

COMMENTS

Hydroelectric Power, the Federal Power Act, and State Water Laws: Is Federal Preemption Water Over the Dam?

Whether federal or state government should regulate water is a vital policy issue, particularly in the West. This Comment argues that the Supreme Court has ignored congressional desire to defer to state concerns in licensing hydroelectric power facilities. However, recent decisions concerning energy legislation and statutory interpretation indicate a rethinking by the Court. This Comment concludes that Congress intended states to retain power to regulate water and such intent should be recognized in licensing hydroelectric facilities.

INTRODUCTION

For nearly a century, hydroelectric power¹ has played an important role as a source of energy in the United States.² Throughout this period, the nature of this role has been dictated by large hydroelectric

¹ Hydro facilities generate electricity using water that is impounded behind a dam or water that is temporarily diverted from a continuous stream. Water power is created when water from a high level (headwater) flows to a lower level, creating water pressure, and passes through a turbine. The mechanical energy produced is transformed by generators into electric energy. See McGuigan, *Legal Issues Affecting the Development of Low-Head Hydroelectric Power*, in SOLAR ENERGY RESEARCH INSTITUTE 3 (June 1980).

² In the early 1900's, hydroelectric production met almost a third of the nation's energy needs. J. KERWIN, *FEDERAL WATER-POWER LEGISLATION* 39 (1926). Today, hydroelectric generation provides about 15% of the energy consumed annually in the United States. Armstrong, *The Impact of the World's Energy Problems on Low-Head Hydroelectric Power*, in *LOW-HEAD HYDRO — AN EXAMINATION OF AN ALTERNATIVE ENERGY SOURCE* 16 (1978); McGuigan, *supra* note 1, at 1.

facilities.³ The potential of small hydroelectric facilities⁴ for generating power has remained virtually untapped.⁵ Numerous economic, regulatory, and institutional barriers have prevented small hydroelectric production facilities from contributing to national energy needs.⁶ However,

³ See Lock, *Encouraging Decentralized Generation of Electricity: Implementation of the New Statutory Scheme*, 2 SOLAR L. REP. 705, 707, 711-13 (1980); McGuigan, *supra* note 1, at 1.

⁴ The Public Utilities Regulatory Act (PURPA), Pub. L. No. 95-617, 92 Stat. 3117 (1978) (codified in 16 U.S.C. § 324a-3 (1982)), applies only to the development of small hydroelectric production facilities. PURPA and its regulations define a small production facility as having a power production capacity of no more than 80 megawatts (Mw). 16 U.S.C. § 796(17)(A)(ii) (1982). At least 75% of such a facility's fuel in any calendar year must be generated from biomass, waste, renewable resources like the sun, wind, water, or geothermal steam, or any combination thereof. 18 C.F.R. § 292.204(b) (1983). Public utility holding companies that do not own electric utilities may own a qualifying small hydro facility, as may electric utility holding companies and subsidiaries that are not "primarily engaged in the generation or sale of electric power." 18 C.F.R. § 292.206(a) (1983). If the primary fuel source is geothermal, 100% of the facility may be utility owned. 18 C.F.R. § 292.202(o) (1983). A hydroelectric facility with a production capacity of 5 Mw or less may be exempted from the requirements, including licensing requirements, of the Federal Power Act (FPA), 16 U.S.C. §§ 791a-824h (1982). 16 U.S.C. § 2705(d) (1982); 18 C.F.R. § 4.101-113 (1983).

⁵ A recent study by the Army Corps of Engineers determined that approximately 55,000 Mw of electricity could be produced at existing dam sites. Twenty-seven thousand Mw of this potential energy could be put to use at sites using small hydroelectric facilities of 5 Mw or less. Armstrong, *supra* note 2, at 18.

⁶ In the 1930's, cheap fossil fuels began to enter the energy market in major proportions and their use rapidly became more economical than building and operating hydroelectric plants. By the 1950's, most small hydroelectric facilities had been abandoned, and only large hydroelectric facilities were being constructed. *See Id.*

The nation's energy picture changed drastically in the 1970's and energy economics favored small hydroelectric energy production. The Iranian oil embargo and the formation of the Organization of Petroleum Exporting Countries (OPEC) sent oil prices soaring, while construction costs for large hydroelectric and nuclear projects escalated. Proposals to construct large hydroelectric, nuclear, or coal burning facilities were often greeted with disapproval from environmentalists. Further, the best sites for large hydroelectric facilities had already been developed. For a discussion of these problems, see Lock, *supra* note 3, at 707-13.

While the developments in the energy market appeared to make small hydroelectric production profitable, institutional barriers that provided disincentives to small hydro development remained. Utility companies enjoyed monopsony power and small producers found it difficult to negotiate reasonable contracts for the sale to the utility of the electricity they produced. The utility companies would also refuse to provide the small producer with power to generate the facility, or would do so at an unreasonable rate. *See American Elec. Power Serv. Corp. v. FERC*, 675 F.2d 1226, 1230 n.8 (D.C. Cir. 1982) (citing remarks of various members of Congress regarding these institutional dilemmas of small hydro developers); Golden, *The Role of State Regulatory Authorities*

a national energy crisis and a desire to promote alternative energy sources⁷ inspired Congress to enact section 210 of the Public Utilities Regulatory Policy Act (PURPA),⁸ a principal component of the National Energy Act.⁹ Section 210 sought to encourage investment in small hydroelectric facilities through incentives and removal of the obstacles that had impeded their development.¹⁰ However, many states,

in the Implementation of Federal Ratemaking Policies and Regulations for Small Hydroelectric Producers, 16 NEW ENG. L. REV. 711, 712 n.3 (1981); Lock, *supra* note 3, at 711-12; Lornell, *A PURPA Primer*, 3 SOLAR L. REP. 31, 33 (1981). The prospective developer also faced the possibility of being subjected to state public utilities commission jurisdiction and having its operations regulated and profits controlled. Further, the licensing regulations issued under the FPA had been geared for the development of large projects. The complexity and expense of these was beyond the means of many small developers. See Lock, *supra* note 3, at 713.

⁷ See H.R. REP. NO. 543, 95th Cong., 1st Sess. 5-10, reprinted in 1978 U.S. CODE CONG. & AD. NEWS 7674-79; see also *American Paper Inst. v. American Elec. Power Serv. Corp.*, 103 S. Ct. 1921, 1924 (1983) (PURPA designed to promote development of cogeneration and small power production facilities); *FERC v. Mississippi*, 456 U.S. 742, 745 (1982) (PURPA part of package of legislation designed to combat national energy crises); Lock, *supra* note 3, at 707-08.

⁸ Pub. L. No. 95-617, 92 Stat. 3117 (1978) (codified in 16 U.S.C. § 324a-3 (1982)).

⁹ Five major statutes comprise the National Energy Act. In addition to PURPA, Congress enacted the National Energy Conservation Policy Act, Pub. L. No. 95-619, 92 Stat. 3206 (1978), the Energy Tax Act of 1978, Pub. L. No. 95-618, 92 Stat. 3174, the Natural Gas Policy Act of 1978, Pub. L. No. 95-621, 92 Stat. 3350, and the Power Plant and Industrial Fuel Use Act of 1978, Pub. L. No. 95-620, 92 Stat. 3289.

¹⁰ PURPA's most attractive aspect is its requirement that utility companies purchase the electricity produced by the small hydroelectric producers. 16 U.S.C. § 824a-3(a) (1982). The utilities must pay for the electricity at a rate which does not exceed the incremental cost to the electric utility of producing alternative electric energy — the avoided cost. 16 U.S.C. § 824a-3(b) (1982); see also *American Paper Inst. v. American Elect. Power Serv. Corp.*, 103 S. Ct. 1921 (1983) (FERC regulations requiring utilities to offer to purchase at avoided cost and to interconnect with small hydroelectric developers constitutional); see also Lock, *Statewide Purchase Rates Under section 210 of PURPA*, 3 SOLAR L. REP. 419 (1981) (examining New Hampshire's and Vermont's statewide purchase rate methodologies); Lock & Van Kuiken, *Cogeneration and Small Power Production: State Implementation of Section 210 of PURPA*, 3 SOLAR L. REP. 659 (1981) (reviewing common issues and problems arising from state rate implementation proceedings).

In addition, Congress provided tax incentives to the small hydro developer. A 21% investment tax credit is available, 26 U.S.C. § 46a(2)(A), (B), (C) (1982), as well as a five year depreciation formula under the accelerated cost recovery system for the cost of the capital investment, rather than the previous 40 year recovery schedule, 26 U.S.C. § 168 (1982); see also Friedmann & Mayer, *Energy Tax Credits in the Energy Tax Act of 1978 and the Crude Oil Windfall Profits Tax Act of 1980*, 17 HARV. J. ON LEGIS. 465, 494 (1980).

particularly the semiarid and arid¹¹ western states,¹² have not greeted PURPA with open arms.¹³

Since water is a scarce resource in the West, the western states are particularly interested in preserving state control over water use and appropriation.¹⁴ Congress¹⁵ has repeatedly recognized this state interest

¹¹ "Land is considered arid or semiarid if potential evapotranspiration [the total water dissipated from an area by evaporation from water and land surfaces and by transpiration from plants] exceeds average precipitation, and the total water supply is insufficient for the cultivation of otherwise arable land." Note, *Federal-State Conflicts Over the Control of Western Waters*, 60 COLUM. L. REV. 967, 967 n.2 (1960) [hereafter Note, *Federal-State Conflicts*].

¹² The western states include the states of Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming. *Id.* at 967 n.1.

¹³ See *infra* notes 26, 91 & 140.

¹⁴ See generally Wolfe, *Hydropower: FERC Licensing and Emergency State-Federal Water Rights Conflicts*, 21 PUB. LAND & RESOURCES L. DIG. 851 (1984) (increasing number of FERC licensing exemptions, redefining FERC powers over nonnavigable waters, and improving administrative cooperation should answer western states' fears).

¹⁵ The United States Constitution grants Congress the power to regulate interstate commerce. U.S. CONST. art. I, § 8, cl. 3. This power includes the right to regulate navigation on the navigable waterways of the United States. *Gibbons v. Ogden*, 22 U.S. (9 Wheat) 1 (1824). In the FPA, Congress for the first time defined navigable waters of the United States.

'Navigable waters' means those parts of streams or other bodies of water over which Congress has jurisdiction under its authority to regulate commerce with foreign nations and among the several States, and which either in their natural or improved condition notwithstanding interruptions between the navigable parts of such streams or waters by falls, shallows, or rapids compelling land carriage, are used or suitable for use for the transportation of persons or property in interstate or foreign commerce, including therein all such interrupting falls, shallows, or rapids, together with such other parts of streams as shall have been authorized by Congress for improvement by the United States or shall have been recommended to Congress for such improvement after investigation under its authority.

16 U.S.C. § 796(8) (1982).

Congress also has the right to regulate navigation involving nonnavigable tributaries of navigable waterways, *United States v. Grand River Dam Auth.*, 363 U.S. 229, 232 (1960), and nonnavigable streams that could be made navigable by reasonable improvement, *United States v. Appalachian Elec. Power Co.*, 311 U.S. 377, 426 (1940) ("[I]t cannot properly be said that the constitutional power of the United States over its waters is limited to control for navigation. . . . Flood protection, watershed development, recovery of the cost of improvements through utilization of power are likewise parts of commerce control. . . . That authority is as broad as the needs of commerce."); see also Frank, *Forever Free: Navigability, Inland Waterways, and the Expanding Public Interest*, 16 U.C. DAVIS L. REV. 579 (1983) (discussing federal rules of navigability and analyzing recent federal decisions liberalizing federal rules for public trust purposes).

when deciding whether federal agencies must recognize state water law in implementing federal statutes.¹⁶ In enacting the Federal Power Act (FPA),¹⁷ the licensing statute for hydroelectric facilities,¹⁸ Congress expressly provided for the retention of state power to regulate water use and appropriation, thereby creating a dual system of control between the federal and state governments. Under section 9(b) of the FPA, each application for a license must demonstrate satisfactory compliance with

The federal government may also prevent diversion from a nonnavigable stream if the diversion would adversely affect the navigability of a downstream navigable waterway. *United States v. Rio Grande Dam & Irrigation Co.*, 174 U.S. 690 (1899). Congress further has the power under the commerce clause to regulate projects that generate electricity for interstate commerce. *New Eng. Power Co. v. New Hampshire*, 455 U.S. 331, 340 (1982).

Congress may, however, reserve to the states the power to regulate interstate commerce by failing to act. *Cooley v. Board of Wardens*, 53 U.S. (12 How.) 299 (1851), or by expressly consenting to state regulation of interstate commerce, *Prudential Ins. Co. v. Benjamin*, 328 U.S. 408 (1946).

¹⁶ For example, the Act of 1866 provides:

Whenever, by priority of possession, rights to the use of water for mining, agricultural, manufacturing, or other purposes, have vested and accrued, and the same are recognized and acknowledged by the local customs, laws, and the decisions of courts, the possessors and owners of such vested rights shall be maintained and protected in the same; and the right of way for the construction of ditches and canals for the purposes aforesaid is hereby acknowledged and confirmed

43 U.S.C. § 661 (1976).

Thirty-seven similar statutes promulgated by Congress that have provided for deference to state water laws in the administration of federal programs were noted by a recent Senate subcommittee. *A Bill to Clarify the Relationship of the Interests of the United States and of the States in the Use of the Waters of Certain Streams: Hearings on S. 1275 Before the Subcomm. on Irrigation and Reclamation of the Senate Comm. on Interior and Insular Affairs*, 88th Cong., 2d Sess. 302-10 (1964) (materials submitted by Senator Kuchel) [hereafter *Hearings*]. *But see Note, Federal Acquisition of Non-Reserved Water Rights After New Mexico*, 31 *STAN. L. REV.* 885, 907-11 (1979) (arguing that these 37 statutes do not constitute a continual and broad deference to state water law) [hereafter *Note, Federal Acquisition*].

¹⁷ 16 U.S.C. §§ 791a-828c (1982). The Federal Water Power Act of 1920 (FWPA), ch. 285, 41 Stat. 1063, was renamed and amended in the Federal Power Act of 1935 (FPA), ch. 687, § 320, 49 Stat. 838, 863. Reference to the FPA in the text and footnotes, unless otherwise stated, will refer to the FWPA as amended by the FPA.

¹⁸ The FPA requires a developer of a small hydro facility to obtain a license from the Federal Energy Regulatory Commission (FERC) before beginning to operate the facility. 16 U.S.C. § 797(e) (1982). In 1977, the Federal Power Commission (FPC) was renamed the Federal Energy Regulatory Commission (FERC). Department of Energy Organization Act of 1977, Pub. L. No. 95-91, § 402(a)(1), 91 Stat. 565, 583 (1977). Reference to FERC in the text and footnotes, unless otherwise stated, will refer to both FERC and FPC.

state laws regarding appropriation, diversion, and the use of the water for power purposes.¹⁹ In addition, section 27 of the FPA reserves to the states the power to regulate water appropriation and proprietary rights.²⁰

Although sections 9(b) and 27 of the FPA appear to protect state water laws,²¹ the courts have refused to enforce these sections, holding that they conflict with the supremacy and commerce clauses.²² This failure to protect state water laws has concerned the western states.²³ Since the passage of PURPA, the number of license applications to construct small hydroelectric facilities has increased dramatically.²⁴ The construction of new facilities will create additional demands for water appropriation. If developers of these new hydro facilities are permitted to circumvent state water appropriation laws, carefully drafted and regulated state water appropriation schemes could become ineffective and

¹⁹ Section 9(b) of this act states:

Satisfactory evidence that the applicant has complied with the requirements of the laws of the State or States within which the proposed project is to be located with respect to bed and banks and to the appropriation, diversion, and use of water for power purposes and with respect to the right to engage in the business of developing, transmitting, and distributing power, and in any other business necessary to effect the purposes of a license under this Act.

16 U.S.C. § 802(b) (1982).

²⁰ Section 27 of this act states: "Nothing herein contained shall be construed as affecting or intending to affect or in any way interfere with the laws of the respective States relating to the control, appropriation, use, or distribution of water used in irrigation or for municipal or other uses, or any vested right acquired therein." 16 U.S.C. § 821 (1982).

²¹ See Scott, *Is Federal Control of Water Power Development Incompatible with State Interests?*, 9 GEO. WASH. L. REV. 631, 646 (1941) (Congress carefully refrained from exercising its maximum constitutional authority over state water resources in enacting FPA).

²² *First Iowa Hydro-Electric Coop. v. FPC*, 328 U.S. 152 (1945); see also *infra* note 91 and cases cited therein for cases following *First Iowa*.

²³ This Comment primarily concerns itself with the effects PURPA will have on the western states. However, the need to protect state water laws is not limited to the western states. The arguments made in this Comment for a greater recognition of state water laws by the federal government in licensing hydroelectric facilities are applicable to all the states. This Comment emphasizes the need for recognition of water laws of the western states because of the unique and highly complex nature of these laws developed to regulate the scarce water resources in this region.

²⁴ Applications for permits to construct hydroelectric projects have increased from an average of 20 per year in the mid-1970's to 1859 in 1981. 1981 *FERC Annual Report* 22; Arnold, *Emerging Possibilities for State Control of Hydroelectric Development*, 13 ENVTL. L. REP. 10135, 10135 (1983).

create disastrous water allocation problems.

Part I of this Comment examines the water needs of western states, the historical judicial deference to state water laws, the origins of the FPA, and the congressional decision to share control of water appropriation with the states. Part II reviews the leading Supreme Court decision addressing section 9(b), *First Iowa Hydro-Electric Cooperative v. Federal Power Commission*,²⁵ in which the Supreme Court held that section 9(b) does not protect state laws regulating hydroelectric development that have the effect of vetoing federal licensing objectives. Part III identifies two recent Supreme Court decisions, *California v. United States*²⁶ and *Pacific Gas & Electric Co. v. State Energy Resources Conservation & Development Commission*,²⁷ which demonstrate judicial recognition of state laws regulating water and energy resources that act as obstacles to federal statutory objectives. These decisions have upheld federal statutes similar to sections 9(b) and 27 of the FPA requiring deference to state laws. Finally, Part IV addresses policy considerations that support the need for deference to state water laws. The increased demands small hydros will have on vital state water appropriations must not be overlooked; the effects could be devastating. In addition, consideration must be given to the powers of the Federal Energy Regulatory Commission (FERC),²⁸ the federal licensing agency of hydroelectric facilities. The courts have held that FERC may request license applicants to demonstrate compliance with state water laws. FERC's bias towards licensing hydro facilities, however, directly conflicts with the suggestion to comply with state water laws. Moreover, FERC's lack of experience and knowledge of state water laws suggests that FERC cannot be relied on by the states to protect their complex water laws. The determinations of water appropriation, use, and proprietary rights are better left to the state regulatory agencies, which have been making these decisions for decades.

The courts have never directly considered whether the FPA preempts state water appropriation laws. This Comment argues that the courts, if faced with the issue, should defer to these state water laws and strictly enforce sections 9(b) and 27 of the FPA. If an applicant for a small hydroelectric facility license fails to comply with state laws requiring permits for water appropriation, the applicant should be denied

²⁵ 328 U.S. 152 (1945).

²⁶ 438 U.S. 645 (1978).

²⁷ 103 S. Ct. 1713 (1983).

²⁸ See *supra* note 18.

the license.²⁹

I. STATE WATER LAW AND THE FEDERAL POWER ACT

A. *Unique Needs of Arid Western States*

The development of the western United States depended on the availability of water, particularly for mining and agricultural purposes.³⁰ Because water was scarce, conflicts over its use were inevitable.³¹ Therefore, it became imperative for these states to regulate their water resources and to balance conflicting demands for water appropriations.³²

The legislatures and courts of this region needed a system of water

²⁹ The ability of § 27 and § 9(b) of the FPA to protect these state water laws applies, however, to large hydroelectric projects as well. This Comment does not attempt to make a distinction between large and small hydros. Rather, the increase in the number of license applications to operate hydroelectric facilities created by PURPA provides an excellent opportunity to demonstrate that state water laws now require greater recognition and protection.

The states have protested FERC's actions in issuing preliminary permits and licenses to prospective hydroelectric developers without requiring compliance with state laws. In two recent letters to FERC, the director of Idaho's Department of Water Resources requested FERC to refuse to issue licenses until the applicant demonstrated that an application for a water appropriation permit had been filed for. The director stated the State of Idaho would issue a letter of protest to FERC for any preliminary permit or license FERC issues without an accompanying water right. Letter from A. Kenneth Dunn, Director of Idaho's Department of Water Resources, to Georgiana Sheldon, Commissioner of FERC (June 16, 1981) (on file at U.C. Davis Law Review office); Letter from A. Kenneth Dunn, Director Of Idaho's Department of Water Resources, to Kenneth F. Plumb, Secretary of FERC (Sept. 21, 1981) (on file at U.C. Davis Law Review office).

³⁰ See *California v. United States*, 438 U.S. 645, 648-50 (1978) (general discussion of development of western United States and dependence on water availability); *Jennison v. Kirk*, 98 U.S. 453, 457-60 (1879) (account of migration of miners to California and their use of and need for water); E. COOPER, *AQUEDUCT EMPIRE* (1968) (description of water needs and conditions in California from early 1800's to present); Backman, *Public Land Law Reform — Reflections From Western Water Law*, 1982 B.Y.U. L. REV. 1, 23; Proctor, *Section 10 of the Rivers and Harbors Act and Western Water Allocations — Are the Western States Up a Creek Without a Permit?*, 10 B.C. ENVTL. AFF. L. REV. 111, 115 (1982); Note, *Federal-State Conflicts*, *supra* note 11, at 967-69.

³¹ "Ever since western water rights were first established in the mining camps of the Sierra Nevadas, it has frequently been nip and tuck whether differences of opinion would be resolved by briefs or by bullets." Corker, *Water Rights and Federalism — The Western Water Rights Settlement Bill of 1957*, 45 CALIF. L. REV. 604, 604 (1957).

³² See Clyde, *Allocation of Water for Resource Development*, 14 NAT. RESOURCES LAW. 519, 521 (1982); Proctor, *supra* note 30, at 115.

rights peculiarly responsive to the needs of a semiarid land.³³ In the eastern states, where water was abundant and scarcity was not a concern, the development of water law was compelled by different concerns and served different policies. These concerns and policies led the courts and legislatures in these states to adopt the doctrine of riparian water rights.³⁴ This doctrine, in brief, provided the owner of lands through or by which the stream of water flows the right to use this water flow.³⁵ This right to the water use could not be obstructed by upstream riparian owners except for natural and domestic uses.³⁶ Conversely, the right was limited by the equal rights of downstream riparian proprietors.³⁷

The doctrine of riparian water rights proved inapplicable to the needs of the western states. In the arid West, the ease of access to water was essential. The diversion of water for mining operations,³⁸ agricul-

³³ See Note, *Federal-State Conflicts*, *supra* note 11, at 967.

³⁴ Thirty-one states have adopted the doctrine of riparian water law, and many of them have codified this doctrine and statutorily control water use. F. TRELEASE, *WATER LAW* 10-13 (3d ed. 1979). For a detailed discussion of riparian water law and the water laws of the eastern United States, see 7 *WATER AND WATER RIGHTS* (R. Clark ed. 1967 & Supp. 1978) [hereafter R. CLARK].

The origin of the doctrine of riparian law has been a matter of debate. Some writers have argued that the riparian doctrine originated in the Anglo-American common law and was a natural development of the common law. Maas & Zobel, *Anglo-American Water Law: Who Appropriated the Riparian Doctrine?*, 10 *PUB. POLICY* 109 (1961). The competing theory is that the doctrine of riparian water law is not the result of common law, but was introduced by the Code Napoleon of 1804, a civil law doctrine, and adopted by English and American common law. S. WIEL, *WATER RIGHTS IN THE WESTERN STATES* (3d ed. 1911); Wiel, *Waters: American Law and French Authority*, 33 *HARV. L. REV.* 133 (1919); Wiel, *Origin and Comparative Development of the Law of Watercourses in the Common Law and in the Civil Law*, 6 *CALIF. L. REV.* 245, 342 (1918); Wiel, *Running Water*, 22 *HARV. L. REV.* 190 (1909); see also 7 R. CLARK, *supra*, at 28-35 (discussion and critique of these competing viewpoints).

The leading United States case setting forth the riparian doctrine is *Tyler v. Wilkinson*, 24 F. Cas. 472 (C.C.D. R.I. 1827) (No. 14,312). The plaintiffs and defendants in this case owned land and mills on the Pawtucket River, which formed the boundary line between Massachusetts and Rhode Island. The defendants diverted water from this river to run their mills. Plaintiffs sued, claiming the defendants were only entitled to a wastewater privilege, that is, a right to use only surplus water not used by downstream riparian users for any of their purposes. The court held that each riparian owner had a basic right to use the water from the stream. Each riparian owner had an equal right to a reasonable use of this water, and each owner had no right to diminish or obstruct the quantity of water flowing naturally to the riparian owner below. The adoption by the court of these principles became the basis for riparianism in the United States.

³⁵ See S. WIEL, *WATER RIGHTS IN THE WESTERN STATES* 426-27 (2d ed. 1908).

³⁶ See 7 R. CLARK, *supra* note 34, at 77-82.

³⁷ See 1 R. CLARK, *supra* note 34, at 67-69.

³⁸ See, e.g., *Jennison v. Kirk*, 98 U.S. 453, 457-60 (1879) (historical insight into

ture,³⁹ and public consumption⁴⁰ was necessary in areas where streams did not flow.⁴¹ In addition, the federal government owned most of the land adjacent to water sources in the western United States.⁴² Adoption of the riparian doctrine by the western states would have prevented the requisite diversion of water if the user did not own the land adjacent to the stream, and it would not have permitted diversion by a riparian owner if the diversion affected the rights of a downstream riparian owner.⁴³

Western states, faced with vital water needs, enacted complex water laws that attempted to account for the scarcity of water.⁴⁴ These laws

early mining operations in California); Note, *Federal-State Conflicts*, *supra* note 11, at 969 (imperative need of water for mining operations).

³⁹ See, e.g., Backman, *supra* note 30, at 23 (use of irrigation by Mormon settlers in Utah necessary for agricultural development); Hostyk, *Who Controls the Water? The Emerging Balance Among Federal, State, and Indian Jurisdictional Claims and Its Impact on Energy Development in the Upper Colorado and Upper Missouri River Basins*, 18 TULSA L.J. 1, 33 (1982) (citing leading Colorado case that indicated law of prior appropriation originated in Colorado to use scarce water resources for irrigation on nonriparian lands).

⁴⁰ See, e.g., Note, *Sporhase v. Nebraska: The Muddying of Commerce Clause Waters*, 11 ECOLOGY L.Q. 215, 230 (1983) (water for public consumption constitutes a significant portion of water appropriated).

⁴¹ Diversion of water from surface streams composes much of the water used in the western states. In 1963, the National Water Commission estimated that the 1970 average diversion of 370 billion gallons of water each day from surface streams for use could exceed 1200 billion gallons each day by the year 2000. 1 R. CLARK, *supra* note 34, at 13-16.

⁴² See Backman, *supra* note 30, at 3; Proctor, *supra* note 30, at 116 n.34; Note, *Federal-State Conflicts*, *supra* note 11, at 970-71; see also J. KERWIN, *supra* note 2, at 154 (developers in western United States concerned with unavailability of federal land for hydropower development).

⁴³ A riparian owner had the right to divert water only if the use was reasonable and not excessive. Although the diversion of water for irrigation or mining purposes might have been reasonable, these uses could have been excessive, thereby affecting the rights of a downstream riparian owner. These possible restrictions on the use of water would have hindered the development of the West. See generally 7 R. CLARK, *supra* note 34, at 36-42 (discussion of reasonable and excessive uses of water permitted by riparian owners).

⁴⁴ For example, under California water law a person wishing to appropriate water is required to obtain a permit from the State Water Resources Control Board. CAL. WATER CODE §§ 1201, 1225 (West 1971 & Supp. 1984). Permits can be issued only if there is unappropriated water available and the intended use is beneficial. CAL. WATER CODE §§ 1240, 1375 (West 1971). A request for a permit must be rejected if the proposed appropriation would not be in the "public interest." CAL. WATER CODE § 1255 (West 1971). The Board is required to consider alternative uses of the water, including the enhancement of water quality, recreation, and preservation of fish and

drew from the doctrine of prior appropriation.⁴⁵ Under this doctrine, the first person to appropriate water from a stream bed and put it to a beneficial use⁴⁶ is permitted the continual use of the water as long as a

wildlife resources. CAL. WATER CODE §§ 1242.5, 1243, 1257 (West 1971). The Board may also levy any conditions on the use of the water that "in its judgment will best develop, conserve, and utilize in the public interest the water sought to be appropriated." CAL. WATER CODE § 1253 (West 1971); see also Note, *Federal Water Projects: After California v. United States, What Rights Do the State and Federal Governments Have in the Water?*, 11 U.C. DAVIS L. REV. 401, 405-06 (1978) [hereafter Note, *Federal Water Projects*].

⁴⁵ It should be noted that the prior appropriation doctrine was adopted by many states in addition to other water law doctrines. In 10 states (California, Kansas, Mississippi, Nebraska, North Dakota, Oklahoma, Oregon, South Dakota, Texas, and Washington) the riparian system has been combined with the prior appropriation doctrine. Only in nine western states (Alaska, Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming) has the prior appropriation doctrine been exclusively adopted. See Backman, *supra* note 30, at 3 n.13; Milliman, *Water Law and Private Decision-making: A Critique*, 2 J. L. & ECON. 41, 44 (1959).

The doctrine of prior appropriation developed in California as an informal rule amongst the miners. It was aptly called the "first in time, first in right" rule, because the first person to divert water from a stream bed and put it to use had the right to use water from that source until continual use ended. See *Jennison v. Kirk*, 98 U.S. 453, 457-60 (1879); E. COOPER, *supra* note 30, at 407-10. The California Supreme Court first adopted this doctrine in the mid-nineteenth century in *Irwin v. Phillips*, 5 Cal. 140 (1855). The case involved a miner who diverted water from a stream on which he did not own riparian rights. A subsequent miner claimed squatter's rights to a parcel of land adjacent to the same stream. He claimed he had a common law riparian right to the use of the water from the stream, and that this right was superior to the nonriparian miner. The court held in favor of the nonriparian miner, deciding that the doctrine of prior appropriation was applicable, and that the first person to divert water from its natural course had a usufruct right paramount to all subsequent appropriators. *Id.* at 146-47. However, in two subsequent cases, *Crandall v. Woods*, 8 Cal. 136 (1857), and *Lux v. Haggin*, 69 Cal. 255 (1886), the California Supreme Court recognized riparian rights to the use of the water flow. Although this often has caused confusion between appropriative and riparian right claims, both are subject to reasonable and beneficial uses of the water appropriated. See Note, *The Application of California Riparian Water Rights Doctrine to Federal Lands in the Mono Lake Basin*, 34 HASTINGS L.J. 1293, 1302-06 (1983). See generally 5 R. CLARK, *supra* note 34, at 231-405.

Some states, such as Colorado, adopted early on the pure form of prior appropriation and have held steadfastly to this determination. Backman, *supra* note 30, at 3 n.14; Note, *Federal-State Conflicts*, *supra* note 11, at 974-75. See generally, 5 R. CLARK, *supra* note 34, at 39-229.

⁴⁶ The concept of beneficial use is important to the doctrine of prior appropriation. Nearly every western state has a statute relating to the beneficial uses of appropriated water. Uses of water that are reasonable, useful, and beneficial to the appropriator, and at the same time consistent with the interests of the public in the best utilization of water supplies, are deemed beneficial. 1 R. CLARK, *supra* note 34, at 86.

In 1928, California amended its constitution to prohibit the waste of its water re-

continual beneficial use exists.⁴⁷ The first appropriator has the right to divert as much water from the natural stream as is needed. Later appropriators may take what remains, if any. There is no balancing of needs or rights as in the riparian system.⁴⁸

B. *Historical and Continued Deference to State Water Law*

The federal government has the power to control the flow of water under the commerce clause,⁴⁹ spending power,⁵⁰ and property clause.⁵¹ Congress has often refrained from exercising that power, thereby allowing states to regulate their water resources despite possible conflicts with federal statutes.⁵² Traditionally, the federal courts have also deferred to state water law.⁵³ For example, in a 1907 decision, the Supreme Court decided that the federal government has no control over what type of water allocation system a state may choose.⁵⁴

The property clause grants the federal government plenary control over patented federal lands.⁵⁵ Land patent statutes, however, have been interpreted to require recognition of state water laws and customs on

sources. The amendment required all users of water in California, whether appropriative or riparian, to limit water use to reasonable and beneficial uses. CAL. CONST. art. X, § 2 (1976). The requirement of beneficial use was also codified in California. CAL. WATER CODE §§ 1240, 1375 (West 1971).

⁴⁷ 1 R. CLARK, *supra* note 34, at 85-87; *see also* Note, *Federal-State Conflicts*, *supra* note 11, at 970.

⁴⁸ *See* McGuigan, *supra* note 1, at 17.

⁴⁹ U.S. CONST. art. I, § 8, cl. 3; *see also supra* note 15.

⁵⁰ U.S. CONST. art. I, § 8, cl. 1. The spending clause grants Congress the power to tax and spend money for the general welfare. *United States v. Butler*, 297 U.S. 1 (1936). The Supreme Court in dictum in *United States v. Gerlach Live Stock Co.*, 339 U.S. 725 (1950), stated that the Reclamation Act of 1902, Pub. L. No. 57-161, 32 Stat. 388 (codified in 43 U.S.C. § 371 (1982)), is justified under the spending power.

⁵¹ U.S. CONST. art. IV, § 3, cl. 2. The property clause grants the federal government the power to use and dispose of federal land. The property power grants Congress the power to control the flow of water on federal land. *See United States v. New Mexico*, 438 U.S. 696 (1978).

⁵² *See supra* note 16.

⁵³ *See infra* note 108.

⁵⁴ *Kansas v. Colorado*, 206 U.S. 46 (1907). The United States asserted that it had the right to intervene in a water dispute between Kansas and Colorado. The Court held that the property clause only granted the United States the power to determine water rights in territories and not states. The Court ruled that the Constitution does not grant the United States power to determine what water allocation systems are used by the states.

⁵⁵ A land patent is a conveyance of government property of the public domain to a private party. *See Backman, supra* note 30, at 13-14.

these patented lands. In *Broder v. Water Co.*,⁵⁶ the Supreme Court held that early federal land patents implied a right of way in favor of canals and ditches constructed before the patents were issued. This 1879 decision conformed to local laws and customs in regions where these artificial waterways were absolutely necessary.⁵⁷ In *California Oregon Power Co. v. Beaver Portland Cement Co.*,⁵⁸ the Court addressed the issue of whether federal lands transferred to private parties carried water rights independent of those recognized under state law. The Court held, under the severance doctrine, that when patented federal land is transferred to a private party the recipient receives only title to the land; title to the water must be perfected under state law.⁵⁹

The Winters Doctrine⁶⁰ is an exception to the severance doctrine of *California Oregon Power*. Under the Winters Doctrine, when federal lands are reserved for specific federal purposes, sufficient water to carry out these purposes is impliedly reserved.⁶¹ For example, *United States v. New Mexico*⁶² involved a conflict between the state of New Mexico and United States Forest Service officials regarding the amount of

⁵⁶ 101 U.S. 274 (1879).

⁵⁷ In *Broder*, a canal that was built in 1863 to distribute water crossed federal land patented both under the Pacific Railroad Act of 1864, ch. 216, § 3, 13 Stat. 356, 357, and the Act of 1866, ch. 262, § 9, 14 Stat. 251, 253. The predecessor of the patentee brought the action to have the canal declared a nuisance. The Court held that because these early canals were of great utility and necessity to the early settlers the right of way enjoyed by the canal owners was not revoked by the railroad. 101 U.S. at 277.

⁵⁸ 295 U.S. 142 (1935).

⁵⁹ Petitioner's predecessor in interest had acquired his land under the Homestead Act of 1862, 43 U.S.C. § 161 (1976). The Homestead Act of 1862 was the first of a series of federal land giveaway statutes: the Act of 1866, 43 U.S.C. § 161 (1976), the Act of 1879, 43 U.S.C. § 161 (1976), and the Desert Land Act of 1877, 43 U.S.C. § 321 (1976). The Desert Land Act of 1877 stated that a claimant's water right would be based on the appropriation and use of water, and all unappropriated water was to be "held free for the appropriation and use of the public for irrigation, mining, and manufacturing purposes subject to existing rights." The Court held that this language demonstrated a congressional intent to "sever" the patented land from water and that the right to use water on the patented land would have to be perfected under state law. This separation of patented land from water applied to all federal lands patented after the passage of the Desert Land Act of 1877 and was not limited to patents under that Act. *California Oregon Power*, 295 U.S. at 162.

⁶⁰ The Winters Doctrine was created in *Winters v. United States*, 207 U.S. 564 (1908). The Court held that the federal government has the power to reserve the flowing waters of a territory, exempting them from appropriation when the territory becomes a state. *Winters* held that there was an implied reservation of water in an agreement with various Indian tribes that established the Fort Belknap Reservation.

⁶¹ *Id.* at 577.

⁶² 438 U.S. 696 (1978).

water the Forest Service could use in the Gila National Forest without complying with state water law.⁶³ The United States Forest Service asserted that when the Gila National Forest was reserved, water for stock watering, recreation, and wildlife preservation were also impliedly reserved.⁶⁴ Although the Winters Doctrine had previously been interpreted broadly in favor of the federal government,⁶⁵ the Court held that only water necessary to preserve timber was reserved and that rights to water needed for recreation, wildlife preservation, and stock watering must be acquired under state law.⁶⁶

California v. United States,⁶⁷ the companion case of *New Mexico*, applied the judicial deference for state water law to the spending power. In *California*, the Court held that the Reclamation Act of 1902 requires the Bureau of Reclamation to comply with the state-imposed conditions on the reclamation project as long as the conditions were not inconsistent with a clear congressional doctrine. *California* and *New Mexico* illustrate the continued deference shown by the courts to state water laws when they conflict with federal statutes.⁶⁸

⁶³ Authority for the United States to reserve federal land for national forests is derived from the Organic Administration Act of 1897, 16 U.S.C. § 471 (1976). The Gila National Forest was reserved by the United States in 1899. *New Mexico*, 438 U.S. at 698.

⁶⁴ *New Mexico*, 438 U.S. at 704.

⁶⁵ In *Arizona v. California*, 373 U.S. 546 (1963), Arizona sought to limit use of water on Indian reservations to the present needs of reservation inhabitants. The Court stated that the reservation doctrine applied to water needed to meet both present and future needs of the Indians. The Court granted the Indian reservations enough water to irrigate all of the irrigable land on the reservations regardless of whether the water was actually needed to irrigate the land because the land had not been planted. See *Cappaert v. United States*, 426 U.S. 128 (1976) (rights to ground water necessary to sustain a desert fish in the Devil's Hole Monument held reserved); see also Note, *Federal Acquisition*, *supra* note 16, at 887 n.7 (noting that the Court's holding in *New Mexico* shows a reversal in attitude Court had held for nearly 30 years).

⁶⁶ *New Mexico*, 438 U.S. at 718. The Court characterized water for timber preservation as a direct purpose of the reservation of land, and water needed for stock watering, recreation, and wildlife preservations as a secondary purpose. The Court then held that only water needed for the direct purposes of the reservation had been reserved and rights to water needed for the secondary purposes of the reservation must be acquired under state law. *Id.* at 715-16.

⁶⁷ 438 U.S. 645 (1978); see also *infra* text accompanying notes 92-108.

⁶⁸ *Id.* at 702 n.5 (citing subcommittee report listing 37 statutes in which Congress recognized need to defer to state water law); see also Proctor, *supra* note 30, at 126-27; Note, *Federal Non-Reserved Water Rights: Fact or Fiction*, 22 NAT. RESOURCES L.J. 423 (1982). In questioning the Court's decision, this Note observes that in a comparable number of situations Congress did not defer to state water law. Assuming the Note is correct in asserting that there has not been Congressional deference for state water

C. *The Origins of the Federal Power Act*

The use of water to produce hydroelectric power, an important source of energy to our developing nation,⁶⁹ has historically been recognized as a beneficial use of water resources.⁷⁰ In 1920, Congress enacted the FPA⁷¹ to provide a comprehensive plan to promote the development of hydroelectric power.⁷² Prior to the enactment of the FPA, a fair amount of hydroelectric development had already occurred and the private sector had displayed an interest in constructing more hydroelectric facilities.⁷³ Conservationists wanted strong federal control over these developers. They wanted to preserve the national water resources and to protect consumers against large water power monopolies.⁷⁴ Despite a long and arduous lobby by the hydro developers, the FPA was enacted, requiring developers of hydroelectric power facilities to obtain a federal license to operate.⁷⁵ Congress hoped the FPA would encourage hydroelectric development by providing the developers with a uniform system

law, this fact does not detract from the continued judicial deference paid to state water law and the likelihood that this judicial deference will continue. *See infra* note 103.

⁶⁹ *See supra* note 2.

⁷⁰ *See* CAL. WATER CODE § 1257 (West 1971) (power is an enumerated beneficial use); CAL. ADMIN. CODE tit. 23, R. 663 (1983) (power includes use of water for hydroelectric generation); 1 R. CLARK, *supra* note 34, at 88; I. HUTCHINS, WATER RIGHTS LAWS IN THE NINETEEN WESTERN STATES 423 (1971).

⁷¹ 16 U.S.C. §§ 791a-828c (1982); *see also supra* note 17.

⁷² [I]f we could work out a comprehensive plan under which the millions of potential horsepower energy now running to waste in the rivers and streams throughout the various States of the Union could be developed and utilized for the benefit and comfort of mankind we would have performed a service second to none, and worthy to rank with the highest rendered by any previous Congress in our history.

56 CONG. REC. 9108 (1918) (remarks of Rep. La Follette); *see also* FPC v. Union Elec. Co., 381 U.S. 90, 98 (1965) (central purpose of FPA was to provide for comprehensive control over nation's water resources); 16 U.S.C. § 803(a) (1982) (purpose of licensing hydro facilities is to promote a comprehensive plan for improving water power development); J. KERWIN, *supra* note 2 (complete historical analysis of the enactment of FPA); Scott, *supra* note 21, at 635 (discussing purposes of FPA).

⁷³ *See* J. KERWIN, *supra* note 2, at 39-42.

⁷⁴ *Id.* at 116-23; *see also* Pinchot, *The Long Struggle for Effective Federal Water Power Legislation*, 14 GEO. WASH. L. REV. 9, 16-17 (1945) (President Theodore Roosevelt, a conservationist, vetoed bills that refused consumer protection against large power monopolies).

⁷⁵ *See* Scott, *supra* note 21, at 635; Note, *Expanding Jurisdiction of the Federal Power Commission and the Problem of Federal-State Conflict*, 18 VAND. L. REV. 1847, 1847-48 (1965) [hereafter Note, *Expanding Jurisdiction*].

of regulations, while providing for productive use of the public lands.⁷⁶

Congressional concern during the passage of the FPA over whether the act would displace state power over the appropriation, diversion, and use of intrastate water led to the enactment of two provisions specifically recognizing state water law:⁷⁷ (1) section 27, which precludes interference with state water laws relating to appropriation and proprietary rights;⁷⁸ and (2) section 9(b), requiring that an application for a federal license to operate a hydroelectric facility include satisfactory evidence of compliance with state water law requirements related to appropriation, diversion, and use of water for the purpose of generating power.⁷⁹

II. *First Iowa Hydro-Electric Cooperative v. Federal Power Commission*: JUDICIAL INTERPRETATION OF SECTION 9(B)

Although Congress reserved to the states the power to regulate appropriation, use, and control of water within their borders, the Supreme Court did not recognize these powers in its 1945 decision in *First Iowa Hydro-Electric Cooperative v. Federal Power Commission*.⁸⁰ In *First Iowa*, the developer applied directly to the Federal Power Commission (FPC)⁸¹ for a license to construct a dam and hydroelectric power plant on the Cedar River near Moscow, Iowa.⁸² The developer

⁷⁶ See *Montana Power Co. v. FPC*, 330 F.2d 781, 782 n.1 (9th Cir. 1964) (discussing purposes of FPA).

⁷⁷ The remarks of Representative La Follette are noteworthy:

If we make it one of the conditions precedent to the granting of a license that the applicant has complied with the requirements of State law as to bed, banks, diversion, and use of water, we are most assuredly not infringing any State's right in that respect, but are definitely insisting that the State's rules of property as to water, bed, and banks must have been fully complied with or a license can not issue.

56 CONG. REC. 9108 (1918); see also *First Iowa Hydro-Electric Coop. v. FPC*, 151 F.2d 20, 27-28 n.36 (9th Cir.) (quoting speech given by Rep. La Follette before House of Representatives), *rev'd*, 328 U.S. 152 (1945). This is not the first time Congress has recognized a need to defer to state water law when drafting a federal statute. See *supra* note 16.

⁷⁸ 16 U.S.C. § 821 (1982); see *supra* note 20.

⁷⁹ 16 U.S.C. § 802(b) (1982); see *supra* note 19. Subsequent administration by FERC indicated strongly that considerable state control was contemplated. Decisions, *Administrative Law-Federal Power Commission-Consent of State to Power Project*, 46 COLUM. L. REV. 836, 839 n.15 (1946).

⁸⁰ 328 U.S. 152 (1945).

⁸¹ See *supra* note 18.

⁸² *First Iowa*, 328 U.S. at 159.

made no attempt to obtain the required state permit before constructing a dam and diverting water for industrial purposes.⁸³ The FPC refused to proceed with the developer's application because the application failed to present satisfactory evidence of compliance with the laws of Iowa pursuant to section 9(b) of the FPA.⁸⁴ The Supreme Court ordered the FPC to proceed on the license despite the applicant's failure to comply with section 9(b).⁸⁵

The Court held that Iowa's permit requirements were neither a condition precedent to a federal license, nor an administrative procedure that must be exhausted before securing a federal license.⁸⁶ Because the federal government held plenary control over the licensing of hydroelectric facilities, requiring the applicant to show compliance with both state and federal law would be a costly duplication of effort.⁸⁷ More importantly, the Court found that this requirement would give the state an unintended veto power over the project and would destroy the effectiveness of the federal act.⁸⁸

The purpose of section 9(b), according to the Court, was a "suggestion" to the FPC that it could require the applicant to submit evidence of the applicant's compliance with state laws. In spite of section 9(b)'s

⁸³ *Id.* at 164 (quoting Iowa Code § 7767 (1939)):

Prohibition-permit. No dam shall be constructed, maintained, or operated in this state in any navigable or meandered stream for any purpose, or in any other stream for manufacturing or power purposes, nor shall any water be taken from such streams for industrial purposes, unless a permit has been granted by the executive council to the person, firm, corporation, or municipality constructing, maintaining, or operating the same.

First Iowa, 328 U.S. at 165-66 (quoting Iowa Code § 7771 (1939)):

When permit granted. If it shall appear to the council that the construction, operation, or maintenance of the dam will not materially obstruct existing navigation, or materially affect other public rights, will not endanger life or other public health, and any water taken from the stream in connection with the project is returned thereto at the nearest practicable place without being materially diminished in quantity or polluted or rendered deleterious to fish life, it shall grant the permit, upon such terms and conditions as it may prescribe.

⁸⁴ *First Iowa*, 328 U.S. at 160.

⁸⁵ *Id.* at 183.

⁸⁶ *Id.* at 170. *But see supra* note 72 (statement by Rep. La Follette during passage of FPA).

It had previously been assumed by the Court that § 9(b) made the grant of any license required by state law a prerequisite to extending a federal license under the FPA. *United States v. West Virginia*, 295 U.S. 463, 473 (1935) (dictum).

⁸⁷ *First Iowa*, 328 U.S. at 168.

⁸⁸ *Id.* at 164.

clear language, the Court held that the statute does not itself require compliance with any state laws. Rather, the need for the applicant to comply with state laws will be determined from the constitutional force of these laws.⁸⁹ Moreover, the Court, in dictum, described section 27 of the FPA as protecting only state laws determining proprietary rights in water control, appropriation, use or distribution of water for irrigation, municipal, or other uses of the same nature.⁹⁰

⁸⁹ *Id.* at 177-78. This statement arguably permits a state to require compliance with its applicable laws when federal statutes are silent. However, the state laws would not only have to withstand preemption under the supremacy clause, but would also have to pass constitutional muster under the commerce clause. This would be difficult in light of *First Iowa* if the state law would disrupt the issuance of the federal license, or frustrate the purpose or objective of the federal act. See *Silkwood v. Kerr-McGee Corp.*, 104 S. Ct. 615, 621 (1984) (state law will be preempted if it "stands as an obstacle to the accomplishment of the full purposes and objectives of Congress") (quoting *Hines v. Davidowitz*, 312 U.S. 52, 67 (1941)); *Florida Lime & Avocado Growers, Inc. v. Paul*, 373 U.S. 132, 142 (1963) (test of whether state regulations can coexist with federal regulations is if both can be enforced without impairing federal superintendence of field, citing *First Iowa* with approval); Note, *Regulation of Hydro-electric Development: State Versus Federal Control*, 2 PUB. LAND L. REV. 108, 116 (1981) (Court concerned with effects state laws will have on federal objectives).

⁹⁰ *First Iowa*, 328 U.S. at 175-76. Section 27 protection of state proprietary rights in intrastate water has been interpreted to require the holder of a FERC license to compensate those whose water rights were taken or destroyed incident to the FERC license. See *FPC v. Niagara Mohawk Power Corp.*, 347 U.S. 239, 251-52 (1954); *Henry Ford & Son v. Little Falls Fibre Co.*, 280 U.S. 369, 377 (1930); *California v. FPC*, 345 F.2d 917, 923 (9th Cir.), *cert. denied*, 382 U.S. 941 (1965); *Portland Gen. Elec. Co. v. FPC*, 328 F.2d 165, 176 (9th Cir. 1964).

The Western States Water Council (WSWC) is an organization that represents the interests of 12 western states in developing their water resources. This organization recently proposed an amendment to §§ 9(b) and 27 of the FPA in light of *First Iowa*. The WSWC proposed that Congress strike from § 9(b) the following language: "and to the appropriation, diversion, and use of water for power purposes." The following new subsection was proposed:

(d) Notwithstanding any other provisions of law, the commission is prohibited from issuing an original or new license, amendment to license, or exemption from licensing under this Part, unless the applicant proves acquisition, in accordance with applicable substantive and procedural provisions of state law, of the necessary rights established pursuant to state law to appropriate, divert, and use water for power purposes.

To § 27, four additional subsections were proposed:

(b) Nothing in this Part shall be construed as conferring upon the United States, its agents, permittees, or licensees any right to acquire rights to appropriate, divert, or use water.

(c) Appropriation of water for power purposes subject to this Part shall be pursuant to substantive and procedural provisions of State statutory law, decisional law, and regulations governing appropriation, diversion and use

III. RECENT JUDICIAL LIMITATIONS OF *First Iowa*

Until recently, courts have consistently followed *First Iowa* in determining the FPA preemption of state laws that frustrate federal objectives.⁹¹ However, several recent decisions indicate a change in the Supreme Court's position regarding state laws that affect federal energy statutes.

of water.

(d) Establishment of, and compliance with, pursuant to State law, terms or conditions, including licenses, or other entitlements for appropriation, diversion or use of water for power purposes, shall not be deemed to constitute a burden on interstate commerce.

(e) Nothing in this Part shall alter in any way any provision of State statutory law, decisional law, or regulation, or of any interstate compact, governing the appropriation, diversion, or use of water.

Position of the WSWC concerning Amendment of the FPA, proposed April 16, 1982, in Las Vegas, Nevada (on file at U.C. Davis Law Review office).

The WSWC also recently sent a letter to FERC requesting that its regulations be amended to require all applicants for preliminary permits and licenses to operate hydroelectric facilities to present evidence of having filed for necessary state water rights permits. In the alternative, the developer would be required to demonstrate the ability to acquire the necessary water rights through condemnation proceedings. Letter from Charles E. Nemir, Chairman Western States Water Council, to Georgiana Sheldon, Commissioner of FERC (Jan. 18, 1982) (on file at U.C. Davis Law Review office).

⁹¹ *E.g.*, *City of Tacoma v. Taxpayers*, 357 U.S. 320 (1958) (city permitted to violate its own charter by condemning state land); *FPC v. Oregon*, 349 U.S. 435 (1955) (FPC permitted to violate state anadromous fish laws); *Public Util. Dist. No. 1 v. FPC*, 308 F.2d 318 (D.C. Cir. 1962) (applicant permitted to violate state condemnation laws), *cert. denied*, 372 U.S. 908 (1963); *Washington Dep't of Game v. FPC*, 207 F.2d 391 (9th Cir. 1953) (applicant allowed to violate both state statute and voter initiative limiting size of dams), *cert. denied*, 347 U.S. 936 (1954); *Board of Elec. Light Comm'rs v. McCarren*, 563 F. Supp. 374 (D. Vt. 1982) (applicant permitted to violate state statute requiring approval of new electric generation and transmission facilities); *Town of Springfield, Vt. v. McCarren*, 549 F. Supp. 1134 (D. Vt. 1982) (applicant permitted to violate state statute requiring issuance of certificate of public good prior to commencing construction of hydroelectric projects), *cert. denied*, 104 S. Ct. 360 (1983); *Town of Springfield, Vt. v. Vermont Envtl. Bd.*, 521 F. Supp. 243 (D. Vt. 1981) (applicant allowed to violate state land use laws); *Oregon v. Idaho Power Co.*, 211 Or. 284, 312 P.2d 583 (1957) (applicant permitted to violate state law requiring licensing of water power project).

Although the Supreme Court has repeatedly found state laws preempted by the FPA, it has never directly considered whether state appropriation water laws are preempted by the FPA and *First Iowa*. *First Iowa* was not decided as a water rights case; the developer possessed riparian rights to 98% of the water necessary to operate the proposed project.

A. CALIFORNIA V. UNITED STATES

The first indication that the Supreme Court had begun to limit *First Iowa* was its decision in the 1978 case, *California v. United States*.⁹² There the Court interpreted section 8 of the Reclamation Act of 1902,⁹³ a federal provision analogous to section 27 of the FPA. Section 8 provided that state law relating to appropriation, use, and distribution of water should control in the operation of a federal reclamation project.⁹⁴ Like section 27 of the FPA, section 8 of the Reclamation Act previously had been construed as protecting only the state's right to determine proprietary interests in water.⁹⁵ However, the Court disavowed these interpretations as dictum.⁹⁶

⁹² 438 U.S. 645 (1978).

⁹³ 43 U.S.C. §§ 371-600e (1976 & Supp. V 1981).

⁹⁴ Section 8 of the Reclamation Act states:

Nothing in this Act shall be construed as affecting or intending to affect or to in any way interfere with the laws of any State or Territory relating to control, appropriation, use, or distribution of water used in irrigation, or any vested right acquired thereunder, and the Secretary of the Interior, in carrying out the provisions of this Act, shall proceed in conformity with such laws, and nothing herein shall in any way affect any right of any State or of the Federal Government or of any landowner, appropriator, or user of water in, to, or from any interstate stream or the waters thereof.

43 U.S.C. § 383 (1976).

⁹⁵ In *Ivanhoe Irrigation Dist. v. McCracken*, 357 U.S. 275 (1958), the Court was faced with conflicting federal and state laws concerning appropriation of water. Section 5 of the Reclamation Act limited water allocations under the Act to parcels of 160 acres or less. 43 U.S.C. § 431 (1976). However, California case law placed no acreage limit on irrigation water. *Ivanhoe Irrigation Dist. v. All Parties*, 47 Cal. 2d 597 (1957). The Court held that § 5 was a "specific and mandatory" requirement, and that Congress could not have intended § 8 to override it.

In *City of Fresno v. California*, 372 U.S. 627 (1963), a municipality sought to appropriate water from the Central Valley Project for domestic use. The California Water Code grants a priority on appropriations by municipalities for domestic uses. CAL. WATER CODE § 1460 (West 1971). Section 9(c) of the Reclamation Act, 43 U.S.C. § 485 h(c) (Supp. V 1981), on the other hand, requires water appropriated from a project under the Act to be used for irrigation purposes. The Court, in disallowing the appropriation by the municipality, held that state water law was preempted under § 9(c) of the Reclamation Act. In both *Ivanhoe* and *City of Fresno*, § 8 was interpreted as protecting the state's right to determine proprietary rights in water but not the state's governmental power to appropriate water.

⁹⁶ The Court held that "[s]ection 8 cannot be read to require the Secretary to comply with state law only when it becomes necessary to purchase or condemn vested water rights." 438 U.S. at 674. Whether this interpretation of § 8 could equally be applied to the similar FPA § 27 was at issue in *Town of Springfield, Vt. v. Vermont Envtl. Bd.*, 521 F. Supp. 243 (D. Vt. 1981). A state law required land use permits to be obtained

In *California*, the United States Bureau of Reclamation had applied to the California State Water Resources Control Board for the right to appropriate the water necessary to operate the New Melones Dam then under construction.⁹⁷ The Board granted the Bureau a permit, but attached twenty-five conditions.⁹⁸ The most important of these conditions prohibited full impoundment of the water sought until the Bureau demonstrated a specific plan for the use of the water. This was necessary, the Board concluded, to meet California's statutory water appropriation requirements.⁹⁹ The Bureau filed suit in federal district court for declaratory relief claiming that as a matter of comity a state may not impose *any* terms or conditions not authorized by federal law on water appropriation permits.¹⁰⁰

The Supreme Court held that under section 8 of the Reclamation Act a state may impose conditions not inconsistent with federal statutes on a federal reclamation project.¹⁰¹ Since the district court had not de-

for hydroelectric projects. The district court refused to apply *California* in this case because § 27 of the FPA was enacted to protect supersedure of state laws relating to control, appropriation, use, or distribution of water. State land use controls were not intended to receive this broad protection. *Id.* at 250. It could be inferred from this decision that had the Vermont law related to appropriation, use, or distribution of water, the court would have protected it. However, this has never been directly decided.

⁹⁷ *California*, 438 U.S. at 652.

⁹⁸ New Melones Project Water Rights Decision, Cal. State Water Resources Control Bd. Decision 1422, at 29-36 (Apr. 4, 1973). Briefly, these were the conditions: no water was authorized for the New Melones project during the months of July, August, September, and October because of the unavailability of water during these months; there would be no water appropriated at any time until after a determination that there was a need for water; no water would be appropriated solely for the generation of power; and the project was required to comply with California water quality goals.

⁹⁹ *Id.* at 14, 17-18.

¹⁰⁰ *United States v. California*, 403 F. Supp. 874, 877 (E.D. Cal. 1975), *aff'd*, 558 F.2d 1347 (9th Cir. 1977), *rev'd*, 438 U.S. 645 (1978). The Bureau opened itself up to an unfavorable ruling when it argued the broad proposition that the California State Water Resources Board could not impose any conditions on the New Melones Dam. *California*, 438 U.S. at 677-78.

¹⁰¹ *California*, 438 U.S. at 674-75. The Court decided that § 8 of the Reclamation Act permits the states to regulate federal reclamation projects as long as these regulations are not inconsistent with a federal statute. This holding is consistent with original judicial decisions, academic observations, and Bureau practice. *See United States v. Gerlach Live Stock Co.*, 339 U.S. 725, 760-61 (1950) (discussing Bureau administrative practice to file notices of appropriation under state law when claiming water for reclamation projects); *Nebraska v. Wyoming*, 295 U.S. 40, 43 (1935) (recognizing that Secretary of Interior must obtain permits from Wyoming to appropriate water for project under Reclamation Act); S. WIEL, *supra* note 34, at 1275 (federal government must proceed under state water laws).

cided whether the actual conditions imposed by the Board were inconsistent with any federal statutes, the Court remanded for further proceedings consistent with its holding.¹⁰²

The Court's determination of the validity of section 8 relied primarily on legislative history,¹⁰³ in particular the congressional intent to preserve state power to regulate water distribution and appropriation.¹⁰⁴ The Court observed that Congress had doubted its constitutional power to interfere with purely intrastate water regulation, since previous Supreme Court decisions had upheld the state's right to regulate water appropriation and distribution.¹⁰⁵

The *California* opinion discusses at length the historical significance of the development of water law in the western United States.¹⁰⁶ The Court noted that rather than create a dual system of rights that would lead to confusion, Congress chose to defer to state regulation of intrastate waters.¹⁰⁷ Although this discussion by the Court could be discounted as dictum, it does suggest that the Court appreciates the uniqueness and importance of state water laws, and the need to defer to those laws to promote sound water management, particularly in the arid West.¹⁰⁸

¹⁰² *California*, 438 U.S. at 679. On remand, the circuit court determined that the conditions placed by California on the federal water project requiring the dam project to respect water appropriation conditions and meet water quality goals were valid. *United States v. California*, 694 F.2d 1171, 1181 (9th Cir. 1982).

¹⁰³ Proctor, *supra* note 30, at 122 n.74; Note, *Federal Water Projects*, *supra* note 44, at 410; Note, *Water Resources — Reclaiming State Power Over Federal Reclamation Projects — California v. United States*, 98 S. Ct. 2985 (1978), 54 WASH. L. REV. 743, 748 (1979) [hereafter Note, *Water Resources*].

¹⁰⁴ The opinion is replete with references to the legislative history of the Reclamation Act. *California*, 438 U.S. at 663-70; see also Sax, *Problems of Federalism in Reclamation Law*, 37 U. COLO. L. REV. 49, 57-62 (1964) (legislative intent in enacting § 8 was to protect state water laws regarding appropriation and distribution). *But see* *United States v. California*, 403 F. Supp. 874, 883-89 (E.D. Cal. 1975) (contrary reading of § 8), *aff'd*, 558 F.2d 1347 (9th Cir. 1977), *rev'd*, 438 U.S. 645 (1978); Goldberg, *Interposition — Wild West Water Style*, 17 STAN. L. REV. 1, 27-31 (1964) (contrary reading of the legislative history of section 8); Kelley, *Staging a Comeback — Section 8 of the Reclamation Act*, 18 U.C. DAVIS L. REV. _____ (1984) (forthcoming) (arguing that Justice Rehnquist completely ignored contrary historical evidence available to support either view).

¹⁰⁵ *California*, 438 U.S. at 669-70; see also Note, *Federal Water Projects*, *supra* note 44, at 411 n.60.

¹⁰⁶ *California*, 438 U.S. at 653-55.

¹⁰⁷ *Id.* at 663-70.

¹⁰⁸ "The history of the relationship between the Federal Government and the States in the reclamation of the arid lands of the Western States is both long and involved, but

B. PACIFIC GAS & ELECTRIC CO. v. STATE ENERGY RESOURCES
CONSERVATION & DEVELOPMENT COMMISSION

First Iowa became precedent for a series of cases preempting state laws that were obstacles to the effectiveness of federal energy statutes.¹⁰⁹ However, a 1983 Supreme Court decision recognizing a state's right to regulate nuclear power plant construction suggests that this trend may

through it runs the consistent thread of purposeful and continued deference to state water law by Congress." *Id.* at 653. The Court also discusses the history of the development of water law in the West and how the Court early on deferred to these water laws. *Id.* at 653-63; see also *Sporhase v. Nebraska*, 458 U.S. 941 (1982); *United States v. New Mexico*, 438 U.S. 696 (1978); *Andrus v. Charlestone Stone Prod.*, 436 U.S. 604 (1978); *United States v. Gerlach Live Stock Co.*, 339 U.S. 725 (1950); *California Oregon Power Co. v. Beaver Portland Cement Co.*, 295 U.S. 142 (1935); *Kansas v. Colorado*, 206 U.S. 46 (1907); *Broder v. Water Co.*, 101 U.S. 274 (1879); *Jennison v. Kirk*, 98 U.S. 453 (1879).

¹⁰⁹ In *Public Util. Comm'n v. Attleboro Steam & Elec. Co.*, 273 U.S. 83 (1927), the Public Utilities Commission of Rhode Island attempted to regulate the interstate sale of electricity from a Rhode Island company to a Massachusetts company. The Supreme Court held the PUC's regulation to be in violation of the Commerce Clause. This decision left the interstate sale of electricity wholly unregulated. In response to this void, Part II of the Federal Power Act of 1935 was enacted. 16 U.S.C. §§ 824, 825 (1982). The requirements of the act were "to extend only to those matters which are not subject to regulation by the States." 16 U.S.C. § 824(a) (1982). In *FPC v. Southern Cal. Edison*, 376 U.S. 205 (1964), the FPC asserted jurisdiction over a utility's interstate sale of electricity to a municipality. Despite the fact that the sale was subject to state PUC regulation, the Court upheld FPC jurisdiction over the sale. The Court based its decision on the fact that a portion of the electricity sold was produced by the seller utility in another state. *Id.* at 214-16.

The National Gas Act of 1938 states that the federal regulation under the act:

shall apply to the transportation of natural gas in interstate commerce, to the sale in interstate commerce of natural gas . . . and to natural-gas companies engaged in such transportation or sales, but shall not apply to any other transportation or sale of natural gas or to the local distribution of natural gas or to the facilities used for such distribution or to the production or gathering of natural gas.

15 U.S.C. § 717(b) (1982). In *Illinois Gas Co. v. Central Ill. Public Serv. Co.*, 314 U.S. 498 (1942), the Indiana PUC ordered a company in the business of piping natural gas to provide service to a certain distributor. *Id.* at 501. Even though the appellant was engaged in no interstate transmission of natural gas, the Supreme Court held that the state jurisdiction over the appellant had been preempted by the Natural Gas Act of 1938. *Id.* at 509-10. In *Phillips Petroleum Co. v. Wisconsin*, 347 U.S. 672 (1954), the utility was engaged in the production, processing, and intrastate sale of natural gas. *Id.* at 674. The buyers of this gas piped some of the gas to other states. *Id.* at 675. Even though the utility was not itself selling the natural gas into interstate commerce, the Supreme Court held that the Natural Gas Act of 1938 gave the FPC jurisdiction over the sales. *Id.* at 682-84.

be changing. In *Pacific Gas & Electric Co. v. State Energy Resources Conservation & Development Commission*,¹¹⁰ the federal-state law conflict arose out of a California statute that imposed a moratorium on the construction of nuclear power plants regulated by the Atomic Energy Act.¹¹¹ The moratorium was to continue until the State Energy Resources Conservation and Development Commission determined that a demonstrated technology for the disposal of high level nuclear waste had been developed and approved.¹¹² The district court cited *First Iowa* in finding that the Atomic Energy Act preempted the California statute.¹¹³ It concluded that the statute would be an obstacle to the future development and use of atomic energy.¹¹⁴

On appeal, the Supreme Court reversed.¹¹⁵ The Court held that under the Atomic Energy Act Congress intended the federal government to regulate nuclear plant licensing and radiological safety and the states to regulate whether such facilities were needed, their cost, and

¹¹⁰ 103 S. Ct. 1713 (1983).

¹¹¹ The Atomic Energy Act of 1954 removed the federal monopoly over the production of nuclear energy imposed by the Atomic Energy Act of 1946. 42 U.S.C. §§ 2011-2296 (1976 & Supp. V 1981). Under the 1954 Act, any person wishing to produce or transfer nuclear energy must first obtain a license from the Atomic Energy Commission. 42 U.S.C. § 2131 (1976). Sections 271 and 274 of the act define the division of federal and state jurisdiction.

Section 271 states that the Atomic Energy Act shall not affect any federal or state agency's power to regulate the generation for sale or transmission of electricity produced in nuclear power plants. This limitation on the Commission's power is conditioned by the statement that "this section shall not be deemed to confer upon any Federal, State or local agency any authority to regulate, control or restrict any activity of the Commission." 42 U.S.C. § 2018 (1976).

Section 274 further defines the delegation of federal and state authority under the Act by allowing the Commission to enter into agreements with state governments to limit the authority of the Commission. 42 U.S.C. § 2021(b) (Supp. V 1981). These agreements, however, may not impinge on the Commission's authority to regulate "the construction and operation of any nuclear energy production or utilization facility." 42 U.S.C. § 2021(c)(1) (1976). Section 274 also states that the Act shall not infringe on the state's power to "regulate activities for purposes other than protection against radiation hazards." 42 U.S.C. § 2021(k) (1976).

¹¹² CAL. PUB. RES. CODE § 25524.2 (West 1977).

¹¹³ *Pacific Legal Found. v. State Energy Resources Conservation & Dev. Comm'n*, 472 F. Supp 191, 200-01 (S.D. Cal. 1979), *rev'd*, 659 F.2d 903 (1981), *aff'd*, 103 S. Ct. 1713 (1983); *see also* Murphy & La Pierre, *Nuclear "Moratorium" Legislation in the States and the Supremacy Clause: A Case of Express Preemption*, 76 COLUM. L. REV. 392, 445-50 (1976) (finding *First Iowa* persuasive in preempting moratorium laws on construction of nuclear power plants).

¹¹⁴ *Pacific*, 472 F. Supp. at 201.

¹¹⁵ *Pacific*, 103 S. Ct. at 1713.

other related state concerns.¹¹⁶ Accepting California's argument that this statute was enacted for economic purposes — the prevention of costly shutdowns that might occur if a means of long term waste disposal was not developed¹¹⁷ — the Court found that this was a legitimate exercise of state power.¹¹⁸

The Court also held that the California statute did not frustrate the purpose of the Atomic Energy Act,¹¹⁹ and suggested that the Act's purpose was not to promote the commercial development of nuclear power at all costs.¹²⁰ The Court distinguished *First Iowa*, holding that the Atomic Energy Act did not extend to the Nuclear Regulatory Commission the same comprehensive planning authority as was granted to FERC under the FPA.¹²¹

Although *Pacific Gas & Electric* and *First Iowa* were distinguished by the Court, the two cases are analogous in their effects as obstacles to congressional objectives. *First Iowa* held that the FPA preempted a state law prohibiting the construction of dams and the diversion of water for industrial purposes without first obtaining a permit from the state. The Court determined that if this state requirement was a valid condition precedent to obtaining a federal license it would confer upon the state an unintended veto power over the federal licensee's project.¹²² The statute in question in *Pacific Gas & Electric* imposed a moratorium on the construction of federally licensed nuclear power plants until approved technology could be developed to dispose of the high level nuclear waste.¹²³ If an approved technology is never developed, the moratorium statute would have the effect of completely terminating nuclear power construction in California. This would clearly frustrate the purpose of the Atomic Energy Act and stand as an obstacle to increasing commercial production of nuclear power.¹²⁴ Despite this effect on

¹¹⁶ *Id.* at 1723.

¹¹⁷ *Id.* at 1727.

¹¹⁸ *Id.* at 1728.

¹¹⁹ *Id.* at 1730-31. A state law will be preempted if it "stands as an obstacle to the accomplishment of the full purposes and objectives of Congress." *Silkwood v. Kerr-McGee Corp.*, 104 S. Ct. 615, 621 (1984) (citing *Hines v. Davidowitz*, 312 U.S. 52, 67 (1941)).

¹²⁰ *Pacific*, 103 S. Ct. at 1731.

¹²¹ *Id.* at 1732 n.34.

¹²² *First Iowa*, 328 U.S. at 164.

¹²³ CAL. PUB. RES. CODE § 25524.2 (West 1977).

¹²⁴ See *Estep & Adelman, State Control of Radiation Hazards: An Intergovernmental Relations Problem*, 60 MICH. L. REV. 41, 44 (1961); *Helman, Pre-emption: Approaching Federal-State Conflict Over Licensing Nuclear Power Plants*, 51 MARQ. L. REV. 43, 67 (1967); *Mills & Woodson, Energy Policy: A Test for Federalism*, 18 ARIZ.

federal objectives, the Court held the moratorium statute constitutional.

Pacific Gas & Electric indicates that today's Court may no longer be as concerned with the potential impact of a state statute on a federal licensing project as it was when it decided *First Iowa*. At the time *First Iowa* was handed down in 1945, federal preemption of state laws was commonplace.¹²⁵ The Court readily promoted comprehensive federal regulatory power.¹²⁶ In addition, the increasing interest placed by the current Court on the recognition of states' rights suggests that the Court is willing to accept alternatives to strict federal preemption of state laws that obstruct federal licensing projects.¹²⁷

In *First Iowa*, the Court declared that state laws that create a dual federal-state licensing system would be unworkable, impossible, and would thus require preemption.¹²⁸ The Atomic Energy Act contains

L. REV. 405, 416-17 (1976); Murphy & La Pierre, *supra* note 113, at 445-50.

¹²⁵ See generally Comment, *The Preemption Doctrine: Shifting Perspectives on Federalism and the Burger Court*, 75 COLUM. L. REV. 623, 630-39 (1975) (reasoning that Court of that era used preemption doctrine extensively to advance New Deal programs that regulated activities formerly exclusive provinces of states).

¹²⁶ See, e.g., *San Diego Bldg. Trades Council v. Garmon*, 359 U.S. 236 (1959) (state regulation of similar activities regulated by § 7 and § 8 of National Labor Relations Act were preempted because of potential frustration of national purposes); *Pennsylvania v. Nelson*, 350 U.S. 497 (1956) (Smith Act that prohibited knowing advocacy of overthrow of the United States government by force and violence preempted prohibition of same act by state).

¹²⁷ An example of this is the recent 1984 decision of *Silkwood v. Kerr-McGee Corp.*, 104 S. Ct. 615 (1984). The defendants in this case had been found liable for plutonium contamination injuries of the deceased plaintiff. The jury awarded the plaintiff's estate actual and punitive damages as authorized by state law. The defendants appealed the punitive damages award on the grounds that such damages were preempted by federal law. *Id.* at 620.

The basis for defendants' appeal was that the intent of a punitive damage award was to punish and deter a party's actions. It was argued that an award of punitive damages was thus effectively a form of state regulation, since regulations were intended to deter particular actions. Here the punitive damages were awarded because of radiation contamination to the plaintiff. However, radiation hazards are regulated by the federal government under the Atomic Energy Act, and therefore any punitive damage award was preempted because it attempted to "regulate" radiation hazards. *Id.* at 622.

The Supreme Court disagreed with the defendants and permitted the punitive damage award to stand. It held that the punitive damages did not conflict with any federal law, did not frustrate federal objectives of regulating nuclear safety, nor did it conflict with Congress' express intention to exclude dual regulation of radiation hazards. *Id.* at 626. The Court cited *Pacific Gas & Electric* extensively in making this decision. See also Arnold, *supra* note 24, at 10137-38; Wiggins, *Federalism Balancing and the Burger Court: California's Nuclear Law as a Preemption Case Study*, 13 U.C. DAVIS L. REV. 1 (1979); Note, *Water Resources*, *supra* note 103, at 758 n.70.

¹²⁸ *First Iowa*, 328 U.S. at 168.

provisions for plenary control by the federal government over radiation hazards. Even though California asserts that its moratorium was an economic statute, its effect was to regulate radiation hazards and create a dual system of regulation.

After *Pacific Gas & Electric*, a federal court might view the states' interests with greater sensitivity, and focus more on state interests in federal-state conflicts. Since the states have a crucial interest in managing their water appropriation and distribution policies, state water laws should not be preempted under the FPA despite a conflict with the national plan and purpose of the FPA. A court faced with whether an applicant for a federal license to operate a hydroelectric facility must obtain the required state water permits should decide in the affirmative. Issuance of the license should be denied until all required state permits are obtained.

IV. POLICY CONSIDERATIONS SUPPORT THE NEED FOR RECOGNITION OF STATE WATER LAWS UNDER THE FPA

A. *Effect of Small Hydro Proliferation on State Water Appropriations*

The western states contain some of the most productive agricultural land in the world.¹²⁹ However, these states do not enjoy sufficient rainfall to sustain their highly productive agricultural economies without the use of irrigation and complex water appropriation schemes.¹³⁰ Federal deference to state water laws rests on the recognition of the importance of water to the western states.¹³¹ The proliferation of small hydro

¹²⁹ California is an example of how agriculturally productive the western states are. California is the nation's number one farm state. Fifteen out of 20 of the country's top agricultural counties are located in California. California farms supply 41% of the nation's fruits, 58% of its nuts, 31% of the vegetables, and 25% of the rice. In addition, California's largest cash crop is cotton. E. COOPER, *supra* note 30, at 177.

¹³⁰ Approximately 95% of the harvested crops in California receive some water from irrigation as a supplement to rainfall. Almost 90% of the state's controlled water supply is used in irrigation. Each acre receives about 880,000 gallons of water per year, enough to provide an average individual's water consumption for 13 years. *Id.* at 174.

¹³¹ See *supra* text accompanying notes 30-48; see also *California v. United States*, 438 U.S. 645, 648-49 (1978) (Court noted that for first time in nation's development, settlers needed to irrigate); *California Oregon Power Co. v. Beaver Portland Cement Co.*, 295 U.S. 142, 157-58 (1935) (Court stated that waterways from which water necessary to the development of West must come "were separated from one another by wide stretches of parched and barren land which never could be made to produce agricultural crops except by the transmission of water for long distances and its entire consumption in the processes of irrigation"); *Broder v. Water Co.*, 101 U.S. 274 (1879)

facilities under PURPA¹³² will increase demands by developers for water appropriation to generate these new facilities. This increase in demand heightens the need for federal deference to state laws regulating vital water resources.

If the FPA is permitted to preempt state water laws, owners of hydroelectric facilities at small dams would have both the economic incentive and legal right to detrimentally affect water flow downstream. Hydro developers using dams to generate power would want to impound as much water as possible, because the more water in the dam, the more electricity they can produce.¹³³ If the states were unable to control the amount of water held behind the many small dams likely to be constructed under PURPA, the effect on recreational, agricultural, and domestic uses downstream could be critical.¹³⁴

Run of the river hydroelectric projects also will be constructed under the PURPA incentives. These projects do not require impoundment of water. Rather, water is diverted into a pipe called a penstock, run down a mountain for several miles, then returned to the waterway.¹³⁵ Since these projects do not interfere with the flow of water, they do not reduce the amount of water available to users below the point where the water is returned to the waterway. These projects do, however, reduce the amount of water available to users between the point where the water is diverted into the penstock and where it returns to the waterway. Hence, if the states were unable to regulate diversions into the

(Court noted utility and necessity of water canals to West).

¹³² See *supra* note 24.

¹³³ The quantity of electricity produced at a dam is equal to the head multiplied by the quantity of water passing through the turbine. Head is the vertical distance water falls before passing through the turbine. See McGuigan, *supra* note 1, at 3.

¹³⁴ A FERC licensee has the power to condemn water rights to the same water flow to operate its facility. See *supra* note 90. Although condemnation could be costly in some instances, the fact remains that the licensee has the ability to affect the water rights of others. This opportunity is not normally available under state law.

A further complication arises if the hydro licensee does not condemn the water rights or fails to obtain a state water appropriation permit. Can those with water permits downstream enjoin the licensee from appropriating water? Moreover, can the licensee enjoin upstream users from affecting the flow to the hydro project claiming a federal preemptive right to this possible superior claim? These questions remain unanswered, but may cause serious problems in the near future as more potential hydro developers obtain preliminary permits and licenses.

¹³⁵ Run of the river projects use a mountain instead of a dam to create the headwater. See *supra* note 1. These projects are particularly suited to the geography of the West because the mountains in this region are generally taller and steeper than in other parts of the United States.

penstock, the water supply of these users could be endangered.¹³⁶

B. FERC Implementation of Western Water Law

In *First Iowa*, the Court stated that FERC could require a licensee's compliance with state law to the extent FERC deems appropriate.¹³⁷ FERC, however, is directed by PURPA to prescribe rules that encourage investment in small power production.¹³⁸ This directive makes it unlikely that FERC will fairly enforce state water laws against PURPA licensees because such enforcement could interfere with the development of hydroelectric projects.¹³⁹

¹³⁶ For example, if the state granted a rancher an appropriative water right and FERC subsequently granted a developer a license to construct a run of the river project that would divert water upstream from the rancher and return it downstream, the licensee would be able to stop all water flows to the rancher if state water law were held to be preempted by the FPA. Besides disrupting the agriculture and livestock based economies of the West, there would be great injustices to people in the farmer's position who had developed a dependence on their water right.

Even if state water law is preempted as to some projects, it arguably should be respected as to others. First, PURPA was apparently enacted to encourage only the development of projects at existing facilities. This contention is supported by the legislative history of PURPA, which states that the energy needs of the nation require a program that encourages the development of hydroelectric projects located only at existing dams. 16 U.S.C. § 2601(3) (1982). PURPA also directs FERC to establish simple licensing procedures only for projects at existing facilities. 16 U.S.C. § 2705 (1982). These congressional directives illustrate that the national interest in projects other than at existing facilities is small, and that state water law should be respected at least as to these new facilities.

It can also be argued that state water law should at least be respected as to run of the river projects. The Federal Power Act directs FERC to issue licenses in a manner that will be "best adapted to a comprehensive plan" in developing a waterway. 16 U.S.C. § 803(a) (1982). The primary rationale for this directive is that since waterways cross state lines their development is a national concern. *See Scott, supra* note 21, at 646. In any interstate watershed there is a placement and operation of hydroelectric facilities that best uses the region's water resources. Because of this, restrictive state water flow regulations could reduce the energy-producing efficiency of an interstate watershed. For example, a state could permit water to be held behind a dam within the state when the water could be more efficiently used to produce hydroelectricity downstream in another state. Also, a state could limit the amount of water held behind a dam when the water could most efficiently be used at that dam. These problems do not exist with run of the river projects because the flow of the water is not interfered with. Therefore, state water law should at least be respected with regard to run of the river projects because of their lack of effect on interstate waterflow.

¹³⁷ *Id.* at 167.

¹³⁸ 16 U.S.C. § 824a-3 (1982).

¹³⁹ If a license applicant's project would divert water in violation of state water law, FERC would have no incentive to deny the application, because FERC is commanded

In any event, it would be difficult for FERC to effectively interpret and implement state water law.¹⁴⁰ In the early phases of western devel-

by PURPA to promote small power production.

An example of this recently occurred in Maine. FERC was asked to reject hydro developments on rivers that are protected by Executive Order of the State of Maine. FERC refused this request. Letter from former FERC Chairman C.M. Butler III to Maine Governor Brennan (Aug. 3, 1982) (cited in Roos-Collins, *How Many Kilowatts Is a Fish Worth?*, HYDRO REV., Winter 1983, at 1, 10).

It was also recently brought to FERC's attention that Oregon law prohibits additional hydro generation on the Rogue River without state approval. Nevertheless, FERC issued preliminary permits for three projects on this river. When Ron Corsos, FERC Director of Division of Hydropower, was confronted with this fact, his answer was, "So what, to do otherwise would let the state make the decision as to what developments will be built, and the state is totally incompetent to do so." Interoffice Memorandum of the Oregon Water Resources Department from Chris Wheeler to Jim Sexton (Dec. 1, 1981) (on file at U.C. Davis Law Review office).

¹⁴⁰ Justice Frankfurter, in his dissenting opinion in *First Iowa*, noted the importance of deferring to local authorities in these matters:

It is pertinent to recall the classic statement of the reason for leaving to the controlling interpretation of local courts the meaning of local law: "to one brought up within it, varying emphasis, tacit assumptions, unwritten practices, a thousand influences gained only from life, may give to the different parts wholly new values that logic and grammar never could have got from the books." . . . Before conflict can be found between federal and State legislation, construction must be given the State legislation. Avoidance of conflict is itself an important factor relevant to construction. And so, construction of State legislation relating to the matters dealt with in the Federal Power Act is subtle business and a subtlety peculiarly within the duty, skill, and understanding of State judges.

328 U.S. at 185-87 (Frankfurter, J., dissenting) (quoting *Diaz v. Gonzalez*, 261 U.S. 102, 106 (1923)).

Commentators also agree that to permit vital water resource management and distribution decisions to be made by federal agencies could be disastrous. Attwater, *State Control Over Federal Reclamation Projects*, 8 NAT. RESOURCES LAW. 281, 291-92 (1975) (without power to control water resources in federal reclamation projects there could be significant impact on states' environment, and on nature and pace of their growth); Corker, *Sporhase v. Nebraska ex rel. Douglas: Does the Dormant Commerce Clause Really Limit the Power of a State to Forbid (1) the Export of Water and (2) the Creation of a Water Right for Use in Another State?*, 54 U. COLO. L. REV. 393, 413-14 (1983) (arguing it is beyond federal government's ability to provide ground water management and any attempt might cripple necessary state water resources management); Note, *Expanding Jurisdiction*, *supra* note 75, at 1864-66 (FERC must not disregard state water laws because these laws are based on comprehensive administrative planning of scarce water resources that accounts for all interests involved). *But see* Gatchell, *The Role of the Federal Power Commission in Regional Development*, 32 IOWA L. REV. 283, 285 (1947) (arguing FERC is aware of its duties to recognize state water laws and is careful to consider factors other than power development in granting hydro licenses).

opment, water law was enforced only by the courts.¹⁴¹ As the inadequacies of unsupervised water use became apparent, the western states created administrative agencies to determine and implement procedures for the establishment and adjudication of water rights.¹⁴² Today, all seventeen mainland western states have administrative agencies whose primary function is to supervise the acquisition of water rights and adjudicate disputes involving water rights.¹⁴³ Many of these schemes are detailed and complex.¹⁴⁴ As FERC is entrusted with many diverse responsibilities,¹⁴⁵ it has neither the expertise in the complex state water law systems nor the manpower to enforce state water law as effectively as the state water agencies can.¹⁴⁶

The subordination of state water law under PURPA will not only result in the disregard of the states' water law schemes as to licensees, but it will also threaten the effectiveness of these schemes as to all other water users.¹⁴⁷ For a state water agency to make wise allocation decisions, it must know whether there is unallocated water in the waterway.¹⁴⁸ If developers of hydroelectric facilities are not required to obtain a state water allocation permit, state water agencies would have no knowledge of how much water remains in the waterways. As a result, the agency might issue permits for water that has already been appro-

¹⁴¹ See 1 R. CLARK, *supra* note 34, at 93.

¹⁴² *Id.* at 102-03.

¹⁴³ *Id.* at 107.

¹⁴⁴ See *supra* note 44 (example of California water law requirements).

¹⁴⁵ FERC is entrusted with the regulation of electricity moving in interstate commerce. 16 U.S.C. § 824 (1982). This includes not only hydroelectric projects, but also small cogeneration and wind powered projects. 16 U.S.C. § 824a-3 (1982). Regulation of hydroelectric facilities includes issuing preliminary permits to interested developers. This enables FERC and the developers to work towards satisfying the FERC's requirements for licensing the proposed projects. 16 U.S.C. § 797(f) (1982). FERC is empowered to issue licenses to these permit holders to construct the hydroelectric facilities, but will only do so after they are satisfied with the construction plans of the facility. 16 U.S.C. § 797(e) (1982). FERC is also involved with the construction of regulations of rate scales for the purchase and sale of electricity between hydro producers and local utilities. 16 U.S.C. § 824a-3 (1982). It is also the duty of FERC to continually investigate and collect data concerning the water power industry, regarding how the nation's water resources are being utilized, 16 U.S.C. § 797(a)(1) (1982), and to make these reports and investigations public, 16 U.S.C. § 797(d) (1982).

¹⁴⁶ See *Hearings, supra* note 16, at 97 (statement of Justice Stanley Mosk).

¹⁴⁷ See Corker, *supra* note 31, at 610-11; Towner, *The Role of the States*, 45 CALIF. L. REV. 725, 738-39 (1957); Note, *Expanding Jurisdiction, supra* note 75, at 1858-59; Note, *Governmental Techniques for the Conservation and Utilization of Water Resources: An Analysis and Proposal*, 56 YALE L.J. 276, 281-82 (1947).

¹⁴⁸ 1 R. CLARK, *supra* note 34, at 113.

priated by a PURPA licensee. Holders of state water permits would no longer be assured of priority and would be hesitant to rely on their permits. This could inhibit any investment dependent on a state water permit and cause water shortage problems with serious consequences for an entire state.¹⁴⁹ The effectiveness of water laws depends on all water users following the procedures the state laws require. To protect the states' interests in their water policies, the courts and FERC must require applicants for hydroelectric facility operation licenses to comply with the procedural requirements of state water laws.¹⁵⁰

CONCLUSION

Congress enacted PURPA in 1978 to increase energy production in the United States by providing incentives to develop small hydroelectric facilities. PURPA created great interest in the development of hydroelectricity and is likely to result in the construction of numerous small projects.

In enacting the FPA, Congress could have regulated every aspect of hydroelectric power production under its plenary commerce clause powers. However, Congress chose to exempt state water laws from supersedure by the FPA. Section 27 of the FPA reserves to the states the power to regulate water appropriation and proprietary rights. Section

¹⁴⁹ If a PURPA licensee's diversion created a shortage of water in a waterway and the state water agency had no knowledge of this, the state agency might allow larger appropriations to permit applicants than it would have had it been rationing the water because of the shortage caused by the FERC licensee. Such problems were not as serious before PURPA because relatively few projects had been built and state agencies could easily ascertain the amount of water being appropriated.

¹⁵⁰ PURPA exempts developers of hydro facilities from FPA licensing requirements if the hydro will only produce 5 Mw or less of electricity. 16 U.S.C. § 2705(d) (1982). There is no case law, statute, or FERC regulation that has held that these projects may hide behind the *First Iowa* cloak of federal preemption. Arguably, these small hydros have the same federal protection from state laws as their licensed counterparts do. These facilities will still generate electricity and require water to operate, and this effects interstate commerce regulated by Congress. *See supra* note 15. However, it can be argued that these smaller hydros were purposefully exempted by Congress from licensing and will not be regulated by FERC. These facilities could be regulated by the states without violating *First Iowa* or the supremacy and commerce clauses. No dual licensing authority will exist, thereby quieting the fears of *First Iowa*. More importantly, state regulations of these smaller facilities cannot have the effect of vetoing federal licensing objectives when none exist. Even if the courts are unwilling to accept the contentions of this Comment that state water laws must be respected by FERC in their licensing procedures, it will be difficult to disregard the reasoning set forth above that the exempted hydro facilities have the protection of *First Iowa*.

9(b) requires that an applicant for a license demonstrate compliance with state laws relating to the use of water for the generation of electricity. However, in *First Iowa*, the Supreme Court interpreted section 9(b) as only requiring compliance with those state laws that FERC deems appropriate. In dictum, the Court also held that section 27 only protected state laws determining proprietary rights in water control, appropriation, or distribution. Any state laws that obstruct the effectiveness of federal statutory objectives of licensing hydroelectric facilities, however, will be preempted by the commerce and supremacy clauses.

Recent Supreme Court decisions indicate a weakening of the *First Iowa* doctrine. *California v. United States*¹⁵¹ held that a section of the Reclamation Act similar to section 9(b) of the FPA required the Bureau of Reclamation to obtain and comply with conditions of a state water permit not inconsistent with federal law in the operation of the New Melones Dam. Although the Atomic Energy Act was enacted to encourage the development of atomic energy, *Pacific Gas & Electric* upheld a state law that placed a moratorium on the construction of atomic energy plants, thereby effectively frustrating this federal design.

Important policy considerations warrant deference to state water law under the FPA. Unless licensees of hydroelectric projects are required to comply with state water laws, the many projects likely to be constructed under PURPA incentives may have a devastating effect on agriculturally-based economies of the West. Water allocations that are imperative to farmers and ranchers, as well as to private consumers, could be seriously interfered with if hydro developers are allowed to ignore state water allocation permit requirements. Moreover, these complex allocation schemes will themselves operate inefficiently if the states have no knowledge of the amounts of water being diverted for small hydro power generation.

Dual authority over the licensing of hydros is necessary to protect these state interests. The federal government has the beneficial needs of the country in mind when it encourages the development of alternative energy sources such as small hydroelectric power generation. Nevertheless, such needs cannot, and were not, intended to interfere with the needs of the individual states to regulate their vital and often scarce water resources. The states must be given the right to regulate hydroelectric development and, at the very minimum, be permitted to require potential licensees to comply with state water allocation and use laws as

¹⁵¹ 438 U.S. 645 (1978).

contemplated in sections 9(b) and 27 of the FPA. *First Iowa* must be overturned, and sections 9(b) and 27 strictly adhered to in the future to protect these state water interests.

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