *N.Y. Cent. R.R.* and *Crowell*.

The Court also considered the question whether there would be nuclear plants at all without the Price-Anderson liability limit. If this were the case, then the balance would arguably be different, because there would be no risk of accident. However, to use this approach, the Court would have to balance the risk of accidents against the need for nuclear power, a task it thought better left to Congress. *Id.* at 87. In addition, it declared the only
The Court found the Price-Anderson Act more beneficial to potential victims than state common law because its assurance of a guaranteed pool of assets and its requirement of waiver of certain defenses by nuclear defendants outweighed a recovery limitation. Under the Act, claimants are assured a $560 million recovery fund, whereas under state tort law there is no guarantee that a nuclear defendant will have $560 million worth of recoverable assets. The Court noted that Duke Power Company could only provide $200 million before insolvency.

The Court stated "[T]he . . . waiver of defenses establishes at the threshold the right of injured parties to compensation without proof of fault and eliminates the burden of delay and uncertainty which would follow from the need to litigate liability after an accident." This benefit, plus the assured recovery fund, convinced the Court that the Act provides a quid pro quo.

While the Court's argument concerning the guaranteed recovery fund has surface appeal, it does not bear up under close scrutiny. The nuclear victim may sue not only the public utility whose reactor caused the accident, but also the manufacturers of the reactor and its components. Instead of considering the resources of the public utility, therefore, the Court should have considered the substantial resources of the individual members of the nuclear industry, which together exceed $80 billion.

relevant right prior to the Act was to utilize state tort law, not the right to be free from nuclear power; therefore, "only the terms of that substitution . . . are pertinent to the quid pro quo inquiry." Id. at 88-89 n.33.

95. Id. at 86-89. The Court also relied upon "Congress' now statutory commitment to 'take whatever action is deemed necessary and appropriate to protect the public from the consequences of' any such disaster [exceeding the liability limit], 42 U.S.C. § 2210(e) (1970 ed. Supp. V)." Id. at 86. This reliance seems misplaced. The requirement to take "appropriate action" is so vague as to render the statute meaningless. In addition, judicial review seems precluded by establishing Congress as the determiner of what is "necessary and appropriate."

The possibility that Congress would offer further relief to nuclear victims is not unique to the Price-Anderson Act. "In the past Congress has provided emergency assistance for victims of catastrophic accidents even in the absence of a prior statutory commitment to do so." Id. at 86-87 n.31.

96. But see note 114 infra.
97. 438 U.S. at 91.
98. Id. at 91 n.36.
99. Id. at 91.
100. Id. at 93.
101. The Court recognized this when it stated "Duke Power itself . . . cited recent experiences with suppliers and contractors who were requiring the inclusion of cancellation clauses in their contracts to take effect if the liability limitation provisions were eliminated." Id. at 76. The Court also quoted a House of Representatives report agreeing in more general terms. Id. The fears were based on possible suits.
Moreover, the $560 million limit will provide much less relief than common law tort liability suits. The study relied upon by Congress and the Court, recently repudiated for understating the risks of nuclear accidents, demonstrates the inadequacy of the $560 million limit. This study concluded that a nuclear accident could cause, among other things, $14 billion in property damage, over 3000 early deaths, and 45,000 latent cancer deaths. Although it is difficult to place a monetary value on human life, a figure of $100,000 is not out of line with recent tort law developments. Using these figures, without even including damages for illness or disability not resulting in death, or such exotic disabilities as "cancerphobia" or Down's Syndrome Syndrome, the potential total damages would be $18.8 billion. Under the Price-Anderson Act, the maximum recovery in this situation would be approximately three cents on the dollar.

The waiver of defenses required of nuclear defendants was the second reason the Court found the Price-Anderson Act superior to state tort law. This contention has some merit. While the waiver of de-

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(1975). The combined assets of the four companies who have made all the light water reactors in the United States exceeds $20 billion. Promotion over Protection, supra note 4, at 465 n.323.


104. NUCLEAR REGULATORY COMM’N & REACTOR SAFETY STUDY, WASH-1400 (NUREG-75/014) (1975) [hereinafter cited as REACTOR SAFETY STUDY].

105. REACTOR SAFETY STUDY, supra note 104, at 83.

106. See Promotion over Protection, supra note 4, at 423.

107. Cancerphobia is the fear of getting cancer.

108. This term is defined as the fear of giving birth to mongoloid children. It can result in couples foregoing having children entirely, a cost very difficult to value in dollar terms.

109. The figure is obtained by multiplying 48,000 times $100,000, adding to the $14 billion property damage, and rounding to the nearest hundred million.

110. 438 U.S. at 91. The waiver of defenses is contained in 42 U.S.C. § 2210(n) (1976): [T]he Commission may incorporate provisions in indemnity agreements with licensees and contractors under this section, and may require provisions to be incorporated in insurance policies or contracts furnished as proof of financial protection, which waive (i) any issue or defense as to conduct of the claimant or fault of persons indemnified, (ii) any issue or defense as to charitable or governmental immunity, and (iii) any issue or defense based on any statute of limitations if suit is instituted within three years from the date on which the claimant knew, or reasonably could have known, of his injury or damage and the cause thereof, but in no event more than twenty years after the date of the nuclear incident. The waiver of any such issue or defense shall be effective regardless of whether such issue or defense may otherwise be deemed jurisdictional or relating to an element in the cause of action. When so incorporated, such waivers shall be judicially enforceable in accordance with their terms by the claimant against the person indemnified. Such waivers shall not preclude a defense based upon a failure to take reasonable steps to mitigate damages, nor shall such waivers apply to injury or damage to a claimant or to a claimant's property which is intentionally sustained by the claimant or which results from a nuclear incident intentionally and wrongfully caused by the claimant. The waivers authorized in this subsection shall, as to indemnitors, be effective only with respect to those obligations set forth in the insurance policies or the contracts furnished as proof of financial protection and in the indemnity agreements. Such waivers shall not apply to, or prejudice the prosecution or de-
fenses relating to negligence probably does not relieve plaintiffs of the burden of proving fault,\textsuperscript{111} it does eliminate strict liability defenses relating to acts of God or third parties.\textsuperscript{112} Nonetheless, the waiver of defenses is not likely to save time, since plaintiffs would still have to prove the cause, nature, and extent of their injuries.\textsuperscript{113} Furthermore, the Price-Anderson Act will cause additional litigation on statutory issues.\textsuperscript{114}

The balance compares a reduction of the amount recoverable by victims of nuclear accidents with an opportunity to recover under the Act in circumstances that might preclude recovery under ordinary tort law.\textsuperscript{115} The possibility that recovery under the Price-Anderson Act might be three cents on the dollar or less is, in the Court's analysis, outweighed by the possibility that recovery outside the Act might be limited by insufficient assets and by the defenses precluded by the Act. The thrust of the Carolina Environmental Study Group's argument concerning \textit{quid pro quo} was the inadequacy of the $560 million maximum recovery.\textsuperscript{116} Since the Court refused to question Congress' deci-

\begin{itemize}
  \item Id. at 521. This may include earthquakes and attacks by terrorists, two of the more frightening possibilities concerning nuclear plants. \textit{See Promotion Over Protection, supra note} 4, at 413.
  \item Promotion Over Protection, \textit{supra} note 4, at 410-30.
  \item For example, 42 U.S.C. § 2210(o) (1976) requires that total payments not exceed 15% of $560 million without approval of the trial court. Each indemnitee must be constantly monitored, to ensure the limit is not exceeded. The amount of the $560 million that may be paid to current claimants as opposed to that being set aside for those who will develop latent diseases will have to be litigated, appealed, and resolved before any payments can be made in excess of the 15%. Further, section 2210(o) provides that the court may limit liability even below $560 million, if it determines this would be consistent with the purposes of the Act.
  \item Examples of such circumstances are accidents caused by acts of God or by third parties.
  \item [A]ppellees claim only that the liability limitation in the Price-Anderson Act, which provides wholly inadequate compensation to victims of a large nuclear accident, is unconstitutional. Appellees have never contended that nuclear power is unconstitutional. . . . This case is now before this Court because Congress since 1957 has failed to face up to its responsibilities, leaving virtually the entire burden of loss resulting from a nuclear disaster on victims who happen to reside near the site of the accident.


They argue, \textit{inter alia}, that recovery under the Act would not be greater than without it, that the waiver of defenses . . . is an idle gesture since those involved in the development of nuclear energy would likely be held strictly liable under common law principles; that the claims administration procedure under the Act delays rather than expedites individual recovery, and finally that recovery of even limited compensation is uncertain since the liability ceiling does not vary with the number of persons injured or amount of property damaged.
sion that this figure was adequate, there was, as a practical matter, nothing left to balance the Price-Anderson Act against, and the reasonably just substitute test was satisfied.

C. The Equal Protection Argument

The district court based its decision not only on the due process clause, but also on the equal protection component of the due process clause. Although a denial of equal protection was not argued before the Supreme Court, the Court decided the issue anyway in one paragraph at the end of the opinion:

The general rationality of the Price-Anderson Act liability limitations—particularly with reference to the important Congressional purpose of encouraging private participation in the exploitation of nuclear energy—is ample justification for the difference in treatment between those injured in nuclear accidents and those whose injuries are derived from other sources.

There are two problems with this formulation. First, by focusing on the general rationality of the Act, rather than the relationship between the classification created by the Act and the Act’s purpose, the Court departed from traditional equal protection review. If this test is employed in the future, it would greatly change traditional equal protection analysis by merging the due process and equal protection tests. Second, the “general rationality” language obscures the fact that the classification created by the Price-Anderson Act is not rationally related to either the promotion of nuclear power or the protection of the public from nuclear accidents.

438 U.S. at 90. Each of the first three arguments are responses to specific parts of Price-Anderson claimed by Duke Power Co. to be quid pro quo. The last argument alleges that the specific amount may not be enough, given a bad enough accident, and is therefore the heart of the Carolina Environmental Study Group’s argument.

117. “The remaining contention that recovery is uncertain because of the aggregate rather than individualized nature of the liability ceiling is but a thinly disguised version of the contention that the $560 million figure is inadequate which we have already rejected.”

438 U.S. at 92. This refers to the contention that the figure was irrationally low and therefore violative of the due process clause. The Court did not consider the possibility that a liability limit may be low enough to be rationally related to a legislative goal and also be too low to provide a “reasonably just substitute.” The Court assumed that anything rational is also a “reasonably just substitute.” If this is the case, then legislation need never be analyzed under this standard, for rationality is all that is really required.

118. 431 F. Supp. at 224-25. “No state shall . . . deny to any person within its jurisdiction the equal protection of the laws.” U.S. CONST. amend. XIV. What is in question here is not the fourteenth amendment, but the equal protection component of the due process clause of the fifth amendment. See Bolling v. Sharpe, 347 U.S. 497 (1954).

119. 438 U.S. at 93.

120. Id.

121. These are the dual legislative goals of the Price-Anderson Act. See note 9 supra.
1. **Equal Protection Tests**

*Duke Power* departed from the traditional equal protection test. Under the traditional rule, a legislative classification survives equal protection attack if the classification, rather than the law in general, bears a rational relationship to the purpose of the law.\(^1\) Under the *Duke Power* test, a statute’s “general rationality” to the legislative goal allows *any* classification it makes to survive equal protection challenge.\(^2\)

The Court found rationality by reference to the due process issue. The Act itself, not the *classification* created by the Act, was found generally rational. Indeed, the Court did not discuss the relationship of any classification to the purposes of the Act.\(^3\) If this rationale is followed in the future, any law rationally related to a permissible legislative goal will be constitutional regardless of the classification it creates. Thus, unless a suspect or “middle-tier”\(^4\) classification is involved, legislation which does not violate the due process clause also does not deny equal protection of the law. The language of *Duke Power* has effectively merged analysis of due process issues and equal protection issues. Since this is such a vast departure from previous doctrine, however, it may be brushed aside as dicta if it is argued before the Court. This does not excuse the seed which has been sown.

The merger of equal protection and due process is both unnecessary and detrimental. Declaring a statute invalid on due process grounds may bar any government regulation in the area, but “[i]nvocation of the equal protection clause . . . does not disable any governmental body from dealing with the subject at hand. It merely means that the prohibition or regulation must have a broader impact.”\(^5\) If *Duke Power* had held the classification of people who must bear the risk of damages exceeding $560 million unconstitutional, Congress would not be disabled from promoting the nuclear industry. The goal could be achieved by requiring the general public to bear this risk.


\(^{123}\) 438 U.S. at 93. Although the Court did not address the issue, one must assume that this excludes both “suspect” classifications such as race, and “middle-tier” classifications, since these two categories demand more than just a “rational” relationship. See note 125 infra.

\(^{124}\) 438 U.S. at 93-94.


"Nothing opens the door to arbitrary action so effectively as to allow those officials to pick and choose only a few to whom they will apply legislation and thus escape the political retribution that might be visited upon them if larger numbers were affected." Mr. Justice Jackson's statement describes the Price-Anderson Act perfectly. Only a relative few, potential victims of nuclear accidents, bear the burden created by Congress, and the identity of such victims remains unknown pending a disastrous accident. Congressmen who voted for the Price-Anderson Act can escape the political consequences of their action unless their constituents are sufficiently convinced that they may become victims of a nuclear cataclysm.

2. The Classification Created by the Act and Its Relation to the Act's Purposes

The Price-Anderson Act changes tort common law by limiting the liability of the nuclear industry to $560 million. The Act puts the risk of losses greater than this amount on the potential victims of a nuclear accident. No relationship, rational or otherwise, exists between the class of persons Congress has chosen to bear the loss where nuclear damages exceed $560 million and the goal of promoting nuclear power. The goal is achieved if the nuclear defendants are not liable for damages exceeding $560 million. While the limitation of the industry's liability is relevant to the goal, the class chosen to bear this burden will serve the purpose as well as any other. For example, Congress might have provided that all United States citizens whose surnames begin with the letter "B", or all members of the bar in the State of Ohio bear losses exceeding $560 million. The class of persons composed of potential nuclear victims bears the same relationship to the goals of the Price-Anderson Act as each of the above absurd examples, but it can hardly be doubted that the Court would strike down as arbitrary such classifications just as it should have struck down the classifications created by the Act.

Congress has created a classification by default, arbitrarily letting chance determine who is a member of the class. If chance, rather than a well-considered, or even ill-considered, choice by a legislative body determines the members of the class, that class is not rationally related to the purpose of the law unless chance itself provides the relationship. Since the limit serves the purpose of promoting the nuclear

127. Id. at 112-13.
128. Because the liability limit by itself does not aid in compensation, that purpose of the Act is not considered here.
129. For example, persons eligible for worker's compensation are often injured in acci-
industry, the Price-Anderson Act's choice of chance to determine the
members of the class is irrelevant to that purpose.

While this critique challenges the result in *Duke Power*, it would
not change the outcome of such classic equal protection cases as *Wil-
liamson v. Lee Optical Company*\(^\text{130}\) or *Ferguson v. Skrupa*.\(^\text{131}\) In *Wil-
liamson*, the legislature sought to ensure that the public's eye care
would be handled by competent professionals by creating a class of
persons deemed competent to render such care.\(^\text{132}\) The purpose could
not have been achieved by limiting entry into the eye care profession to
persons whose names began with the letter "B". *Ferguson*, where the
issue was debt-adjusting rather than eye care, could be defended in the
same manner.

III
PUBLIC POLICY AND THE PRICE-ANDERSON ACT

*Duke Power* upheld the constitutionality of the Price-Anderson
Act's aggregate liability limitation in an atmosphere of confidence con-
cerning nuclear power safety. While the safety record of the nuclear
industry and alleged remoteness of a serious accident did not necessar-
ily determine the legal issues, these factors greatly impressed the
Court.\(^\text{133}\) The perceived remoteness of a serious accident made it un-
likely that the liability limitation would ever have effect.

Since *Duke Power* was decided an accident occurred which raised
the possibility that the Price-Anderson Act would be put into operation
for the first time. On March 28, 1979, an accident at the Three Mile
Island nuclear reactor near Harrisburg, Pennsylvania, released radioac-
tive materials into the atmosphere.\(^\text{134}\) Unanticipated technical prob-
lems caused an admitted possibility that a catastrophic meltdown
would occur.\(^\text{135}\) While a meltdown did not occur, the possibility was
significant enough that Pennsylvania authorities and the Nuclear Reg-
ulatory Commission seriously considered evacuation of the population
surrounding and downwind from the plant.\(^\text{136}\)

\(^{130}\) 348 U.S. 483 (1955).
\(^{132}\) B. SCHWARTZ, *supra* note 43, at 170.
\(^{133}\) 438 U.S. at 86 n.30.
\(^{134}\) *Nuclear Accident*, NEWSWEEK, April 9, 1979, at 24.
\(^{135}\) Id. at 25.
\(^{136}\) Id. at 24.
At this writing, the cause and extent of the Three Mile Island accident is still under investigation. Congressional examination of this accident may provide an opportunity for a re-examination of the liability limitation provision of the Price-Anderson Act. Congress should seize this opportunity to amend the Act and either remove the liability limitation or, while limiting the nuclear industry's liability, let the public purse bear the burden of further damages.

A. Removal of the Limit

The Three Mile Island accident demonstrates that the possibility of a serious nuclear accident is not so remote as to be inconsequential. If liability is to be limited, therefore, the amount of liability should be related to the costs that might actually accrue as a matter of sound public policy, if not legal mandate. The easiest way to relate liability to damages is to remove the limit, placing the burden of damages on the nuclear industry.

Even the repudiated Reactor Safety Study clearly shows the potential magnitude of the effects of a bad accident would be far worse than could ever be redressed under the Price-Anderson Act: $14 billion in property damage, 3300 fatalities, 45,000 early illnesses, many latent cancer deaths, and evacuation of an area of nearly 300 square miles. The potential property damage alone is more than twenty times greater than the Price-Anderson liability limit.

I. Questions of Safety

The inadequacy of the $560 million liability limit is further shown by the fact that the safety of nuclear plants relative to other methods of generating electricity has not been demonstrated. In Carolina Environmental Study Group, the district court concluded nuclear plants are not safe enough to justify the $560 million limit. The Supreme Court, after reviewing data on the issue, particularly the NRC's React-

137. Reactor Safety Study, supra note 104, at 83.
tor Safety Study, concluded that "no one can ever know" the safety of nuclear power plants, and deferred to Congress on the issue. Congress should view this deference not as a blanket approval of its actions, although in the legal sense that is what it is, but rather as a challenge to improve upon the present legislation.

The liability limit itself is a forceful argument against the proposition that nuclear plants are sufficiently safe to warrant a $560 million limit. The limit was imposed at the behest of the nuclear industry, which claimed that there would be no nuclear industry without it. At present, nuclear industry spokesmen speak of the virtually absolute safety of nuclear plants, although their tone has been muted in the wake of the Three Mile Island accident. During the Carolina Environmental Study Group trial, however, the industry maintained it could not survive without the liability limit.

The nuclear industry’s position on safety can be characterized as schizophrenic. Nuclear plants are so unsafe that the risk of an accident cannot be borne by heavily capitalized public utilities and manufacturers of nuclear hardware, yet the risk is so small it can be borne by individual citizens who happen to live within the potential contamination area. There is no logic to this position. If the nuclear industry cannot bear the risk, the solution is to shift it to someone or something with more, not fewer, resources than the nuclear industry.

2. Cost Internalization

It has been argued that the liability limit of the Price-Anderson Act, in conjunction with the rest of the Act, is justified because it internalizes the social costs of generating electricity with nuclear plants better than the common law internalizes the social costs of conventional electricity generation. This is not a persuasive justification for the liability limit. First, the liability limit specifically externalizes all such costs exceeding $560 million. In a worst case disaster, this would be the vast majority of such costs. Second, the Price-Anderson Act does not necessarily internalize social costs under $560 million. Claimants under the Act would have serious difficulty proving causation if their injuries were latent. For some cancers, the Act’s twenty year statute

140. 438 U.S. at 85.
141. See text accompanying note 6 supra.
143. E.g., Stoler, supra note 138, at 71.
144. 431 F. Supp. at 210. See also 438 U.S. at 69. This contention may have been a trial tactic on the part of the nuclear industry, but if so, it backfired, since the argument was used by the district court to help establish plaintiff’s standing to sue. 431 F. Supp. at 215.
145. Katz, supra note 4, at 587.
146. REACTOR SAFETY STUDY, supra note 104, at 83.
147. See Estep, Radiation Injuries and Statistics: The Need for a New Approach to Injury
of limitations will bar claims. In addition, certain types of nuclear accidents are not covered or are insufficiently covered by the Act.

The nuclear industry's argument that nuclear plants are safe is seriously undermined by the industry's refusal to accept responsibility for potential accidents. Certainly, the industry's assets exceed those of the persons exposed to damage from nuclear accidents. Repeal of the Price-Anderson Act's liability limit would demonstrate the industry's confidence in its safety and place no more of a burden on the nuclear industry than is placed on industry in general by tort law.

B. Placing the Burden on the Public Purse.

Even if the promotion of nuclear development is justified because the need for nuclear power outweighs its risks, the liability limitation provision of the Price-Anderson Act violates sound public policy. The limit is unsound because it places a large share of the cost of a major nuclear accident on those least able to bear it. A more logical, fairer solution is to place these costs on the nuclear industry. The second alternative is to require the public, through the federal government, to bear the cost of nuclear accidents. When Congress first passed the Act's liability limitation provision and again when it extended the Act in 1965 and 1975, it accepted the nuclear industry's argument that the industry has insufficient resources to bear the risk of a catastrophic accident. If Congress is convinced that nuclear power should be developed to benefit the nation as a whole, the nation as a whole should bear the risk of nuclear power.

Placing the risk of a nuclear accident on the general public would not only remove the risk from innocent victims; it would also force the public to consider whether the benefits of nuclear power outweigh its potential costs. If the risk were placed on the public, a person not liv-


148. Promotion over Protection, supra note 4, at 416 n.108.
149. Id. at 445-64.
150. Indeed, the primary effect of the liability limitation has been to cast doubt upon the safety of nuclear plants. For this reason it has been called the "Achilles heel" of the nuclear industry. Green, supra note 2, at 508.
151. See note 102 supra.
152. See note 2 supra.
153. 438 U.S. at 64.
154. Recently the public utilities have put forth the argument that the nation as a whole favors development of nuclear power. See Stoler, supra note 138. However, public reaction to the Three Mile Island accident may undercut support for nuclear power.
ing within a potential contamination area, while not having to consider the possibility of direct injury to himself, would have to consider the possibility of an adverse financial impact. Thus, spreading the cost of nuclear accidents among the public would reduce the political distortion that occurs by placing the risk only on victims. 155

There is no good reason for the nuclear industry to oppose placing the risk of nuclear damages on the general public. If nuclear power is as safe as the industry claims, this safety plus the national need for energy, should convince the public to accept the risk. If the public cannot be persuaded to accept this risk, the arguments for nuclear power will have been defeated in our normal political process, and the nuclear industry will have been treated no less fairly than any other industry.

CONCLUSION

The Price-Anderson Act, which limits the liability of the nuclear industry in case of an accident causing damages in excess of $560 million, has been declared constitutional by the United States Supreme Court. Nevertheless, serious problems concerning the Act remain. Given the Nuclear Regulatory Commission's own estimates of what damages might be caused by a serious accident, and a potential for accidents recently demonstrated to be substantial, the liability limit is too low. Further, by placing the burden of damages exceeding the limit on potential victims, Congress has avoided political responsibility for its decision, and created a classification that bears no more of a relationship to the purpose of promoting nuclear power than any randomly selected class of persons.

Investigation of the accident at the Three Mile Island nuclear reactor in Pennsylvania provides Congress the opportunity to reexamine nuclear policy. Congress should either abolish the liability limit, making the nuclear industry pay its own way as other industries do, or put the entire risk of accident on the federal government, so all those who benefit from nuclear power will be at risk instead of an unfortunate few.

155. See text accompanying note 127 supra.