

STATE POWER AND PREEMPTION IN THE
NUCLEAR ENERGY FIELD: *PACIFIC GAS
AND ELECTRIC CO. v. STATE ENERGY
RESOURCES CONSERVATION &
DEVELOPMENT COMMISSION*

Congress and the states share the power to regulate the nuclear energy industry.¹ This joint regulatory power creates conflict between the federal and state governments² as each attempts to address the safety, health, and economic problems prevalent in the nuclear energy field.³ The nuclear waste disposal issue in particular highlights the tension between the federal government, the states, and the nuclear energy industry.⁴ While states seek to expand the scope of

1. See *infra* text accompanying notes 55-68. See also *In re Consolidated Edison Co. of N.Y.*, 7 N.R.C. 31, 31-32, 34 (1978).

2. See generally L. TRIBE, *AMERICAN CONSTITUTIONAL LAW* 376-88 (1978) [hereinafter cited as TRIBE] (for an explanation of how congressional intent and the supremacy clause limit state and local power).

3. See, e.g., *Pacific Gas and Elec. Co. v. State Energy Resources Conservation & Dev. Comm'n*, 103 S. Ct. 1713, 1718 (1983). Writing for the majority, Justice White reviewed scientific and government studies regarding nuclear energy and nuclear waste and concluded that "there are both safety and economic aspects to the nuclear waste issue: first, if not properly stored, nuclear wastes might leak and endanger both the environment and human health; second, the lack of a long-term disposal option increases the risk that the insufficiency of interim storage space for spent fuel will lead to reactor shutdowns, rendering nuclear energy an unpredictable and uneconomical adventure." *Id.* See also Tribe, *California Declines the Nuclear Gamble: Is Such a State Choice Preempted?*, 7 *ECOLOGY L.Q.* 679, 711-12 (1979) [hereinafter cited as Tribe, *California Declines*]. (California's nuclear regulatory scheme seeks not only peace of mind (for safety reasons) but also an approach economically superior to indefinite year-to-year storage).

4. See, e.g., *Minnesota v. United States Nuclear Regulatory Comm'n*, 602 F.2d 412, 413 (D.C. Cir. 1979) (state challenge to NRC decision granting two nuclear power plant operators license to expand on-site capacity for nuclear storage). The Court indicated the "crux of the case is current uncertainty about the prospects for developing and implementing safe methods for the ultimate disposal—or even long-term storage—of the highly toxic radioactive wastes." *Id.* *Pacific Gas and Elec. Co. v. State Energy Resources Conservation & Dev. Comm'n*, 103 S. Ct. 1713, 1717 (1983) ("The interrelationship of federal and state authority in the nuclear energy field has not been simple."). See also Jaksetic, *Legal Aspects of Radioactive High-Level Waste*

their authority by regulating problems connected with the disposal of nuclear waste, the nuclear energy industry and the federal government seek to limit the states' role by claiming preemption by federal law.⁵ In *Pacific Gas and Electric Co. v. State Energy Resources Conservation & Development Commission*,⁶ the Supreme Court applied the preemption doctrine to this conflict⁷ and held that states may prohibit the construction of new nuclear plants without preempting federal authority until the federal government develops and approves a means to dispose of nuclear waste.⁸

In 1976, California imposed a moratorium⁹ on the licensing of new nuclear power plants effective until the State Energy Commission determined whether the federal government proposed a permanent solution for the disposal of high-level nuclear waste.¹⁰ Forced to

Management, 9 ENVTL. L. 347, 361-79 (1979) (discussing the complex system of legal authority involving several federal agencies and state efforts to gain further control of nuclear waste regulation).

5. See, e.g., *Northern States Power Co. v. Minnesota*, 447 F.2d 1143 (8th Cir. 1971), *aff'd*, 405 U.S. 1035 (1972); See also Jaksetic, *supra* note 4, at 403 ("The trend of states to enter the field of nuclear power regulation indicates political opposition to various aspects of commercial nuclear power and as a challenge to federal assertions of preemption in the area."). See generally Murphy & LaPierre, *Nuclear "Moratorium" Legislation in the States and the Supremacy Clause: A Case of Express Preemption*, 76 COLUM. L. REV. 392 (1976) (reviewing the extent of federalism conflicts in the nuclear energy field).

6. 103 S. Ct. 1713 (1983).

7. See *infra* text accompanying notes 21-24.

8. 103 S. Ct. at 1722.

9. *Id.* at 1719. The California Legislature added three provisions to the Warren-Alquist State Energy Resources Conservation and Development Act of 1974, CAL. PUB. RES. CODE §§ 25000-986 (Deering 1976 and Supp. 1984), to provide for additional regulation of new nuclear power plant construction: § 25524.1(a) (regulating fuel reprocessing); § 25524.1(b) (determination by Energy Commission of adequate storage capacity for spent fuel); § 25524.2 (imposing moratorium on new nuclear plant construction); and § 25524.3 (certification conditioned upon commission study and report to legislature of the necessity, effectiveness, and economic feasibility of undergrounding and berm containment of reactors). Section 25524.2 imposes a moratorium on the certification of new nuclear plants until the Energy Commission "finds that there has been developed and that the United States through its authorized agency has approved and there exists a demonstrated technology or means for the disposal of high-level nuclear waste." *Id.* See generally *Pacific Legal Found. v. State Energy Resources Conservation and Dev. Comm'n*, 659 F.2d 903, 907 (9th Cir. 1981) (discussing amendments to the Warren-Alquist Act); Tribe, *California Declines*, *supra* note 3, at 682-83.

10. 103 S. Ct. at 1719. For a discussion of the problems associated with high-level nuclear wastes, see Jaksetic, *supra* note 4, at 348-61. See generally Note, *Nuclear*

postpone or cancel plans to construct new nuclear facilities,¹¹ private utilities claimed that the Atomic Energy Act of 1954¹² preempted the state's action¹³ and challenged it under the supremacy clause.¹⁴ The district court agreed with the utilities' contention.¹⁵ The Ninth Circuit reversed the lower court, however,¹⁶ and the Supreme Court affirmed the appeals court decision.¹⁷

The framers of the Constitution designed the supremacy clause as a check on state power.¹⁸ Beginning with its decision in *Gibbons v.*

Waste Management: A Challenge to Federalism, 7 *ECOLOGY L.Q.* 917, 917-28 (1979) (proper treatment of waste and potential risks inherent in existing disposal methods uncertain).

11. *Pacific Gas and Elec. Co. v. State Energy Resources Conservation and Dev. Comm'n*, 489 F. Supp. 699, 701 (E.D. Cal. 1980); Wiggins, *Federalism Balancing and the Burger Court: California's Nuclear Law as a Preemption Case Study*, 13 *U.C.D. L. REV.* 3, 6 (1979).

12. 103 S. Ct. at 1719-20. The Atomic Energy Act of 1954, as amended, 42 U.S.C. §§ 2011-2296 (1982).

13. 103 S. Ct. at 1719-20; 489 F. Supp. at 700-02. The utilities directed their attack against numerous provisions of the Warren-Alquist Act, but only § 25524.2 and 25524.1(b) were reviewed by the Supreme Court. The Court held only § 25524.2 ripe for review since "questions concerning the constitutionality of the interim storage provisions, § 25524.1(b)" should await further development because "we cannot know whether the Energy Commission will ever find a nuclear plant's storage capacity to be inadequate." *Id.*

14. U.S. CONST. art. VI, cl. 2. The supremacy clause provides that the "Constitution and the Laws of the United States which shall be made in pursuance thereof; . . . shall be the Supreme Law of the Land."

15. 489 F. Supp. at 704. For a critical analysis of the district courts' opinion, see Note, *May a State Say "No" to Nuclear Power?* *Pacific Legal Foundation Gives a Disappointing Answer*, 10 *ENVTL. L.* 189 (1979).

16. *Pacific Legal Found. v. State Energy Resource Comm'n*, 659 F.2d 903 (9th Cir. 1981). The Ninth Circuit consolidated *Pacific Gas* and *Pacific Legal Foundation* in the same appeal. *Pacific Legal Foundation* involved a related challenge to § 25524.2 brought by a nuclear engineer hired to work on a proposed nuclear plant who subsequently lost his job when the project was abandoned. The court of appeals held that the nuclear moratorium provisions of § 25524.2 were not preempted because §§ 271 and 274(k) of the Atomic Energy Act, 42 U.S.C. § 2018 and § 2021(k) constitute a congressional authorization for states to regulate nuclear power plants for purposes other than protection against radiation hazards. 103 S. Ct. at 1719-20.

17. 103 S. Ct. at 1713.

18. *See generally* NOTES OF DEBATES IN THE FEDERAL CONVENTION OF 1787 REPORTED BY JAMES MADISON (Norton ed. 1969) (reviewing the framers' concerns about a weak national government); *see also* *McCulloch v. Maryland*, 17 U.S. (4 Wheat.) 316, 378 (1819) ("The means of giving efficacy to the sovereign authorities vested by the people in the national government, are those adapted to the end; fitted to promote, and having a natural relation and connection with, the objects of that

Ogden, the Supreme Court has demonstrated support for the framers' plan and applied the supremacy clause to preempt state action which obstructs or conflicts with a valid exercise of federal power.¹⁹ Yet there is no definitive formula which the Court applies to determine whether federal law preempts state action.²⁰ The Court engages in federalism balancing,²¹ a subjective analysis²² guided by principles which help determine on a case-by-case basis²³ whether the purpose and scope of a congressional act precludes state action.²⁴

government. The constitution, by which these authorities, and the means of executing them, are given, and the laws made in pursuance of it, are declared to be the supreme law of the land; and they would have been such, without the insertion of this declaratory clause. They must be supreme, or they would be nothing."); Freeman, *Dynamic Federalism and the Concept of Preemption*, 21 DE PAUL L. REV. 630 (1972) (reviewing the history and need for the supremacy clause).

19. Chief Justice Marshall wrote in *Gibbons v. Ogden*: "The nullity of any act, inconsistent with the constitution, is produced by the declaration, that the constitution is the supreme law." 22 U.S. (9 Wheat.) 1, 210-11 (1824). "[A]cts of the State Legislatures . . . [which] *interfere with*, or are contrary to the laws of Congress, made in pursuance of the constitution, are invalid under the Supremacy Clause." *Perez v. Campbell*, 402 U.S. 637, 649 (1971) (emphasis in original) (quoting *Gibbons*, 22 U.S. at 211).

20. *Hines v. Davidowitz*, 312 U.S. 52, 67 (1940) (Courts must determine in each case whether state law "stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress."); TRIBE, *supra* note 2, at 377; Note, *The Preemption Doctrine: Shifting Perspectives on Federalism and the Burger Court*, 75 COLUM. L. REV. 623, 624 (1975) [hereinafter cited as Note, *The Preemption Doctrine*].

21. Congress can expressly preempt state action, but in most cases Congress remains silent and courts must determine on a case-by-case basis whether Congress implicitly intended to preempt the states. "The Court uses techniques of 'federalism balancing' in an effort to preserve a domain of state regulatory power . . . by employing presumptions and balancing standards and by assigning weights to the competing interests to be balanced . . ." Wiggins, *supra* note 11, at 10-11.

22. *Id.* at 10. Professor Wiggins argues that preemption cases depend upon the individual judge's state of mind. "Gone are the Justices who could be relied upon to engage Wechsler's admonition [that a valid constitutional decision could be based on neutral principles]." *Id.* at 9. "Subjective judicial values about the proper balance of state and federal regulatory authority have become increasingly important in the Court's disposition of cases raising federalism issues." *Id.* at 10.

23. "Our prior cases on preemption are not precise guidelines . . . for each case turns on the peculiarities and special features of the federal regulatory scheme." *City of Burbank v. Lockheed Air Terminal, Inc.*, 411 U.S. 624, 638 (1973) (local noise control curfew preempted by Noise Control Act).

24. See, e.g., *City of Burbank v. Lockheed Air Terminal, Inc.*, 411 U.S. 624, 643-44 (1973) (implied preemption depends upon federal statutes clear intent); *Florida Lime & Avocado Growers, Inc. v. Paul*, 373 U.S. 132, 141 (1963); see also Freeman, *supra* note 18, at 639-40.

The Supreme Court first articulated a framework for federalism balancing in *Hines v. Davidowitz*.²⁵ The Court in *Hines* struck down a state alien registration law because Congress had “occupied the field” with a pervasive, detailed scheme for the registration and regulation of aliens.²⁶ Although no actual conflict existed between the state and federal laws,²⁷ the majority emphasized that the state law stood as an obstacle to the strong federal interest in uniform registration of aliens.²⁸ Justice Stone’s dissent²⁹ cautioned against the rapid expansion of national power³⁰ and argued that a presumption against preemption³¹ should help the Court define the “boundaries” when the states and the federal government share the regulatory field.³²

25. 312 U.S. 52 (1940). Later Supreme Court decisions have incorporated the standards established by *Hines* in their preemption analysis. See, e.g., *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230 (1947) (Act of Congress in a field of dominant federal interest precludes enforcement of state laws on the same subject); *Jones v. Rath Packing Co.*, 430 U.S. 519, 526 (1977) (preemption criterion is whether state law stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress).

26. 312 U.S. at 63, 66-67.

27. *Id.* at 78 (Stone, J., dissenting).

28. *Id.* at 73-74 (Stone, J., dissenting).

29. *Id.* at 74-81 (Stone, J., dissenting).

30. *Id.* at 74-75 (Stone, J., dissenting). Justice Stone recognized that Congress’ power to legislate could “greatly enlarge the exercise of federal authority” and diminish the powers of the states. *Id.* at 75. “At a time when the exercise of the federal power is being rapidly expanded through Congressional action, it is difficult to overstate the importance of safeguarding against such diminution of state power. . . .” *Id.* The “presumption against preemption” is one label applied to a presumption favoring the validity of state laws in preemption cases.

31. Professor Wiggins states that the presumption against preemption shifts the burden of proof to the federal government “when the language or history of the federal enactment does not obviously require otherwise and when the state’s purpose in regulating is to promote what the Court finds to be an important objective of independent and traditionally local concern.” Wiggins, *supra* note 11, at 25. Justice Stone’s dissent in *Hines* argued that the Court should apply a presumption favoring the states:

The Judiciary of the United States *should not assume to strike down a state law* which is immediately concerned with the social order and safety of its people unless the statute plainly and palpably violates some right granted or secured to the national government by the constitution or similarly encroaches upon the exercise of some authority delegated to the United States for the attainment of objects of national concern.

312 U.S. at 75 (Stone, J., dissenting) (emphasis added). See also Note, *The Preemption Doctrine*, *supra* note 20, at 645.

32. 312 U.S. at 78-79 (Stone, J., dissenting).

Six years later the Court established a framework for preemption analysis which incorporated Stone's presumption against preemption.³³ In *Rice v. Santa Fe Elevator Corporation*,³⁴ a warehouse owner licensed under the U.S. Warehouse Act challenged the validity of duplicative state license laws. Because states traditionally regulated warehouses,³⁵ the Court stated that a presumption against preemption favored the state law unless Congress clearly intended to preclude state action.³⁶

The Court considered four factors relevant to a determination of congressional intent:³⁷ 1) the pervasiveness of the federal regulatory scheme; 2) the strength of the federal interest; 3) whether state and federal laws had the same purpose; 4) whether state policy produced a result inconsistent with the objective of the federal statute.³⁸ Each of these factors weighed in favor of preemption if Congress regulated in any way the matter on which the state asserted the right to act.³⁹

33. See generally Freeman, *supra* note 18, at 638-40 (standard test for preemption is one of congressional intent).

34. 331 U.S. 218 (1946).

35. *Id.* at 230.

36. *Id.* The Court's preemption analysis began with this underlying premise: "So we start with the assumption that the historic police powers of the state were not to be superseded by the Federal Act unless that was the clear and manifest purpose of Congress." *Id.*

37. The Court applied an implied preemption analysis "test," following the guidelines established in *Hines*. 312 U.S. at 230. Commentators refer to the *Rice* analysis as occupational preemption. While Congress refuses to act on the particular matter before the Court, state action is preempted because Congress occupies the regulatory field. See TRIBE, *supra* note 2, at 384-85; Wiggins, *supra* note 11, at 30-41 (occupation preemption forecloses state authority).

38. 331 U.S. at 236. The Court considered each of these factors in subsequent preemption decisions. For pervasiveness of the federal scheme and a dominant federal interest, see *e.g.*, *Ray v. Atlantic Richfield Co.*, 435 U.S. 151 (1978) (regulating oil tanker design and operations); *Burbank v. Lockheed Air Terminal, Inc.*, 411 U.S. 624, 633 (1973) (regulation of aircraft noise); *Northern States Power Co. v. Minnesota*, 447 F.2d 1143, 1153 (8th Cir. 1971), *aff'd*, 405 U.S. 1035 (1972) (regulation of nuclear power plant construction and operation). For similarity of purpose, see *e.g.*, *Jones v. Rath Packing Co.*, 430 U.S. 519, 534 (1977) (regulation of package labeling). But see *Perez v. Campbell*, 402 U.S. 637, 652 (1970); *Florida Lime and Avocado Growers, Inc. v. Paul*, 373 U.S. 132, 142 (1963) ("The test . . . 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."). For inconsistent results, see *e.g.*, *Fidelity Fed. Sav. and Loan Ass'n v. de la Cuesta*, 458 U.S. 141 (1982) (regulation of "due-on-sale" clauses in mortgage contracts).

39. 331 U.S. at 236.

The Court followed *Hines* and *Rice* in preemption cases for several years,⁴⁰ but the Burger Court takes a different approach toward the preemption doctrine.⁴¹ In *Merrill Lynch, Pierce, Fenner & Smith v. Ware*,⁴² the Court articulated a federalism balancing test which is more deferential toward state law.⁴³ The Court upheld a California law which protected wage earners from forfeiture clauses despite a New York Stock Exchange rule which allowed them.⁴⁴ The Court altered the *Rice* preemption framework by giving great weight to the state's interest.⁴⁵ The *Ware* preemption analysis emphasized reconciliation between the state and federal schemes,⁴⁶ and rejected a test that preempts state action solely because it frustrates any part of the purpose of federal legislation.⁴⁷

Ware did not end the *Hines* and *Rice* influence in preemption analysis.⁴⁸ Subsequent Supreme Court decisions applied the general

40. See *supra* note 38. See also *Perez v. Campbell*, 402 U.S. 637, 649 (1970) (listing cases that have adhered to the *Hines* preemption test).

41. See *Wiggins*, *supra* note 11, at 25:

The Court has settled on an analytic framework for preemption disputes, it has reemphasized the importance of identifying the precise state and national interests at stake, and it has given tentative signals about . . . a judicial preference for upholding state regulatory power against claims of preemption.

Id. See also Note, *The Preemption Doctrine*, *supra* note 20, at 649.

42. 414 U.S. 117 (1973).

43. *Id.* at 139. The court emphasized it would not favor preemption of state law "in the absence of persuasive reasons" or a persuasive and comprehensive scheme of federal regulation. *Id.* (quoting *Florida Lime and Avocado Growers, Inc. v. Paul*, 373 U.S. 132, 142 (1963)).

44. The Court decided that the strong state policy of protecting its wage earners from undesirable economic pressures affecting the employment relationship, outweighed the means selected (forfeiture clauses for employee profit-sharing plans) by the New York Stock Exchange to prevent an employee of one securities firm from switching to a competitor. *Id.* at 138-40.

45. 414 U.S. at 129-30. *Cf.* *National League of Cities v. Usery*, 426 U.S. 833 (1976). The Burger Court found Congress' amendments to the Fair Labor Standards Act invalid under the commerce clause because they "operate to directly displace the states' freedom to structure integral operations in areas of traditional governmental functions, that are not within the authority granted Congress. . . ." *Id.* at 852. For an argument that state decisions on nuclear energy are protected under the *National League of Cities* doctrine, see *Wiggins*, *supra* note 11, at 67.

46. 414 U.S. at 127 (quoting *Silver v. New York Stock Exch.*, 373 U.S. 341, 357 (1963)). The Court noted its analysis would be sensitive to federalism problems. "The proper approach is to reconcile the operation of both statutory schemes with one another rather than holding one completely ousted." *Id.*

47. 414 U.S. at 139.

48. See *infra* notes 49-50. See also *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S.

principles of *Hines* and *Rice* to preempt state action, either because Congress occupied the field of regulation,⁴⁹ or because an actual conflict existed between federal and state law.⁵⁰ The Court, however, continues to decide preemption cases according to their particular facts,⁵¹ and the outcome in each case continues to depend on the Court's analysis of a federal statute read in "light of its constitutional setting and its legislative history."⁵²

When applying preemption analysis in the nuclear energy field, the Court must necessarily consider the Atomic Energy Act⁵³ which established the basic scheme of federal regulation.⁵⁴ The Act created a government monopoly controlled by the Atomic Energy Commission (AEC) in order to promote the peaceful development of nuclear power.⁵⁵

Congress amended the Act in 1954⁵⁶ to end the government mo-

470, 479-80 (1974) (state trade secret law not preempted by federal patent law); *De Canas v. Bica*, 424 U.S. 351, 357-58 n.5 (1976) (state law prohibiting knowing employment of illegal aliens not preempted by federal immigration law).

49. See, e.g., *Ray v. Atlantic Richfield Co.*, 435 U.S. 151, 157 (1978); *Jones v. Rath Packing Co.*, 430 U.S. 519, 525 (1977).

50. "Actual conflict" preemption is characterized by a state law that stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress. See, e.g., *Fidelity Fed. Sav. and Loan Ass'n v. de la Cuesta*, 458 U.S. 141, 142 (1982). See also Comment, *A Preemption Analysis of California's Moratorium on Nuclear Plant Construction*: Pacific Legal Foundation v. State Energy Resource Conservation and Development Comm'n, 66 MINN. L. REV. 1258, 1261-63 (1982).

51. For example, Justice Douglas observed that "each case turns on the peculiarities and special features of the federal regulatory scheme in question." *Burbank v. Lockheed Air Terminals, Inc.*, 411 U.S. 624, 638 (1973).

52. *Hines v. Davidowitz*, 312 U.S. 52, 78-79 (1940) (Stone, J., dissenting). Justice Stone's dissent laid the groundwork for the Court's later preemption decisions by questioning the *Hine's* majority preemption analysis:

Little aid can be derived from the vague and illusory but often repeated formula that Congress "by occupying the field" has excluded from it all state legislation. Every Act of Congress occupies some field, but we must know the boundaries of that field before we can say that it has precluded a state from the exercise of any power reserved by the Constitution. To discover the boundaries we look to the federal statute itself, read in the light of its constitutional setting and its legislative history.

Id.

53. See *supra* note 12.

54. See *Murphy & LaPierre, supra* note 5, at 394-398 (discussion of the Atomic Energy Acts of 1946 and 1954).

55. See 42 U.S.C. §§ 2011-2296 (1982); S. REP. NO. 1211, 79th Cong., 2d Sess., reprinted in 1946 U.S. CODE CONG. & AD. NEWS 1327, 1327-29.

56. See 42 U.S.C. §§ 2011-2296 (as amended).

nopoly⁵⁷ and to encourage private participation in the development of nuclear power under strict AEC supervision.⁵⁸ Congress also added section 271⁵⁹ in order to preserve the states' traditional authority to regulate the economic aspects of electrical power.⁶⁰

Between 1954 and 1959 many states assumed a greater role in the nuclear energy field by regulating and registering radiation sources.⁶¹ Uncertainty concerning the scope of these state actions led Congress to amend the Act in 1959.⁶² The addition of section 274 evinced a congressional intent to clearly define the responsibilities of the states and the federal government in order to prevent dual jurisdiction.⁶³ Section 274 specifically precludes the states from regulating the construction and operation of any nuclear production or utilization facility,⁶⁴ but expressly retains state authority to regulate AEC licensees for health, safety, and economic purposes other than protection against radiation hazards.⁶⁵

In 1965, Congress amended section 271 of the Act to redefine the permissible limits of state and local power to regulate the economic aspects of nuclear energy.⁶⁶ Influenced by the Ninth Circuit's deci-

57. See Murphy & LaPierre, *supra* note 5, at 395.

58. S. REP. NO. 1699, 83d Cong., 2d Sess., *reprinted in* 1954 U.S. CODE CONG. & AD. NEWS 3456, 3465-66.

59. 42 U.S.C. § 2018 (1976).

60. Section 271 provided that "nothing in this chapter shall be construed to affect the authority or regulations of any federal, state or local agency with respect to the generation, sale, or transmission of electric power produced through the use of nuclear facilities licensed by the Commission." Atomic Energy Act of 1954, ch. 1073, § 1, 68 Stat. 960 (codified as amended at 42 U.S.C. § 2018 (1982)). S. REP. NO. 390, 89th Cong., 1st Sess. 4, 9-10 (1965) (§ 271 intended to affirm states' authority over all sources of power generation).

61. See Murphy & LaPierre, *supra* note 5, at 398-99.

62. *Id.* at 399.

63. S. REP. NO. 870, 86th Cong., 1st Sess., *reprinted in* 1959 U.S. CODE CONG. & AD. NEWS 2872, 2878-79. See also Murphy & LaPierre, *supra* note 5, at 399-401.

64. 42 U.S.C. § 2021(c) (1976).

65. Section 274(k) stated: "Nothing in this section shall be construed to affect the authority of any state or local agency to regulate activities for purposes other than protection against radiation hazards." The Atomic Energy Act Amendments of 1959, Pub. L. 86-373 § 1, 73 Stat. 688 (1959). See also S. REP. NO. 870, 86th Cong., 1st Sess., *reprinted in* 1959 U.S. CODE CONG. & AD. NEWS 2872, 2880; Tribe, *California Declines*, *supra* note 3, at 702-03.

66. Congress amended § 271 of the Atomic Energy Act in 1965. 42 U.S.C. § 2018, *amended by* Pub. L. 89-135, 79 Stat. 551 (1976): "Provided that this section shall not be deemed to confer upon any federal, state, or local agency any authority to regulate,

sion in *Maun v. United States*,⁶⁷ upholding a local ordinance which prohibited overhead power lines to a nuclear research facility authorized by the AEC,⁶⁸ Congress determined that state and local authorities could not restrict the AEC's activities through their control of electric power.⁶⁹

As states gained awareness of the safety and environmental problems associated with nuclear power, they heightened their regulatory activity.⁷⁰ Increased concern for the high-level radioactive wastes generated by nuclear reactors⁷¹ led Minnesota to enact a law regulating radioactive waste releases from nuclear power plants.⁷² The utility industry challenged the Minnesota statute in *Northern States Power Co. v. Minnesota*.⁷³ In this landmark preemption case in the nuclear energy field,⁷⁴ the Eighth Circuit rejected the states' regulation of radioactive waste as an invalid exercise of the police power.⁷⁵ The Court held that the Atomic Energy Act preempted the states' regulation of radioactive effluents because it was "inextricably intertwined" with the AEC's sole authority to regulate radiation

control, or restrict any activities of the Commission." *Id.* (emphasis in the original).

67. 347 F.2d 970 (9th Cir. 1965).

68. *Id.* at 978.

69. The legislative history of the 1965 Amendment includes an extensive discussion of the *Maun* case. Concerned that the Ninth Circuit decision would open the door to substantial state and local interference with nuclear energy development, Congress amended section 271 to overturn *Maun* and clarify its intent to prevent any federal, state or local agency from hampering AEC activities. See H.R. REP. NO. 567, 89th Cong., 1st Sess., reprinted in 1965 U.S. CODE CONG. & AD. NEWS 2775, 2775-88.

70. See generally Murphy and LaPierre, *supra* note 5, at 415-17.

71. For a discussion of the history behind the nuclear waste problem, see Lucas, *Nuclear Waste Management: A Challenge to Federalism*, 7 *ECOLOGY L.Q.* 917, 933-40 (1979). See also L. GOULD, *The Radioactive Waste-Management Problem in TOO HOT TO HANDLE* (C. Walker, L. Gould & E. Woodhouse eds. 1983).

72. Minnesota's Pollution Control Agency specified conditions under State law regulating the level of radioactive liquid and gaseous discharges and required monitoring programs for the detection of such releases. The conditions imposed were more stringent than those imposed by the AEC. See *Northern States Power Co. v. Minnesota*, 447 F.2d 1143, 1145 (8th Cir. 1971), *aff'd*, 405 U.S. 1035 (1972).

73. 447 F.2d 1143 (8th Cir. 1971), *aff'd*, 405 U.S. 1035 (1972).

74. See Comment, *supra* note 50, at 1258. Several other courts faced with state action that interfered with the Atomic Energy Act followed *Northern States*. See *infra* notes 82-83.

75. 447 F.2d at 1145. Minnesota argued that the State's traditional power under the tenth amendment to protect and promote the health, safety, and general welfare of its citizens provided the authority to regulate radioactive waste. *Id.*

hazards associated with the operation of nuclear facilities.⁷⁶

Northern States did not prevent other states from gaining greater regulatory control in the nuclear energy field,⁷⁷ but the decision signaled to the states to shift their efforts toward problems not associated with nuclear power plant radiation hazards.⁷⁸ First, the states focused on environmental concerns⁷⁹ by enacting comprehensive siting laws to control nuclear plant construction and operation,⁸⁰ and by regulating radioactive waste disposal inside⁸¹ and outside their borders.⁸² The courts, however, continued to strike down state laws which interfered with federal authority to regulate radiation hazards

76. *Id.* at 1150-53. The Court applied an occupation preemption analysis to the Atomic Energy Act. It determined that 42 U.S.C. § 2021(k) did not give the states authority to regulate radioactive discharges. Congress intended to give the AEC sole authority to regulate the operation of nuclear power plants and its comprehensive licensing scheme preempted the Minnesota law. *Id.*

77. See Murphy & LaPierre, *supra* note 5, at 419-20.

78. Parenteau, *Regulation of Nuclear Power Plants: A Constitutional Dilemma for the States*, 6 ENVTL. L. 675, 691 (1976). Mr. Parenteau notes that "*Northern States* served as a warning to the states to focus their attention on non-radiological health and safety issues associated with nuclear power plants." *Id.* In particular, states began to regulate the siting of nuclear plants as an exercise of their authority to regulate land use. *Id.*

79. See *id.* See also Maleson, *The Historical Roots of the Legal Systems Response to Nuclear Power*, 55 S. CAL. L. REV. 597, 616 (1982) (state and local governments acted on a broad range of issues loosely grouped under the rubric "environmental").

80. See Paranteau, *supra* note 78, at 697. See, e.g., MD. NAT. RES. CODE ANN. § 3-301 to § 3-304 (1977) (comprehensive energy facilities siting law). See also Note, *California's Nuclear Power Plant Siting Legislation: A Preemption Analysis*, 52 S. CAL. L. REV. 1189, 1192-93 (1979) (state regulation of nuclear power plant location, construction, operation, and decommission is directed at numerous objectives).

81. See Jaksetic, *Constitutional Dimensions of State Efforts to Regulate Nuclear Waste*, 32 S.C.L. REV. 789, 824-48 (1981). Mr. Jaksetic identifies six categories for state legislation dealing with nuclear wastes: 1) prohibiting the disposal of out-of-state radioactive waste within their borders; 2) prohibiting nuclear waste facilities in their states; 3) requiring legislation or other state approval of nuclear waste facilities; 4) regulating radioactive waste disposal sites; 5) regulating transportation of nuclear waste; 6) regulating nuclear waste disposal in other ways, such as state moratoriums. See *id.*

82. State bans on the transportation and storage of out-of-state radioactive waste within state borders have been held unconstitutional on both commerce clause and supremacy clause grounds. See, e.g., *Illinois v. General Elec. Co.*, 683 F.2d 206 (7th Cir. 1982) (state cannot prevent nuclear waste from being imported for storage), *cert. denied*, 103 S. Ct. 1891 (1983); *Washington State Bldg. and Constr. Trades Council v. Spellman*, 684 F.2d 627 (9th Cir. 1982) (statute closing borders to entry of low-level radioactive waste invalid), *cert. denied*, 103 S. Ct. 1891 (1983).

of nuclear power plants and nuclear waste.⁸³ In *Train v. Colorado Public Interest Research Group, Inc.*,⁸⁴ the Supreme Court affirmed *Northern States*⁸⁵ and rejected an attempt by Colorado to impose stricter effluent standards on nuclear power plants under the Federal Water Pollution Control Act (FWPCA).⁸⁶ The Court held that Congress intended the AEC to retain full authority to regulate radioactive "pollutants" unaltered by the EPA's authority agency under the FWPCA.⁸⁷

Second, states attempted to obtain greater control of the problems associated with nuclear energy by influencing the licensing procedures of the Nuclear Regulatory Commission (NRC).⁸⁸ Several states joined with environmental groups to prevent the NRC from licensing

83. See, e.g., *United States v. City of New York*, 463 F. Supp. 604 (S.D.N.Y. 1978) (city ordinance requiring a certificate of health and safety invalid exercise of police power); *New Jersey Dep't of Envtl. Protection v. Jersey Cent. Power & Light Co.*, 69 N.J. 102, 351 A.2d 337 (1976) (nuclear facility not liable under state law for deaths of fish caused by reactor cooling system); *Marshall v. Consumers Power Co.*, 65 Mich. App. 237, 237 N.E.2d 266 (1975) (state preempted from regulating radioactive hazards of emergency core cooling system); *Commonwealth Edison Co. v. Pollution Control Bd.*, 5 Ill. App. 3d 800, 284 N.E.2d 342 (1972) (state regulation of radioactive discharge standards preempted by federal law). See also Jaksetic, *supra* note 81, at 795 n.34.

84. 426 U.S. 1 (1976).

85. *Id.* at 15-16. The Court noted that *Northern States* left no room for the states to regulate radioactive discharges from nuclear power plants. *Id.*

86. *Id.* The Federal Water Pollution Control Act (FWPCA), 33 U.S.C. §§ 1251-1376 (1982), would have allowed the states to adopt effluent limitations more stringent than those required or established by the Act through the development of state permit programs. See 33 U.S.C. §§ 1342(b), (c) & 1370 (1982).

87. 426 U.S. at 15.

88. See, e.g., *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council*, 435 U.S. 519 (1978) (AEC procedural rules for environmental impact statements upheld on nuclear energy conservation issues); *Minnesota v. United States Nuclear Regulatory Comm'n*, 602 F.2d 412 (D.C. Cir. 1979) (operating licenses to permit expansion of on-site nuclear waste storage capacity); *New Hampshire v. Atomic Energy Comm'n*, 406 F.2d 170 (1st Cir. 1969) (AEC properly refused to consider evidence of thermal pollution in licensing procedures), *cert denied*, 395 U.S. 902 (1969). Congress transferred the licensing and related regulatory functions of the AEC to the NRC in §§ 5841 and 5842 of the Energy Reorganization Act of 1974, 42 U.S.C. §§ 5801-91 (1982). See S. REP. NO. 980, 93d Cong., 2d Sess. 93 (1974). Congress also created the Energy Research and Development Administration (ERDA) to promote the development of nuclear energy through government research and production facilities. 42 U.S.C. §§ 5801(b), 5811-17 (1982). See S. REP. NO. 980, 93d Cong., 2d Sess., reprinted in 1974 U.S. CODE CONG. & AD. NEWS 5470, 5470-5538; CONF. REP. NO. 1445, 93d Cong., 2d Sess., reprinted in 1974 U.S. CODE CONG. & AD. NEWS 5470, 5538-5553.

new nuclear power plants until the federal government solved the nuclear waste disposal problem.⁸⁹ Some states also attempted to force the Commission to assign greater weight to environmental and health factors in regulatory proceedings.⁹⁰ Both efforts failed.⁹¹

Third, the states proposed indefinite moratoriums on the construction of new nuclear power plants.⁹² California enacted moratorium provisions in 1976 based on its traditional authority to regulate the economic aspects of electrical generation.⁹³ Faced with the prospect that California's activities could halt the development of nuclear energy,⁹⁴ the utility industry challenged the California Act and placed

89. See, e.g., *Minnesota v. United States Nuclear Regulatory Comm'n*, 602 F.2d 412 (D.C. Cir. 1979) (state challenge to expansion of on-site capacity for storage of nuclear waste). See also *Murphy & LaPierre*, *supra* note 5, at 433 (state legislation threatens to conflict directly with NRC's licensing and regulation function).

90. See, e.g., *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council*, 435 U.S. 519 (1978) (health hazards of radioactive wastes in environmental impact statements); *New Hampshire v. Atomic Energy Comm'n*, 406 F.2d 170 (1st Cir. 1969) (environmental effects of thermal pollution), *cert. denied*, 395 U.S. 902 (1969).

91. Generally, the Supreme Court will not interfere with procedural rules used by the NRC unless a statute mandates substantive reasons. See *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council*, 435 U.S. 519, 557 (1978) ("Congress has made a choice to at least try nuclear energy, establishing a reasonable review process in which courts are to play a limited role."). Cf. *Maleson*, *supra* note 79, at 616 (attempts to challenge the safety of nuclear power generation and the disposal of radioactive waste have failed because judicial activism is not characteristic for nuclear energy issues).

92. Professors Murphy and LaPierre list various state moratorium proposals which by 1975 indicated that the states were contemplating more extensive control in regulating nuclear energy. See *Murphy & LaPierre*, *supra* note 5, at 420. See also *Tribe*, *California Declines*, *supra* note 3, at 707 n.134.

93. See *supra* note 9 and accompanying text. For a detailed explanation of the California provisions, see *Tribe*, *California Declines*, *supra* note 3, at 682-83, 708-19.

94. See *supra* notes 59-65 and accompanying text. The State's actions were responses to the federal government failure to deal with the growing radioactive waste disposal problem. The General Accounting Office noted "the involved problem of radioactive waste disposal threatens the future of nuclear power in the United States." GENERAL ACCOUNTING OFFICE REPORT, *The United States Nuclear Energy Dilemma: Disposing of Hazardous Radioactive Wastes Safely*, quoted in *Natural Resources Defense Council, Inc. v. United States Nuclear Regulatory Comm'n*, 582 F.2d 165, 175 (2d Cir. 1978). Congress did not enact legislation to deal with the radioactive waste problem until passage of the Nuclear Waste Policy Act of 1982. Pub. L. 97-425, 96 Stat. 2201 (1983) 42 U.S.C.A. §§ 10101-226 (West 1983). The legislative history the government's failure to provide for a repository development program "seriously undermined the strength of the domestic nuclear industry." H. REP. NO. 491, 97th Cong., 2d Sess., reprinted in 1982 U.S. CODE CONG. & AD. NEWS 3792, 3794-95.

the nuclear regulatory conflict before the Supreme Court in *Pacific Gas*.⁹⁵

The Court⁹⁶ acknowledged that there were both safety and economic aspects of the nuclear waste problem⁹⁷ and that California enacted the moratorium in response to these concerns.⁹⁸ The Court set up a *Hines* and *Rice* framework for preemption analysis in order to test the validity of the California Act.⁹⁹ Because states traditionally regulated economic aspects of energy generation, the Court incorporated a presumption against preemption into its analytical framework.¹⁰⁰

The Court reviewed the legislative history of the Atomic Energy Act and concluded that Congress intended to preserve dual regulation in the nuclear energy field.¹⁰¹ The federal government maintains complete control of the safety and radiological aspects of energy generation, while states retain their authority to determine the need for new nuclear facilities, land use, and ratemaking.¹⁰²

The Court examined the California statute and distinguished regu-

95. 103 S. Ct. 1713 (1983).

96. The decision of the Court was unanimous. Justice White delivered the Court's opinion. Justice Blackmun, joined by Justice Stevens, filed an opinion concurring in part and concurring in the judgment.

97. *Id.* at 1718. Justice White stated: "First, if not properly stored, nuclear wastes might leak and endanger both the environment and human health; second, the lack of a long-term disposal option increases the risk that the insufficiency of interim storage space for spent fuel will lead to reactor shutdowns." *Id.*

98. *Id.*

99. *Id.* at 1722. See *supra* text accompanying notes 25-39.

100. *Id.* at 1723. The Court determined that the need for new power facilities, their economic feasibility, and rates and services are aspects of electrical generation that have been regulated "for many years and in great detail by the States." *Id.* Thus, its preemption analysis started "with the assumption that the historic police powers of the States were not to be superseded by the Federal Act unless that was the clear and manifest purpose of Congress." *Id.* (citing *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230 (1946)).

101. *Id.* The Court indicated that the Atomic Energy Act does not expressly nor impliedly require the states to construct or authorize nuclear power plants or prohibit the states from deciding not to permit the construction of any further reactors. *Id.* at 1722. "Congress . . . intended that the federal government should regulate the radiological safety aspects involved in the construction and operation of a nuclear plant, but that the States retain their traditional responsibility in the field of regulating electrical utilities for determining questions of need, reliability, cost and other related state concerns." *Id.*

102. *Id.* at 1726.

latory provisions aimed at safety concerns from those intended to deal with economic problems.¹⁰³ The Court, in dictum, noted that it would preempt any state prohibition on construction of nuclear energy plants "grounded in safety concerns" because the federal government had "occupied the entire field of nuclear safety."¹⁰⁴ Since the California law addressed economic problems and not radiation hazards, the statute fell outside the prohibited field and the Atomic Energy Act did not preempt the state's action.¹⁰⁵ Because the Court refused to inquire into the legislative motive behind the State law, it ignored the petitioner's claim that the purpose of the California law was radiation safety and not economic reliability.¹⁰⁶

Justice Blackmun's concurrence leaves open the possibility that states may increase the breadth of their authority on safety as well as economic grounds, prior to the construction and operation of a nuclear power plant.¹⁰⁷ Justice Blackmun rejected the majority's dictum that a state may not prohibit the construction of nuclear power plants if motivated by safety concerns.¹⁰⁸ Rather than evaluate the

103. *Id.* at 1726-27.

104. *Id.* The respondents argued that although safety regulation of nuclear plants by states is forbidden, a state may completely prohibit new construction until its safety concerns are satisfied by the federal government. *Id.* at 1726.

The majority rejected this broad view of state power but Justice Blackmun argued that the states should be able to reject new nuclear power plants on any grounds, including safety, "to exercise their traditional police power over the manner in which they meet their energy needs." *Id.* at 1733.

105. *Id.* at 1726 n.24. The Court did not find any conflict between its summary affirmance of *Northern States* and its *Pacific Gas* decision. *Northern States* did not control *Pacific Gas* because Minnesota's law regulated radioactive waste discharges, a safety concern reserved for federal authority. *Id.* at 1726 n.24.

106. *Id.* at 1728. "Inquiry into legislative motive is often an unsatisfactory venture." *Id.* The Supreme Court relied on the court of appeals review of the Warren-Alquist Act's legislative history, which concluded that the California Legislature adopted the moratorium law because "uncertainties in the nuclear fuel cycle make nuclear power an uneconomical and uncertain source of energy." *Id.* at 1728 (quoting 659 F.2d at 925). See also Tribe, *California Declines*, *supra* note 3, at 708-21. But see Comment, *supra* note 50, at 1270-81 (The California law affects radiation safety and should be preempted).

107. 103 S. Ct. at 1732-35.

108. *Id.* at 1732. Justice Blackmun stated three reasons for rejecting the majority view that a state's safety-motivated decision to prohibit construction of nuclear power plants would be preempted. First, Congress did not occupy the broad field of "nuclear safety concerns," but only the narrower area of how a nuclear plant should be constructed and operated to protect against radiation hazards. *Id.* at 1732. Second, a flat ban for safety reasons on power plant construction would not conflict with the NRC's judgment that construction of nuclear plants may safely proceed, because

validity of state regulation in the nuclear energy field based on the "elusive test" of legislative motive,¹⁰⁹ Justice Blackmun would uphold a state ban on construction of nuclear power plants for any reason as a valid exercise of the states' traditional police power to determine how to meet their energy needs.¹¹⁰

Pacific Gas is consistent with other Burger Court decisions since *Ware*¹¹¹ which have employed a presumption against preemption to uphold state action in a field occupied by both Congress and the states.¹¹² Although the Court reached a correct result by upholding the California moratorium law,¹¹³ the majority's reasoning did not settle the state and federal conflict over the scope of regulatory authority in the nuclear energy field.

It is clear that a state cannot regulate safety aspects of nuclear energy, including the construction and operation of reactors. It remains unclear to what extent a state may regulate matters such as nuclear waste disposal, which combine both safety and non-safety concerns. By linking state action and legislative motive,¹¹⁴ the Court created a scheme by which states may expand the scope of their authority by using economic purposes as a pretext for safety regulation.

Since the Burger Court will not look to the legislative history of state laws,¹¹⁵ *Pacific Gas* sends a message to the states that they may

neither the NRC nor Congress has mandated that the states must also find nuclear power safe. *Id.* at 1733. Third, a safety-motivated ban does not violate the *Hines* preemption standard because Congress has "merely encouraged the development of nuclear technology" and has not forced the states to accept it as an energy source. A ban, therefore, does not conflict with Congress' objectives or purposes. *Id.* at 1734.

109. *Id.* at 1735. See *supra* note 105.

110. 103 S. Ct. at 1733. Justice Blackmun drew a distinction "between the threshold determination whether to permit the construction of new nuclear plants and, if the decision is to permit construction, the subsequent determinations of how to construct and operate those plants. The threshold decision belongs to the State; the latter decisions are for the NRC." *Id.*

111. See *supra* notes 48-49 and accompanying text.

112. See *supra* notes 42-47 and accompanying text.

113. The Court's step-by-step analysis of the Atomic Energy Act is consistent with its review of the Act in *Northern States* and *CoPirg*. But the conclusion that Congress did not intend to preempt state moratoriums based on economic grounds until the federal government develops a permanent radioactive waste disposal solution is valid only if the State's action is construed to focus on nonradiation hazards.

114. See *supra* text accompanying note 105. See *supra* note 108 and accompanying text (Justice Blackmun's concurrence recognized the majority's reliance on the State's motive or purpose as a "benchmark" for validity).

115. See *supra* note 105 and accompanying text.

continue to address the growing safety, environmental, and economic problems associated with nuclear energy and radioactive waste disposal. Faced with increased regulatory activity and financial problems *Pacific Gas* may force the nuclear energy industry to push Congress for legislation further defining the permissible boundaries of state regulatory activity.

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