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Preemption - Atomic Energy

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PREEMPTION—ATOMIC ENERGY

PREEMPTION—ATOMIC ENERGY. The United States Supreme Court upheld a prohibition on the future construction of nuclear power plants within the state of California and found no preemption of the California Nuclear Law by the Atomic Energy Act. The California Nuclear Law did not attempt to regulate the construction or operation of a nuclear plant, nor did the law infringe on the federally occupied fields of radiation safety and nuclear wastes. Rather, California's moratorium on future nuclear power was based on legitimate economic considerations and fear of economic disaster if the plants were forced to shut down because of accumulating nuclear wastes. *Pacific Gas and Electric Co. v. State Energy Resources Conservation & Development Commission*, ___ U.S. ___, 103 S. Ct. 1713 75 L. Ed.2d 759 (1983).

BACKGROUND

Congress passed the Atomic Energy Act of 1954 (AEA)¹ to encourage private enterprise to develop peaceful uses of nuclear energy. As a result, private utilities have built commercial nuclear reactors for the generation of electricity.² Currently, in the United States there are 70 nuclear reactors with 90 more nuclear reactors under construction.³ The general problem of nuclear power is that the fuel used in nuclear power plants is highly radioactive and remains so for thousands of years because present technology is insufficient to regenerate the spent fuel.⁴ Over 8,000 metric

1. 42 U.S.C. §§ 2011-96 (1976).

2. "In 1980, nuclear power plants were responsible for 11% of the total electric power generation, and by 1990, this is projected to increase to about 25% of total generation." Nuclear Fuel Cycle Policy and the Future of Nuclear Power, 1981: Hearings Before the Subcommittee on Oversight and Investigation of the House Committee on Interior and Insular Affairs, 97th Cong., 1st Sess. 8 (1981) (statement of Shelby Brewer, Assistant Secretary for Nuclear Energy).

3. *Id.* at 2.

4. In the present generation of electricity within commercial light-water reactors the fuel is a mixture of U-235 and U-238 dioxides. It is the fission of the U-235 which drives the reaction producing energy, neutrons, and fission products. Bombardment of the U-238 by the resulting neutrons creates Plutonium-239 which undergoes fission as well. When the U-235 is so depleted that power production becomes inefficient, the fuel is deemed "spent" and removed from the reactor. The typical removal rate of spent fuel per reactor is 30 tons annually. The radioactive material in spent fuel is classified into two groups: fission products and actinide elements. Some of the fission products and their half-lives are listed: strontium-90, 28 years; iodine-129 and -131, 1.7×10^7 years and 8 days respectively; cesium-134, -135, and -137, 2 years, 3×10^6 years, and 30 years respectively; krypton-85, 10.8 years. Actinides consist of transuranic elements which include plutonium-239 with a half life of 24,390 years, americium-241 and -243 with a half life of 458 years and 7.95×10^3 years respectively, and neptunium-237 with a half-life of 2.14×10^6 years. Other radioactive isotopes such as tritium with a half life of about 12.5 years and carbon-14 with a half life of 5730 years are also included in spent fuel. DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR 40 C.F.R. SECTION 191: ENVIRONMENTAL NUCLEAR FUEL, HIGH-LEVEL AND TRANSURANIC RADIOACTIVE WASTES, OFFICE OF RADIATION PROGRAMS, U.S. ENVIRONMENTAL PROTECTION AGENCY 8-11 (EPA 510/1-82-025, 1982) [hereinafter cited as DRAFT EIS for Nuclear Fuel]; HANDBOOK OF CHEMISTRY AND PHYSICS (53rd ed. 1973);

tons of nuclear wastes from nuclear power plants have already accumulated; the estimated projection of accumulated wastes by the year 2000 is 72,000 metric tons.⁵ The utility companies presently store the radioactive wastes in water storage pools located on site. The storage pools also contain reserve capacity for the reactor core if repairs must be made. As wastes accumulate the pools are enlarged to store greater volumes.⁶ The utilities realize that this is a temporary solution and permanent waste disposal methods are needed.⁷ The crux of the problem is that if permanent waste disposal methods are not developed soon, the reactors will be forced to shut down because of the hazards of the accumulated wastes.⁸ In fact, the Department of Energy (DOE) has been warning Congress of imminent shut down of the nuclear power reactors for this reason for several years.⁹ Concurrently, the Nuclear Regulatory Commission (NRC) has also expressed dismay concerning the failures and delays in schedules and plans of the federal nuclear waste disposal program.¹⁰

While waiting for the federal government to develop a nuclear waste disposal strategy, California enacted legislation specifically addressing the issue of accumulating nuclear wastes. In Section 25524.1(b) of the California Warren-Alquist Act, the California legislature provides an approach to the temporary storage of spent nuclear fuels in on-site storage pools. The statute requires that the California State Energy Resources Conservation and Development Commission determine what storage capacity is sufficient for both the operating core and the spent nuclear fuel of a nuclear power generating facility when such storage is required.¹¹ Section 24424.2 of the California Nuclear laws addresses the problem of permanent disposal of nuclear wastes.¹² This statute stipulates that no nuclear reactors can be built in California until permanent disposal technology for high-level nuclear wastes has been demonstrated and approved by the federal government. In 1978 the California Energy Commission

THE MERCK INDEX (1976).

5. The total amount of spent fuel from commercial nuclear power reactors contains about 800 million Curies of radionuclides with half lives greater than 20 years. This is expected to grow at a rate of about 200 million Curies per year from the reactors currently licensed to operate. DRAFT EIS for Nuclear Fuel, *supra* note 4, at 2. See also, MANAGING COMMERCIAL HIGH-LEVEL WASTES, OFFICE OF TECHNOLOGY ASSESSMENT 9 (1982).

6. Full core reserve is not required by the NRC for safety reasons but utilities maintain full core to optimize operational flexibility. Brief for Respondent at 4, *supra* notes 4 and 5, *Pacific Gas & Electric v. State Energy Resources Conservation & Development Commission*, ___ U.S. ___, 103 S. Ct. 1713 (1983) [hereinafter cited as PG&E].

7. Brief for Respondent, PG&E, 103 S. Ct. 1713.

8. *Id.*

9. H.R. Rep. No. 97-785, part 1, 97th Cong., 2d Sess. 47 (1982).

10. REMARKS BEFORE THE 10TH ANNUAL ILLINOIS ENERGY CONFERENCE (October 13, 1982), reprinted in NEWS RELEASE No. S-16-82, NRC Office of Public Affairs.

11. CAL. PUB. RES. CODE § 24424.1(b) (West 1977).

12. *Id.* at § 24424.2.

reported to the state legislature that "even the initial steps for federal approval of waste disposal technology have not been completed."¹³ This statute established the California moratorium on the construction of new nuclear power plants within the state.

These Nuclear Laws, as they have come to be known, were challenged by two utility companies in *Pacific Gas and Electric Company v. State Energy Resources*.¹⁴ In their suit, the utilities argued that the California Nuclear Laws were unconstitutional because they were preempted by the AEA. The federal district court ruled that the California Nuclear Laws were invalid because the laws were "either in conflict with or substantially impede[d] the regulation of nuclear energy reserved to the federal government by the Atomic Energy Act. . . .,"¹⁵ but on appeal, the Ninth Circuit Court of Appeals¹⁶ reversed and held that the California laws "were neither in conflict with the objectives of the AEA nor within the area of regulation reserved exclusively to the NRC under the AEA."¹⁷ The United States Supreme Court granted certiorari limited to two questions: (1) whether the interim-storage provision, Section 25524.1(b), and the permanent waste disposal provision, Section 25524.2, were ripe for review,¹⁸ and (2) whether they had been preempted by the AEA.¹⁹

The United States Supreme Court decided that the California moratorium on nuclear power plants was ripe for adjudication.²⁰ The Court

13. DECISION IN THE MATTER OF IMPLEMENTATION OF NUCLEAR REPROCESSING AND WASTE DISPOSAL STATUTES, ERCDC, Nos. 76-NL-1, 76-NL-3 slip op. at 4 (January 25, 1978), cited in Tribe, *California Declines the Nuclear Gamble: Is Such a State Choice Preempted?*, 7 *ECOLOGY L. Q.* 679, 682 n.15 (1979).

14. PG&E, 103 St. Ct. 1713.

15. *Pacific Gas and Electric Company v. State Energy Resources Conservation and Development Commission*, 489 F. Supp. 699, 704 (E.D. Cal. 1980).

16. *Pacific Legal Foundation v. State Energy Resources Conservation and Development Commission*, 659 F.2d 903 (9th Cir. 1981). See also, Note, *Ninth Circuit Upholds Nuclear Power Moratorium Provision*, 22 *NAT. RES. J.* 689 (1982).

17. Note, *supra* note 16, at 690.

18. The California law dealing with the interim storage capacity was not ripe for review because the Court, at this time, could not know whether the California Energy Commission would ever find a nuclear plant's storage to be adequate. Furthermore because the moratorium was upheld as constitutional, no new nuclear power plants would be built thereby postponing the uncertainty surrounding that issue. PG&E, 103 St. Ct. at 1721-22.

19. *Id.* at 1720.

20. Pacific Gas and Electric cancelled plans for the construction of the Stanislaus nuclear power plant on the basis of the CA laws. The utility had 12-14 years of planning and 10 million dollars invested in the project. PG&E, 103 St. Ct. at 1721, n.13, 14. Southern California Edison abandoned general plans to build two nuclear plants. Lodge, *Melting Down Preemptive Federal Regulation of Nuclear Power—Pacific Legal Foundation v. State Energy Resources Commission*, 14 *U. TOL. L. REV.* 57, 64 (1982). The Court determined the California moratorium on nuclear power plants was ripe for adjudication. The question of preemption, a predominantly legal issue, was within the Court's authority, PG&E, 103 S. Ct. at 1720. Postponement of the decision would place the utilities in a difficult position. The utilities' investment of time and money into the planning was significant to the Court. Moreover, "to require the utilities to proceed without knowing whether the moratorium is valid would impose a palpable and considerable hardship on the utilities, and may ultimately work

held that the nuclear power plant moratorium did not conflict with the AEA and was not preempted by it. The Court concluded that California was exercising its traditional powers over land use and energy planning and its duty to establish an economic and reliable source of energy.²¹ The California statute did not regulate nuclear power plants on the basis of health and safety concerns; nor did it prescribe the construction and operation of a nuclear power plant, both of which are within the exclusive jurisdiction of the federal government.²² The Court balanced the state's traditional interest in providing reliable and economical energy to its residents against the pervasive federal control over certain aspects of nuclear energy.

The preemption doctrine directs the allocation of power between the federal government and the states in this nuclear power play. It is the court's duty to interpret congressional intent while recognizing and balancing important states' interests. To unravel this electrifying drama, this case note will briefly review the preemption doctrine. The case note will then examine the status of the federal interests in nuclear energy and investigate the nature of the allegedly conflicting California statutory scheme. The three preemption arguments of the utility companies will be addressed separately and prior case law will be summarized with respect to each argument. The Supreme Court's holding will be discussed and, finally, the character of the Court's dicta will be developed and analyzed.

THE PREEMPTION DOCTRINE

Courts have recognized several forms of preemption. There are no clear distinctions between the types of preemption. Often the fact situation of a particular case is so complex that a great deal of overlap and redundancy occur in a court's preemption analysis. The easiest form of preemption has been labelled express preemption and is determined by the language of the federal statute without regard to state concerns. Express preemption occurs when Congress acts within one of its enumerated powers and explicitly states in the statutory language that state law is displaced.²³ The Supremacy Clause operates and the state law is preempted.²⁴

harm on the citizens of California." PG&E, 103 S. Ct. at 1721. The court was unwilling to adjudicate the issue presented by the California law requiring on-site interim storage of the plant's nuclear fuel.

21. *Id.* at 1727.

22. *Id.* at 1726-27.

23. *Ray v. Atlantic Richfield*, 435 U.S. 151 (1978) (quoting *Rice v. Santa Fe*, 331 U.S. 218, 230 (1947)).

24. More recently, the United State Supreme Court has directed that the proper approach is to reconcile the operation of both statutory schemes. *TRIBE*, *supra* note 13, at 690. *See also*, Wiggins, *Federalism Balancing and the Burger Court: California's Nuclear Law as a Preemption Case Study*, 13 U.C.D.L. REV. 1, 44 (1979). The federal legislation will be construed narrowly, state law will

Preemption issues may also arise when Congress does not consider all the repercussions of its substantive or jurisdictional policies upon state law. Both the federal government and the state government may claim parallel jurisdiction over the same matter because the language and the legislative history of the federal statute are ambiguous about the extent to which the federal law should interfere with the state's law.²⁵ Modern preemption doctrine recognizes state contributions in an increasingly complex society and attempts to balance the federal objectives with the state's interests.²⁶ The United States Supreme Court has adopted a clear statement policy for preemption to preserve traditional and necessary exercises of the state's power. Courts will not presume preemption unless it is "the clear and manifest purpose of Congress."²⁷ This is an important political safeguard of federalism because it forces Congress to give full attention to the interests of the states by refusing to expand federal supremacy.²⁸ In other words, Congress must be explicit if it intends to prevent states from legislating in an area.

The remaining variations of the preemption doctrine recognize these state interests and balance them against the federal objectives. These include implied preemption, characterized by Congress' occupation of a given area, and the "conflict" preemptions. Implied preemption of state law by federal law occurs when federal regulations are so comprehensive and/or the federal interest in uniformity of laws is so overwhelming that any interest the state has is precluded.²⁹ In these "occupation" cases the courts examine the nature of the regulated subject matter which requires exhaustive federal legislation. The subject matter is national in character when Congress enacts legislation by virtue of an enumerated power which has been denied to the states, for example, the regulation of commerce. Implied preemption also occurs if uniform standards are required to promote efficiency or prevent clashes if each state develops a regulatory

be "preempted to the extent that it actually conflicts with federal law." PG&E, 103 S. Ct. at 1722.

25. The preemption problem presented in PG&E has its roots in the following Congressional hearing: "We thought that this Act [AEA], without saying in so many words, did make clear that there was preemption here, but we tried to avoid defining the precise extent of that preemption, feeling that it is better to leave these kind of detailed questions perhaps up to the courts later to be resolved." Mr. Lowenstein (Office of the General Counsel, AEC) 1959 Hearings 307. Senator Clinton P. Anderson prophetically remarked, "The Atomic Energy Act of 1954 is silent as to the regulatory role of the States; and if this silence is allowed to continue, . . . there will be confusion and possible conflict between Federal and State regulations and uncertainty on the part of industry and possible jeopardy to the public health and safety." 105 Cong. Rec. 19042 (September 11, 1959).

26. See *TRIBE*, *supra* note 13; *WIGGINS*, *supra* note 24, at 27-28.

27. PG&E, 103 S. Ct. at 1723 (quoting *Rice v. Santa Fe*, 331 U.S. 218, 230 (1947)); *Ray v. Atlantic Richfield Co.*, 435 U.S. 151, 157 (1978).

28. See, Note, *The Preemption Doctrine: Shifting Perspectives on Federalism and the Burger Court*, 75 *COLUM. L. REV.* 623 (1975) [hereinafter referred to as *SHIFTING PERSPECTIVES*].

29. *Rice v. Santa Fe*, 331 U.S. at 230.

scheme of its own.³⁰ Conflict preemption has also been subcategorized into express and implied conflict for purposes of analysis. Express conflict preemption examines the bounds of permissible intersections of federal and state law in actual operation. If compliance with both federal and state laws is physically impossible³¹ and an "immediate constitutional repugnancy" is evident, preemption of state law is inevitable under the doctrine of express conflict.³² The Supreme Court has posed a test for express conflict preemption: if "the matter on which the State asserts the right to act is in any way regulated by the Federal government,"³³ state law will be preempted. Sometimes, however, a state ordinance will be allowed to stand even if compliance with both the state and federal mandates is a physical impossibility.³⁴ The courts then adopt a federalism balancing approach to determine the degree of conflict and the objectives of the conflicting statutes. Conflicts between the state regulations and the federal policies will necessarily arise when the objectives of the state and federal statutes are incongruent, and there is a significant overlap in coverage.³⁵ If the state and federal provisions only coincide incidentally and the expectation of conflict is significantly low the state law will not be invalidated. The courts recognize the autonomy of the state police power and encourage a healthy state regulatory structure.³⁶ Implied conflict analysis asks only if the state law handicaps the purposes of the federal legislation. Implied conflict occurs when state law allegedly frustrates and hinders the intent and the policies that the federal act encompasses.³⁷

THE FEDERAL SCHEME FOR CONTROL OF NUCLEAR ENERGY

When Congress passed the AEA it was exercising its constitutional powers to promote the general welfare, common defense, and security of the nation.³⁸ The AEA relinquished the federal monopoly over the emerging nuclear industry and provided for the licensing of private construction, ownership, and operation of commercial nuclear power reac-

30. WIGGINS, *supra* note 24, at 34.

31. *Florida Lime & Avocado Growers, Inc. v. Paul*, 373 U.S. 132, 142-43 (1963).

32. *Goldstein v. California*, 412 U.S. 546, 555 (1973) quoting 32 *The Federalist* 243 (B. Wright ed. 1961).

33. *Rice v. Santa Fe*, 331 U.S. at 236.

34. *Huron Portland Cement Co. v. City of Detroit*, 362 U.S. 440 (1960).

35. *Goldstein*, 412 U.S. at 554.

36. If state law may possibly conflict with the federal law, then preemption need not occur. WIGGINS, *supra* note 24, at 56. "The test of whether both federal and state regulations may operate, or the state regulation must give way, is whether both regulations can be enforced without impairing the federal superintendence of the field, not whether they are aimed at similar or different objectives." *Contra*, *Florida Lime Growers*, 373 U.S. at 142.

37. *Hines v. Davidowitz*, 312 U.S. 52 (1941).

38. 42 U.S.C. Sections 2011-12 (1976).

tors.³⁹ The possession and use of specified nuclear materials and the construction and operation of nuclear production and utilization facilities are comprehensively regulated by the NRC.⁴⁰ The NRC considers its statutory responsibilities to be the protection of the public health and safety from radiation hazards and the promotion of the common defense and security.⁴¹ The federal government has total responsibility and authority for regulating, from the standpoint of radiological health and safety, specified nuclear facilities and materials.⁴²

Several provisions within the Act recognize states' interests. Section 271 provides that state authority with respect to the generation, sale, or transmission of electric power produced by nuclear energy shall not be affected by the AEA.⁴³ This section was amended in 1965 to prohibit the regulation of any activities of the Atomic Energy Commission (AEC) by state and local agencies.⁴⁴ It was the congressional intent that the AEC's (now NRC's) regulatory control be limited to the common defense, security and the special radiological hazards associated with the operation of nuclear facilities.⁴⁵

39. *Duke Power Co. v. Carolina Environmental Study Group, Inc.*, 438 U.S. 59, 63 (1978). The United States Supreme Court balanced local environmental and aesthetic interests resulting from the operation of a nuclear power plant against Congressional desire to develop nuclear power. The economic stability of the nuclear power plant industry was in jeopardy early due to uncertain profits and the accompanying risk, however remote, of a major nuclear accident resulting in extensive damage. *Duke Power*, 438 U.S. at 63-64. The Price-Anderson Act emerged to stimulate the involvement of private enterprise in the production of electric energy through the use of atomic power. 42 U.S.C. § 2210 (1976). The Price-Anderson Act imposes an upper limit of 560 million dollars on liability for nuclear accidents resulting from the operation of a federally licensed private nuclear power plant. The Act further requires those indemnified to waive all legal defenses. Thus Congress has entered the sphere of nuclear power plant economics. The Court found that injuries resulting from thermal pollution and emission of non-natural radiation were sufficient to give the parties standing to challenge the Act, but the harm was not sufficient to defeat the Congressional desire to develop nuclear power.

40. 10 C.F.R. Section 8.4(b), (c) (1983) and 10 C.F.R. Part 50 (1983). Among these regulations are design objectives of equipment, 10 C.F.R. Part 50.34a, technical specifications, 10 C.F.R. Part 50.36, standards for construction permits. 10 C.F.R. Part 50.45, emergency plans. 10 C.F.R. Part 50.47.

41. 10 C.F.R. § 8.4(b) (1983).

42. *Id.* at 8.4 (i).

43. 42 U.S.C. § 2018 (1976). Representative Cole, in the House hearings, stated that existing state authority regarding public convenience and necessity of nuclear power plants is not influenced by the AEA in any respect. 100 Cong. Rec. 11689 (1954). Further legislative history confirms that Congress intended the safety of nuclear technology to be the exclusive business of the federal government, but state jurisdiction over the production of electricity was not displaced. S. Rep. No. 1699, 83rd Cong., 2d Sess. 31 (1954); H.R. Rep. No. 2181, 83rd Cong., 2d Sess. 31 (1954); 100 Cong. Rec. 12015, 12196-202 (1954).

44. Congress added this proviso specifically to overturn a federal court ruling which allowed local authorities to prohibit transmission lines necessary for the AEC's own activities, *Maun v. United States*, 347 F.2d 970 (9th Cir. 1965).

45. The legislative reports of this amendment explicitly restate that the authority of the federal, state and local agencies having jurisdiction over the generation, sale, and transmission of electric power is not affected by the amendment. H.R. Rep. No. 567, 89th Cong., 1st Sess. 4, 10 (1965).

Section 274 of the AEA provides statutory guidelines for increased state cooperation which allow control over special nuclear material to be shifted to states pursuant to agreements between the AEC and the states.⁴⁶ Section 274 provides that the authority of states to regulate activities for purposes other than the protection against radiation hazards shall not be affected by the AEA,⁴⁷ but states may not assume "authority and responsibility with respect to regulation of . . . the construction and operation of any production or utilization facility" and the disposal of hazardous nuclear material.⁴⁸

When Congress passed the Energy Reorganization Act of 1974 it abolished the Atomic Energy Commission.⁴⁹ In its place, Congress created the Nuclear Regulatory Commission (NRC) with authority over the licensing of nuclear power plants and radiation hazards. The developmental and promotional aspects of nuclear power were delegated to the Energy Research and Development Administration (ERDA) which, in turn, was incorporated into the Department of Energy (DOE).⁵⁰ More recently Congress passed the Nuclear Waste Policy Act of 1982.⁵¹ The Nuclear Waste Policy Act establishes disposal repositories for high-level radioactive wastes including spent nuclear fuel. The Act also licenses and expands interim storage resources and provides funding for research and development in the field of nuclear waste disposal.

Coupled with the federal responsibility to nuclear energy is the state's traditional obligation to determine need, reliability, rates and services of electrical utilities.⁵² Threshold decisions about the need for and the types

"[Indeed, w]e were trying to keep the AEC out of the business of regulating electricity. That is what gave birth to Section 271. We provided that nothing in the act would affect the local supervising authority's right to control the manufacture of electricity generated by nuclear facilities." 111 Cong. Rec. 19832 (1965).

46. 42 U.S.C. § 2021 (1976). The indication in the legislative history reveals that the amendment applies principally to radioisotopes (quantities not sufficient to form a critical mass). Mr. Van Zandt—105 Cong. Rec. 19169 (September 11, 1959). California has signed such an agreement in 1962. CAL. HEALTH & SAFETY CODE §§ 25875-76 (West 1977).

47. 42 U.S.C. § 2021(k) (1976). From the legislative history, this particular reservation of powers to the states is "intended to make clear that the bill does not impair the State authority to regulate activities . . . for the manifold health, safety, and economic purposes other than radiation protection." S. Rep. No. 870, 86th Cong., 1st Sess., *reprinted in* 1959 U.S. Code Cong. & Ad. News 2872, 2882.

48. 42 U.S.C. 2021(c)(1), (4) (1976).

49. Energy Reorganization Act of 1974, 42 U.S.C. §§ 5801-91 (1976).

50. Department of Energy Organization Act, 42 U.S.C. §§ 7101-352 (Supp. I 1977).

51. Nuclear Waste Policy Act of 1982, 42 U.S.C. § 10101-226, Pub. L. No. 97-425, 96 Stat. 2201 (1983).

52. PG&E, 103 S. Ct. at 1723, 1724, n.18. *See e.g.*, Central Hudson Gas & Electric Corp. v. Public Service Commission of New York, 447 U.S. 557 (1980); Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, 435 U.S. 519 (1977); Jackson v. Metropolitan Edison Co., 419 U.S. 345 (1974); Rice v. Santa Fe Elevator Corp., 331 U.S. 218 (1947); Frost v. Corporation Commission, 278 U.S. 515 (1929).

of power plants to be built are substantive decisions made by the state.⁵³ In spite of the exhaustive and ubiquitous federal regulations over nuclear power generation, the NRC does not have the authority to consider future state energy needs or whether a nuclear power plant would be an economical and reliable source of energy. Moreover, the NRC recently repealed its regulations concerning the financial qualifications and capabilities of a utility proposing to construct and operate a power plant.⁵⁴ It is the state that must assess the relative benefits and costs of various generation technologies with respect to state land sites, environmental quality, reliability, availability, and economics.⁵⁵

THE CALIFORNIA SCHEME TO REGULATE NUCLEAR POWER

The California legislature, exercising its traditional power in planning for future energy needs, enacted the California Nuclear Laws as amendments to an energy planning and conservation omnibus law entitled the Warren-Alquist Act.⁵⁶ The history of the Nuclear Laws expresses a “pre-dominant legislative concern for the reliability and economics of nuclear generated electricity”⁵⁷ and reflects the state’s duty and right to minimize

53. *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council*, 435 U.S. 519 (1978). The licensing of a nuclear power plant was challenged because the NRC failed to consider the environmental impact of fuel reprocessing and disposal or energy conservation as an alternative to the nuclear reactor. *Id.* at 535–37. Once a state initially has decided the need for additional electrical energy generating capacity, the NRC need not consider conservation as an alternative to licensing the construction of a nuclear power plant. *Id.* at 550. “[S]tate public utility Commissions . . . are empowered to make the initial decision regarding the need for power” and it is Congress or the states which must inevitably decide whether or not to develop nuclear power, PG&E, 103 S. Ct. at 1723 (quoting *Vermont Yankee*, 435 U.S. at 550).

54. PG&E, 103 S. Ct. at 1724. The NRC has eliminated entirely requirements for financial qualifications review on the belief that such review “has done little to identify substantial health and safety concerns at nuclear power plants.” 47 Fed. Reg. 13750 (1982).

55. Woychik, *State Opportunities to Regulate Nuclear Power and Provide Alternative Energy Supplies: Part I*, 15 U.S.F.L. REV. 127, 157–58, n.171 (1980).

56. CAL. PUB. RES. CODE §§25000–968 (West 1977). Section 25200 grants the California Energy Commission broad authority to formulate a comprehensive energy plan. The California law expands state authority to conserve energy, protect the environment, and prevent delays and interruptions in the generation and service of electrical energy. *Id.* at §25005. Long-term cost, energy use reduction, and increased independence from other fuel sources are major considerations in the energy planning scheme. *Id.* at §25008. The California Energy Commission is specifically directed to examine technically feasible forms of alternative energy generation, e.g., solar and geothermal energy, as well as fossil fuels and nuclear power. This Section also states, “It is the intent of the Legislature that no policy in this section, expressed or implied, be in conflict with existing state or federal regulations regarding the production or sale of electricity, and that this policy be just and reasonable to utility ratepayers.” The California Energy Commission also factors land use, urban expansion, transportation systems, environmental protection and economic development into its energy directives. *Id.* at §25003.

57. Declaration of Emilio E. Varanini III, *Declarations Submitted by Defendants in Opposition to Plaintiff’s Motion for Summary Judgment*, *Pacific Gas and Electric Co. v. State Energy and Resources Dev. Comm’n*, No. 5-78-527 MLR, reprinted in WOYCHIK, *supra* note 55, at 153, n.145. “Without available enriched uranium at reasonable prices, nuclear power plants may not or

the economic and social burdens of an uncertain nuclear industry.⁵⁸ California considered the lack of permanent disposal techniques to be a bottleneck in the nuclear fuel cycle. The piling up of nuclear wastes in storage pools could cause the premature closing of the nuclear reactors.⁵⁹ California was unwilling to have its citizens bear the financial risk of a nuclear power plant shutdown because of this "clog" in the nuclear cycle.⁶⁰ The California laws mandated "reliance upon other energy sources until these uncertainties associated with nuclear power are resolved."⁶¹

PACIFIC GAS AND ELECTRIC, THE CASE

The California Law Does Not Expressly Conflict with the AEA Nor Does It Attempt to Regulate the Operations and Construction of a Nuclear Power Plant

The utility companies allege that the California Nuclear Laws attempt

perhaps should not become part of the energy supply on which California relies. Without a method for disposing of spent fuel either by recycling through reprocessing facilities or ultimate disposal, spent fuel storage capacity at reactor sites may soon be exceeded with possible premature, economically disastrous closure of already licensed and operating nuclear plants. Overall, this concern for the cost of nuclear power is purely an economic one, the Legislature's clearly expressed desire to protect the rate paying consumer from a possible overly-expensive energy generation alternative. . . . Thus, having previously established an energy planning and policy scheme, the state Legislature now factored into the states's choice among alternative technologies the economic and reliability uncertainties which it had discovered to be associated with the nuclear fuel cycle." *Id.*

58. TRIBE, *supra* note 13, at 704.

59. ASSEMBLY COMMITTEE ON RESOURCES, LAND USE AND ENERGY, REASSESSMENT OF NUCLEAR ENERGY IN CALIFORNIA: A POLICY ANALYSIS OF PROPOSITION 15 AND ITS ALTERNATIVES (1976).

60. PG&E, 103 S. Ct. at 1727. There are real economic concerns if a nuclear reactor is forced to shut down, "[A] shutdown does not represent a serious safety problem, but it does represent an economic embarrassment of the highest sort. Each one of those big reactors represents about a half-billion dollars investment, and the thought of these most economical power producers, or already troubled utility systems, becoming idle is a picture I believe we do not care to help in painting—any one of us. Further, for each idle reactor the utility must find and [sic] fuel alternative generating capacity. Replacement fuel alone, if generating capacity is available, amounts to about 10 million barrels for each idle reactor." *The Role of Nuclear Fuel Reprocessing in Fulfilling National Energy Objectives*, House Subcommittee on Energy and the Environment, Committee on Interior and Environmental Affairs (testimony of A. Schubert, President, Allied-General Nuclear Services, Barnwell, South Carolina), *reprinted in* TRIBE, *supra* note 13, at 706.

61. Pacific Legal Foundation, 659 F.2d at 925. The provisions emerged as alternatives to Proposition 15 which was defeated by the voters of California in 1976. PG&E, 103 S. Ct. at 1728, n.27. For a discussion of Proposition 15 and its relation to the Nuclear Laws, *see* Pacific Legal Foundation, 659 F.2d at 924. Proposition 15, like the Nuclear Laws, banned new nuclear power plants until a permanent nuclear waste disposal method had been developed but, unlike the Nuclear Laws, was firmly rooted in safety and concern for the threat of harm to the land or the people of California. Nuclear Law No. 3, CAL. PUB. RES. CODE § 25524.3 (West Supp. 1983), directs the California Energy Commission to study the necessity for and effectiveness of undergrounding and berm containment of nuclear reactors. By doing so the state wishes to "enhance the public health and safety at a site . . ." *Id.* at § 25524.3(b), (c). It is the author's opinion that this third Nuclear Law would be preempted by the AEA as it attempts to regulate nuclear power plants on the basis of health and safety concerns which are within the purview of the AEA.

to regulate the construction of nuclear power plants predicated on safety concerns. They assert that the California statute “ignores the division between federal and state authority created by the [AEA], and falls within the field that the federal government has preserved for its own exclusive control.”⁶²

The extent to which the AEA preempts state law had been considered by a number of courts prior to *PG&E*. These courts determined that the state or local laws were preempted because the federal government had completely occupied the area in which the states were regulating. State interference with the construction and operation of a nuclear power plant because of radiological safety concerns was first held to be preempted by the AEA in *Northern States Power Co. v. Minnesota*.⁶³ Minnesota imposed stricter radiation standards on the radioactive liquid and gaseous discharges from an operating nuclear power plant than the AEA.⁶⁴ The Court of Appeals determined that the state law was not expressly preempted by the AEA and that it was not physically impossible to satisfy both federal and state emission standards.⁶⁵ The discharge of radioactive gases and effluents from a nuclear power plant is nonetheless inextricably intertwined with the operation of the facility. Since the operation of a nuclear power plant is subject to exclusive federal regulation by the AEA, the Minnesota law was preempted.⁶⁶ The court reasoned that the national development and utilization of nuclear energy required uniform standards and policies. The case recognized states' power to regulate for purposes other than radiation protection.⁶⁷ The dissenting judge focused on the balance between the states' interests in environmental protection and the desired development of atomic energy.⁶⁸ He invoked the “clear statement” rule saying that Congress knew how to establish preemption and did not do it.⁶⁹

In *U.S. v. City of New York*, New York City (NYC) denied a Certificate of Health and Safety for Nuclear Reactor Operation to Columbia University because of the “possibility of injury to the health and safety of

62. *PG&E*, 103 S. Ct. at 1722.

63. *Northern States Power Co. v. Minnesota*, 447 F.2d 1143 (8th Cir. 1971), *aff'd*, 405 U.S. 1035 (1972). Upon appeal the U.S. Supreme Court reaffirmed the judgment without issuing an opinion.

64. *Northern States*, 447 F.2d at 1145.

65. *Id.* at 1147. The express conflict preemption doctrine is triggered when it is a physical impossibility to comply with both the state and federal laws. See *supra*, text accompanying notes 31–36.

66. *Northern States*, 447 F.2d at 1149 n.6, 1153.

67. *Id.* at 1150, 1151.

68. *Id.* at 1156.

69. *Id.*

the public resulting from an accidental release of radiation.”⁷⁰ Columbia asserted the NYC ordinance was preempted by the AEA. The court agreed and determined that the NRC considers local safety factors as well as generic safety factors when it issues an operating license.⁷¹ “Congress did not leave room for dual federal-state regulation of radiation hazards associated with the operation of nuclear reactors.”⁷²

The Supreme Court in *PG&E* found no express preemption of the California Nuclear Law at issue because the AEA does not expressly compel states to authorize nuclear power plants; nor does the AEA expressly prohibit states from forbidding the construction of any further reactors.⁷³ The Supreme Court recognized that the AEA expressly grants the NRC exclusive authority to license the transfer, delivery, receipt, acquisition, possession and use of nuclear materials.⁷⁴ Moreover, states were given no role to license the private construction, ownership, and operation of commercial nuclear power reactors.⁷⁵

The Supreme Court also determined there was no implied preemption because the initial decisions by states to determine the need for and the type of power do not tell utilities “how” to construct or operate a nuclear plant. More specifically, this California law does not attempt to instruct the utilities how to construct or operate a nuclear power plant.⁷⁶ The Supreme Court in *PG&E* reconciled *Northern Minnesota* with *PG&E* without adopting the lower court’s reasoning. They said that Minnesota’s regulation of radioactive waste disposal “fell squarely within the field of safety . . . [which is] reserved for federal regulation.”⁷⁷

The federal government has not occupied the field of all nuclear matters but rather “the entire field of nuclear safety concerns.”⁷⁸ The Supreme Court easily found sufficient powers reserved to the states allowing them, if so inclined, to halt the construction of new nuclear plants. Because the NRC cannot mandate nuclear power to the states, and because the NRC does not exercise any authority based on economic considerations,⁷⁹ states can refuse to issue certificates of public convenience on economic grounds

70. *U.S. v. City of New York*, 463 F. Supp. 604, 607 (S.D.N.Y. 1978). The challenged city ordinance is Section 175.107(c) of the New York City Health Code.

71. *Id.* at 613.

72. *Id.* at 614.

73. *PG&E*, 103 S. Ct. at 1722.

74. *PG&E*, 103 S. Ct. at 1724 (interpreting 42 U.S.C. 2131, 2133, 2134).

75. *Id.*

76. *Id.* at 1726.

77. *Id.* at 1726 n.24.

78. *Id.* at 1726. 42 U.S.C. §§2011, 2012, 2018(c) (1976). The U.S. Supreme Court reiterated that NRC’s “prime area of concern . . . is the national security, public health, and safety.” *Vermont Yankee*, 435 U.S. at 550.

79. 10 C.F.R. 8.4 (1983).

to utility companies proposing nuclear power.⁸⁰ The state's interest in the economical features of nuclear power is a historic and justifiable exercise of the state's police power. Therefore the dissimilar motives of the variant laws avert preemption.⁸¹

The Court further accepted that California is not attempting to enter the field of nuclear waste disposal technology—one which is occupied by the federal government.⁸² California asks only that the federal government choose a method of permanent nuclear waste disposal; it "is concerned not with the adequacy of the method, but rather with its existence."⁸³ California recognizes that it is the federal responsibility to develop and license nuclear waste disposal technology.⁸⁴

The Supreme Court concluded this part of its analysis by stating that the language of the AEA mandates that the federal government retain express and exclusive jurisdiction over the "radiological safety aspects involved in the construction and operation of a nuclear plant."⁸⁵ The Court stated that a state may not regulate the construction or operation of a nuclear power plant even if enacted out of non-safety concerns. Justices Blackmun and Stevens, concurring in the result, but issuing a separate opinion in *PG&E*, would limit the field of preemption to the "narrower area of how a nuclear plant should be constructed and operated to protect against radiation hazards."⁸⁶

The Court states that if California's moratorium were motivated by safety concerns, either for nuclear technology or the operation and construction of a nuclear power plant, it would be unconstitutional.⁸⁷ Justice

80. *PG&E*, 103 S. Ct. at 1728.

81. *Huron Portland Cement*, 362 U.S. at 446. The Court is unwilling to permit federal interest overwhelm state regulations of historic and justifiable importance if the conflict is trivial or insubstantial. *New York Department of Social Services v. Dublino*, 413 U.S. 405, 423 n.29 (1973).

82. *PG&E*, 103 S. Ct. at 1730.

83. *Id.* at 1727 (quoting *Pacific Legal Foundation*, 659 F.2d at 925).

84. *Id.* at 1730.

85. *PG&E*, 103 S. Ct. at 1723. See 42 U.S.C. 2021(c), (k) (1976).

86. *PG&E*, 103 S. Ct. at 1732.

87. The Supreme Court, in *PG&E*, surprisingly granted a great deal of deference to the California state legislature and accepted the nonsafety, economic rationale for the California Nuclear Laws. *Id.* at 1728. In contrast, the Court has increasingly scrutinized both the purported motive and the actual effect of state legislation in cases of commerce clause preemption. See, *Sporhase v. Nebraska*, 458 U.S. 941 (1982) (state restriction of groundwater exportation violates commerce clause); *Kassel v. Consolidated Freightways*, 450 U.S. 662 (1981) (alleged state safety statute regulating truck length unduly burdened commerce); *Exxon Corp. v. Governor of Maryland*, 437 U.S. 117 (1978) (permissible state regulation of retail gasoline marketing. Justice Blackmun dissented saying the purpose and effect of the state regulation was protection of in-state gasoline retailers); *Raymond Motor Transportation, Inc. v. Rice*, 434 U.S. 429 (1979) (balanced asserted safety purposes of state regulating truck length against degree of interference of interstate commerce); *Pike v. Bruce Church, Inc.*, 397 U.S. 137 (1970) (state must employ least restrictive means to accomplish a legitimate state purpose). See generally Browde, DuMars, *State Taxation of Natural Resource Extraction and the Commerce Clause: Federalism's Modern Frontier*, 60 OR. L. REV. 7 (1981).

With the precedent of commerce clause preemption it is difficult to understand why the Supreme

Blackmun disagrees. He declares that the traditional police power reserved to the states includes the ability to promulgate a ban on construction of nuclear power plants, "even if its authors were motivated by fear of a core meltdown or other nuclear catastrophe."⁸⁸

The ambiguity in the majority opinion in *PG&E* is that it asserts, as a matter of law, that the federal government has sole authority over the "radiological safety aspects of the construction and operation" of a nuclear power plant and then, in dicta, expands this preemptive capacity of the AEA beyond radiological safety to include all the aspects of nuclear plant construction and operation.⁸⁹ This expansion is the antithesis of both Sections 271 and 274 of the AEA, which allow states to regulate activities for purposes other than radiation hazards.⁹⁰ The Court also failed to address just what the "construction and operation" of a nuclear power plant encompasses. The dicta of this case may actually expand the AEA's jurisdiction beyond previous case law to include any action by the states which may have only an incidental effect on the construction and operation of a nuclear power plant.⁹¹ The Court limits the state's power to consideration of the threshold question of "whether" to allow nuclear power plants at all. States are precluded from regulation once a "safe" nuclear power plant has been constructed and is operating within their jurisdiction. This expansive dicta, however, may lead states to decline nuclear power because of their potential inability to control nonradiation hazards.⁹² For example, interpretation of this dicta may prevent a state from denying

Court did not scrutinize the alleged purposes and actual effect of California's Nuclear Law as closely as it has done in commerce clause preemption analyses. The utility companies could have triggered this critical commerce clause inquiry into the state's motive because the AEA does regulate commerce. "[T]he processing and utilization of . . . nuclear material affect[s] interstate . . . commerce and must be regulated in the national interest." 42 U.S.C. § 2012(c) (1976).

88. *PG&E*, 103 S. Ct. at 1735.

89. *Id.* at 1726.

90. *See supra*, text accompanying notes 43-48. The Court in *PG&E* actually uses the clear statement rule, not to limit, but to expand federal power with respect to atomic energy. The language of the statute reads "the [NRC] shall retain authority and responsibility with respect to regulation of (1) the construction and operation of any production or utilization facility." 42 U.S.C. § 2021(c) (1976). There is no statutory language which expresses the congressional intent to limit federal regulation to radiological safety hazards involved in the construction and operation of a nuclear power plant.

91. *But see*, Northern States, 447 F.2d 1143. Minnesota's stricter radiation emission controls arguably had only an incidental effect on the operation of a nuclear power plant. *See supra* text accompanying notes 63-69.

92. *Contra* "Yet questions arise regarding the stiffening of economic regulation of a nuclear power plant whose operation represents a considerably less-than-optimal bargain for ratepayers. It seems possible, in light of [*Pacific Gas and Electric*], that the operation of a nuclear power plant might be required to cease by state regulatory fiat, not because of health and safety considerations (although those might exist incidentally), but because of a potentially disastrous performance on the economic balance sheet. Perhaps [*Pacific Gas and Electric*] "paves the way for an 'economic impact statement of sorts.'" Lodge, *Melting Down Preemptive Federal Regulation of Nuclear Power—Pacific Legal Foundation v. State Energy Resources Comm'n*, 14 TOL. L. REV. 57, 70 (1982).

rate increases to a nuclear plant's customers when the utility requests it to enlarge their storage pools or to add increased measures of safety. Similarly, pay increases to nuclear power plant employees or increases of the rate of return to stockholders may be so inextricably intertwined with the operation of a nuclear power plant that states will not be allowed to regulate them.⁹³ In fact, it is unclear from the *PG&E* opinion whether a state with scarce water resources could, in exercising its traditional control over its resources, compel a utility to use an air cooling system rather than a water cooled system regardless of cost to the utility. The utilities could challenge this state action as regulating the construction and operation of a nuclear power plant.

The Court suggests that the line between the generation of electricity (entirely within the state's purview) and the operation of a nuclear power plant (entirely within federal jurisdiction) is a bright line. Realistically, it is an imprecise continuum of legitimate state and federal interests. If the Court is suggesting the line is a distinct and bright one, the absurd consequence would be that the "generation of electricity" is separable from the "operation" of a nuclear power plant. The Court must articulate this difference if the dicta is to be meaningful. When a state does attempt to regulate the construction or operation of a nuclear power plant, motivated by something other than safety and radiation hazards, the courts probably will balance the competing state and federal interests. The language of the AEA is still too ambiguous and the interests of the states are too imperative to evolve an absolute preemption of this issue.

Both the majority and the separate opinion recognize that the consequences of absolute preemption would create a "regulatory vacuum" and give the utilities a "jurisdictional monopoly."⁹⁴ Preemption of the California law would grant the utilities the discretion to determine "when and how" to provide for the state's energy needs by using only nuclear power. The decision of "when and how" to provide for future energy is the most crucial decision of energy planning in that it has the greatest impact on the greatest number of people within the state. It would be ironic if the utilities, already a heavily regulated industry, were free to

93. This very issue—the issue of whether a state may order a plant to shut down because of its economic burden to taxpayers—was bypassed by the Ohio Supreme Court in *City of Cleveland v. Public Utilities Commission of Ohio*. The Ohio Supreme Court held that other issues involving state regulation of radiological hazards and safety standards were preempted by the AEA. The economic question was not an issue because the Davis-Besse plant was not used and useful during the time in question. *City of Cleveland v. Public Utilities Commission of Ohio*, 64 Ohio St.2d 209, 414 N.E.2d 718, 723 (1980). See Note, 10 CAP. U. L. REV. 919 (1981).

94. *PG&E*, 103 S. Ct. at 1724. See WIGGINS, *supra* note 24, at 64. If the states are prevented from considering broad social, economic and ideological policies when deciding whether or not to build a nuclear facility a regulatory vacuum would exist. *PG&E*, 103 S. Ct. at 1733, quoting WIGGINS, *supra* note 24, at 64.

determine these economic and energy planning matters of greatest consequential importance.⁹⁵ The fear of deregulating utilities is the argument that saved the California law in *PG&E*. The policy interest of the state in economic and energy planning is so great that the Court was unwilling to usurp that responsibility. A leading commentator nudges Congress, "[i]n labeling a subject as national or local, the Court will be deciding a matter of political as much as legal importance, because the label will virtually determine the scope of state power to regulate."⁹⁶

The federal government has occupied the two most notorious fields of nuclear power: the field of radiation safety and the field of nuclear wastes. It would be naive for Congress or the Supreme Court to think that states do not have a compelling interest in these fields. Because it is the citizens of the state who bear the brunt of a nuclear tragedy, however remote the possibilities of disaster might be, local health and safety fears may not be so easily appeased by the NRC.⁹⁷ This occupation of the field preemption has motivated states to undergo all kinds of legal contortions and pretextual gymnastics to assert some control over the hazards presented by nuclear power, even to the point of barring future nuclear power plant construction on the basis of economic concerns. If California were so very concerned with the economics of the nuclear power plants it could have more directly regulated other economic aspects of nuclear power besides nuclear wastes. These billion dollar giants are years and years behind construction schedules, and the economic burden to shareholders and consumers is as immense as the cooling towers of the power plants.⁹⁸ These considerations could provide a more realistic basis for legitimate regulations.

In reality, the economics of the nuclear power industry are already of

95. WIGGINS, *supra* note 24, at 64.

96. *Id.* at 42.

97. States do have an interest in the health and safety issues surrounding nuclear power plants because state tort law is applicable in determining liability of the responsible parties in the event of a nuclear accident as authorized by the Price-Anderson Act. There is concurrent jurisdiction in both federal and state courts to hear an injury suit resulting from a nuclear accident and, if in state court, state law will be applied unless the NRC has classified the event giving rise to the injury as an extraordinary nuclear accident, in which case only the federal courts have original jurisdiction. 42 U.S.C. § 2210(n)(2) (1976). In *re* Three Mile Island Litigation, 87 F.R.D. 433 (M. D. Pa. 1980). "[I]f a court, in applying applicable state [tort] law, did not find fault or negligence to be a cause of a nuclear accident or did not apply principles of *res ipsa loquitur* or absolute liability, then the public would go uncompensated for damages sustained." Green, *Nuclear Power: Risk, Liability, Indemnity*, 71 MICH. L. REV. 479, 488 (1973). See also, Widoff, *The Accident at Three Mile Island*, 4 W. NEW ENG. L. REV. 223 (1981).

98. Puget Sound Power in Washington state is cancelling plans to build the 1.8 billion dollar Skagit/Hanford nuclear power plant. The utility will try to recover its 170 million dollar losses through rate increases. 109 Wall St. J., Western Edition, August 31, 1983, at 2, col. 2. See also, *supra* text accompanying notes 92-96.

national concern.⁹⁹ Congress, however, is unwilling to completely occupy the field of nuclear power and subsidize the industry. California and the clever drafters of the Nuclear Laws found this loophole in regulation and understood that the federal government has far less preemptive power over the economics of the nuclear industry than it does over the safety of the nuclear industry. The fact that the recent economic disasters resulting from delayed construction of nuclear power plants and national inflation coincided with the passage of the California Nuclear Laws may be the timely result of legislators doing their homework or it may be happenstance. Regardless of the real reason for passing the California law,¹⁰⁰ it is important legislation protecting many consumers' pocket-books. The Supreme Court granted great deference to the California legislature in ascertaining the motive of the Nuclear Laws and the Court determined that economic considerations were a valid basis for state regulation of nuclear power. The California moratorium, however, must still pass the preemption test of whether the state law in operation actually conflicts with the federal statutory scheme.

The California Law Does Not Conflict with the Federal Statutory Scheme of Regulating Nuclear Power

The utilities in *PG&E* urged, as their second preemption argument, that the California law stepped beyond the boundaries of permitted state regulation because the moratorium expressly conflicts with: (1) federal regulations of nuclear waste disposal; (2) Congress' recent passage of the Nuclear Waste Disposal Act, and; (3) the NRC's decision to continue to license reactors in spite of the uncertainty surrounding the waste disposal problem.¹⁰¹

NRC's regulatory scheme, which permits utilities to store high level radioactive wastes in pools at nuclear power reactor sites, was challenged in *Natural Resources Defense Council, Inc. v. United States Nuclear Regulatory Commission*.¹⁰² The policy of issuing operating licenses for

99. The Federal Securities Exchange Act, 15 U.S.C. § 77 (1976), regulates the sale and transfer of stocks and securities of public and private corporations which would include utility companies. The Public Utility Holding Company Act of 1935, 15 U.S.C. § 79 (1976) regulates the holding of public utilities involved in interstate electrical energy generation and transmission. The Federal Energy Regulatory Commission (FERC), authorized by the Department of Energy Reorganization Act, 42 U.S.C. Sections 7101-352 (Supp. I 1977), oversees the rates and charges of the transmission of power entering interstate commerce as regulated by the Federal Power Act, 16 U.S.C. § 791a (1976). There are also federal tax incentives affecting nuclear power. See, Chapman, *Federal Tax Incentives Affecting Coal and Nuclear Power Economic*, 22 NAT. RES. J. 361 (1982).

100. The utility companies allege that the California Nuclear Laws were "more clearly written with safety purposes in mind." *PG&E*, 103 S. Ct. at 1728 n.27.

101. *Id.* at 1729.

102. *Natural Resources Defense Council, Inc. v. United States Nuclear Regulatory Commission*, 582 F.2d 166, 174 (2d Cir. 1978).

nuclear power plants despite an uncertain permanent radioactive waste disposal technology was sustained because NRC has exclusive jurisdiction over the public health and safety with regard to radiation hazards.¹⁰³ The federal district court further noted that Congress had expressly and impliedly approved NRC's policies with full knowledge of the waste disposal problem.¹⁰⁴

The Supreme Court in *PG&E* determined the California law does not conflict with the federal regulations of managing nuclear wastes.¹⁰⁵ The responsible federal agencies admit the lack of and need for a permanent waste disposal technology. California argues that it is not concerned with the adequacy or the safety of nuclear waste disposal techniques; it is only concerned with the existence of the technology.¹⁰⁶ Correspondingly, the Court in *PG&E* recognized that a state may validly prod the federal government into developing a permanent waste disposal system. The Court further stated that once a "satisfactory disposal technology is found and demonstrated, [safety or economic] fears of having to close down operating reactors should largely evaporate."¹⁰⁷ No conflict exists between the California moratorium on the construction of nuclear power plants because an "NRC order does not and could not compel a utility to develop a nuclear plant."¹⁰⁸ Additionally, no conflict necessarily arises because of the NRC's determination that interim storage is safe. The Court reasoned that the construction of a nuclear power plant, while safe, may not be economically wise without a permanent waste disposal plan,¹⁰⁹ and economic concerns are controlled by the state. The Court also found no conflict with the Nuclear Waste Policy Act of 1982.¹¹⁰ Members of Congress had attempted to impose the Nuclear Waste Policy Act on the states as a legal requirement for the existence and approval of a permanent

103. The Court in *NRDC v. NRC* recognized that the field of health and safety concerns of nuclear power plants was exclusively and completely occupied by the federal government. 582 F.2d 166. The case has greater significance to the utilities' conflict preemption argument in *PG&E* because the utilities contend that, since the NRC allows interim storage, California has gone beyond the bounds of permissible state regulation when it asserts that interim storage of nuclear wastes will not be allowed as a result of the moratorium. It is hard to imagine a more direct conflict, but again, the objectives of the Nuclear Laws seek to ensure economic and reliable sources of energy whereas the NRC regulations seek to ensure safety.

104. *Id.* at 173-74.

105. This argument is probably more properly addressed to section 25524.1(b) of the California Nuclear Laws, CA. PUB. RES. CODE § 25524.1(b) (West 1977), because it is possible that the interim-storage provision would have conflicted with the federal regulations of nuclear waste disposal management.

106. *PG&E*, 103 S. Ct. at 1727. See *supra*, text accompanying notes 82-84.

107. *PG&E*, 103 S. Ct. at 1727.

108. *Id.* at 1729.

109. *Id.*

110. Nuclear Waste Policy Act of 1982, 42 U.S.C. §§ 10101-226, Pub. L. No. 97-425, 96 Stat. 2201 (1983).

waste disposal program.¹¹¹ Congress rejected this imposition of preemption, and the Court in *PG&E* would not interpret the Nuclear Waste Policy Act in a manner which Congress had refused to do.¹¹² The Court in *PG&E* further stated that although the Nuclear Waste Policy Act is directed at solving the nuclear waste disposal problem for existing reactors, it does not necessarily encourage or require that future plant construction be undertaken.¹¹³

The Supreme Court in *PG&E* admonishes that "a state judgment that nuclear power is not safe enough to be fully developed would conflict directly with the countervailing judgment of the NRC."¹¹⁴ A state may impose additional safety standards only by exercising its authority over certain land use and siting requirements, or as prescribed by the Clean Air Act Amendments of 1977.¹¹⁵ The majority opinion recognizes the state's safety concerns of land use and siting requirements, but draws a bright line forbidding state regulation of human health and safety in connection with radiological hazards of nuclear power. Justice Blackmun argues that a ban of nuclear power plants based on safety concerns would not make compliance with federal and state laws a physical impossibility. He maintains that NRC and Congress have not decreed that nuclear power plants be built.¹¹⁶ Justice Blackmun and Stevens argue that it is unrealistic to force states to ignore the health and safety risks of nuclear power.¹¹⁷ They maintain that the states must weigh *all* the risks, costs, and benefits of possible energy sources. Justice Blackmun argues that Congress has not clearly and manifestly declared that states be "blind to whatever special dangers are posed by nuclear plants."¹¹⁸

Since the federalism balance had already been struck in favor of the state's choices regarding the need for new power facilities, the Court narrowly interpreted the AEA, the federal waste disposal regulations and NRC's mandates. This is a result-oriented approach because, in reality, it is difficult to reconcile NRC's decision to license the construction of

111. The legislative history is of some particular interest to *PG&E*. ". . . [T]his bill contains no findings or provisions which could preempt state or Federal laws, judicial decisions, or administrative agencies by a congressional determination that there is reasonable assurance that a safe disposal method currently exists. There is no such determination, and such findings which were originally included in the bill were deleted to insure that there be no preemption," Mr. Ottinger. 128 Cong. Rec. H8797 No. 139 (daily ed. December 2, 1982). *Contra* Mr. Goldwater, in a floor discussion, of the Nuclear Waste Policy Act said, "[T]his proposal was necessary to keep nuclear power a viable option in California and other parts of the United States where restrictive laws had banned or slowed needed nuclear development." 128 Cong. Rec. H8797, No. 139 (daily ed. December 2, 1982).

112. *PG&E*, 103 S. Ct. at 1730.

113. *Id.*

114. *Id.* at 1727.

115. *Id.* at 1726, note 25.

116. *Id.* at 1733.

117. *Id.*

118. *Id.* at 1734.

new nuclear power plants with California's decision not to allow the construction of new nuclear power plants. It is even harder to reconcile the California Nuclear Law with the general federal goal to develop nuclear energy.

The California Law Does Not Frustrate the Federal Policies to Develop a Safe Nuclear Technology

The utilities allege an implied conflict preemption arguing that California's moratorium frustrates the federal goal of the private development of peaceful nuclear technology.

The Court determined that the California laws did not "stand as an obstacle to the accomplishment of the full purposes and objectives"¹¹⁹ of the AEA. The Court in *PG&E* reviewed the major policy of the AEA to be the widespread participation of private enterprise to develop peaceful uses of atomic energy. The Court, however, perceived that nuclear power should not be promoted "at all costs."¹²⁰ Rather the development of nuclear energy must "proceed consistent with other priorities and subject to controls traditionally exercised by the states and expressly preserved by the federal statute."¹²¹ Implicit in the Court's interpretation is the underlying condition that atomic energy be safe. Justice Blackmun explicitly characterizes the AEA as having twin goals: the safety *and* the development of nuclear technology.¹²²

"A state prohibition on nuclear construction for safety reasons would also be in the teeth of the AEA's objective that nuclear technology be safe enough for widespread development."¹²³ Justice Blackmun and Justice Stevens urge that the Court read too much into the purposes of the AEA. They suggest that the Act addresses only the practicality of bringing the nuclear industry into being,¹²⁴ and does not limit the states' decision as to what type of electric power it will authorize. "Congress simply has made the nuclear option available, and a State may decline that option for any reason."¹²⁵

The Court articulated Congress' continuing commitment to the development of nuclear energy.¹²⁶ The passage of the Energy Reorganization Act of 1974 does not translate into abandonment of the federal objective

119. *Hines*, 312 U.S. at 67.

120. *PG&E*, 103 S. Ct. at 1731.

121. *Id.* at 1720.

122. *Id.* 1735.

123. *Id.* 1727.

124. *Id.* at 1734, n.4.

125. *Id.* at 1735.

126. *Id.* at 1731.

to develop nuclear power¹²⁷ just because Congress did not want the promotional functions of the AEC to eclipse the safety responsibilities of the federal government with respect to nuclear energy.¹²⁸ The extension of the Price-Anderson Act until 1987 also is indicative of the commitment,¹²⁹ and the encouragement of alternate forms of energy does not suggest a retreat from the promotional purposes of the AEA. Justice Blackmun finds that the federal government places a "greater emphasis on nonnuclear energy" by the passage of recent energy legislation.¹³⁰ He suggests other ways a state can prohibit the construction of nuclear power plants by restrictive land use requirement or more stringent radiation emission standards allowed by the Clean Air Acts Amendments of 1977.¹³¹

The result of the two interpretations of the AEA is the same: nuclear energy should not be developed at all costs. States can decide not to build nuclear power plants, whether the prohibitive factors be economic, as the majority urges, or whether they be grounded in safety concerns, as Justices Blackmun and Stevens advocate.

The Nuclear Laws actually bring the promotion and development of nuclear energy in California to a halt in direct derogation of congressional intent. California, however, left to Congress the power to reverse the moratorium by providing permanent disposal of nuclear wastes. The Court pays little tribute to this argument, primarily because the case had already been decided on implied preemption grounds. The necessity of state regulation in determining efficient energy production far outweighs Congress' irresolute desire to develop nuclear energy. The states have important interests in those areas of nuclear power development where Congress has not chosen to legislate directly or to occupy the field.

CONCLUSION

In *PG&E* the Supreme Court further delineates the allocation of power between the federal and the state government with regard to the AEA. States are empowered to make the initial decision of the need for additional energy and to decide what technology will be used to supply that electrical energy. States, however, may not reject nuclear generated electricity for fear of radiological safety hazards. States may reject nuclear power be-

127. Energy Reorganization Act of 1974, 42 U.S.C. § 5801 (1976), Pub. L. 93-438, 88 Stat. 1233.

128. 1974 U.S. Code Cong. & Ad. News 5471.

129. The constitutionality of the Price-Anderson Act was challenged in *Duke Power Co. v. Carolina Environmental Study Group, Inc.*, 438 U.S. 59 (1978). See *supra*, note 39.

130. *PG&E*, 103 S. Ct. at 1734 (quoting S. Rep. No. 93-980, p. 14 (1974)).

131. See, 42 U.S.C. Sections 7416, 7422 (Supp. I. 1977). Congress acknowledged state's safety and environmental concerns of air quality and "would not follow the holding of *Northern States Power Co. v. State of Minnesota*," Joint Explanatory Statement of the Committee on Conference, H.R. Rep. No. 564, 95th Cong., 1st Sess. 143 (1977), reprinted in *TRIBE, supra* note 13, at 699.

cause the present uncertainties surrounding the disposal of nuclear wastes make nuclear power a risky economical venture.

The Court in *PG&E* expanded the express preemptive capability of the AEA for forbid state interference with the construction and operation of a nuclear power plant. The congressional intent was to limit the preemptive powers of the AEA to the issues of human safety against radiological hazards. Preemption of the California law would have given utilities the power to determine state energy needs and programs thus undermining a traditional and important exercise of the state's powers. The policy against this consequence far outweighed the frustration of the development of nuclear power, and the physical impossibility presented by the California laws.

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