

MASTER

LEGAL OBSTACLES AND INCENTIVES TO
THE DEVELOPMENT OF SMALL SCALE
HYDROELECTRIC POWER IN NEW JERSEY

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INTRODUCTION

This memorandum describes in detail the legal and institutional obstacles to the development of small scale hydroelectric energy at the state level. It is designed to aid the developer in the determination of which permits, licenses and laws of the state must be secured or complied with for the development of a project. However, the developer should be aware that the state regulatory system does not comprise the universe of hydroelectric regulation. The federal government also exercises extensive regulatory authority in the area.

This dual regulatory system is a function of the federalist nature of our government. Federalism permits both the federal government and the state government to regulate and license certain aspects of a developer's project. Principles of federalism often support a finding that the federal regulation in question will be superior to comparable state regulation. This superiority of federal law can divest the state of any regulatory authority in a given area. Typically, the developer, with this general principle in mind, is compelled to wonder why he/she must be concerned with the state system at all. The following discussion will examine the area of federal-state relationships with the aim of creating a more orderly understanding of the vagaries of the system.

Thus, the remainder of this introductory section will examine the dual regulatory system from the standpoint of the

appropriate legal doctrine, the law of pre-emption, application of the law to the case of hydroelectric development and will conclude with an inquiry into the practical use of the doctrine by the Federal Energy Regulatory Commission. (Hereinafter the FERC).

A. The Law of Pre-emption^a

As alluded to above, pre-emption is the term that describes, in a federalist system, the ability of the law of one sovereign to take precedence over the law of a lesser sovereign. Specifically, it is the supremacy of the federal law to the state law.

The doctrine of pre-emption is derived from the U.S. CONST. art. VI, cl. 2, which states: "...[t]his Constitution, and the Laws of the United States...and all Treaties...shall be the supreme Law of the Land;...any Thing in the Constitution or Laws of any State to the Contrary notwithstanding." This clause is the basis of federal supremacy. On its face, the supremacy clause purports to divest the states of authority. However, the principles of federalism do not support such a reading. The federal government is a government of delegated authority.

Its laws can be supreme only within the scope of its delegation.^b

Thus, before the doctrine of pre-emption can be invoked, the federal measure in question must be within an area of the author-

^a See generally Gunther, Constitutional Law ch. 5 § 2 (9th Ed. 1975); Tribe, American Constitutional Law § 6-23 *et seq.* (1978); and Engdahl, Constitutional Power ch. 12 (1974).

^b See McCulloch v. Maryland, 17 U.S. (4 Wheat) 316, 405 (1819), "...government of the Union though limited in its power is supreme within its sphere of action."

ity delegated to the federal government. In other words, the federal action must have the capability to pre-empt the state action. It is implicit in the above statement that there are certain areas of regulation in which the federal government does not have a pre-emptive capability. Where pre-emptive capability is lacking, the state law will control.^c

Once pre-emptive capability is determined to exist, further inquiry must be made to ascertain whether pre-emption exists. Whether a particular state measure is actually pre-empted by a federal measure depends upon the judicially-determined Congressional intent.^d At this point, the difficulty becomes one of how to determine the intent of Congress.

The U.S. Supreme Court has, on a case by case basis, articulated factors which it declares to be indicative of the Congressional intent to pre-empt. At times the Court has examined the federal statutes to see if they deal with the matter exhaustively. From exhaustive federal regulation the Court infers an intent of

^cSee, e.g., Regents v. Carroll, 338 U.S. 586 (1950); where the Court held that the F.C.C. could, pursuant to the federal power of regulating interstate commerce, grant or deny or condition the grant of a radio broadcasting license. Here, the license condition required the unilateral disaffirmance of a contract with a third party. Such a condition violated state law which prohibited unilateral disaffirmance. The Court held that while the federal government has pre-emptive capability in the area of interstate commerce, it had no such privilege in the area of state contract law. Hence, state contract law was supreme.

^dSee, e.g., City of Burbank v. Lockheed Air Terminal Inc., 411 U.S. 624 (1973).

no state regulation.^e Where the Court can infer a need for national uniform standards, pre-emption will be appropriate.^f The Court has also found pre-emption proper where there are contradictory federal and state requirements making compliance with both impossible.^g

Thus, given a finding of the pre-emptive capability of the federal law and a finding that an appropriate basis exists to infer that the Congressional intent was pre-emption, federal law will be superior to state law.

The following section will examine the application of these principles by the Court to the case of hydroelectric development.

B. Pre-emption and Hydroelectric Development

1. The Federal Power Act

In the area of hydroelectric development the Federal Power Act enjoys pre-emptive capability. This pre-emptive capability is based upon the Federal Commerce Clause.^h

That clause gives to the Congress the power "to regulate

^e E.g., Brotherhood of Railroad Trainmen v. Jacksonville Terminal Co., 394 U.S. 369 (1969).

^f E.g., Campbell v. Hussey, 368 U.S. 297, 301 (1961); stating "we do not have the question of whether [state] law conflicts with federal law. Rather we have the question of pre-emption... [Here] complementary state regulation is as fatal as state regulation which conflicts with the federal scheme." Cf. Florida Lime and Avocado Growers Inc. v. Paul, 373 U.S. 132 (1963) finding pre-emption inappropriate as federal law was concerned with minimum standard rather than uniform standard.

^g See Gibbons v. Ogden, 22 U.S. (9 Wheat) 1 (1824).

^h U.S. CONST. art. I, § 8, cl. 3.

commerce...among the several states."ⁱ Federal jurisdiction to regulate commerce has been held to include the regulation of navigable waterways.^j Thus, federal regulation of navigable waterways may preclude state regulation. However, the regulation of property rights is not a federal power and in that area the federal law does not have a pre-emptive capability. State property law will govern the rules pertaining to water rights.^k

The U.S. Supreme Court has also addressed the issue of whether the Federal Power Act actually pre-empts state licensing authority. The Court held that an applicant need not comply with state permit requirements to secure a federal license.^l Further, the Court found that the intent of Congress was to secure enactment of a complete scheme of national regulation which would promote the comprehensive development of the water resources of the Nation.^m Given that finding of intent, the section of the Federal Power Act which requires each applicant to submit satisfactory evidence of compliance with state lawⁿ was interpreted to only require the Federal Energy Regulatory

ⁱ Id.

^j Gibbons v. Odgen, 22 U.S. (9 Wheat) 1, 84 (1824), "...all America understands and has uniformly understood the word 'commerce' to comprehend navigation."

^k First Iowa Hydroelectric Coop. v. F.P.C., 328 U.S. 152, 171-176 (1946). Compare Regents v. Carroll, 338 U.S. 586 (1950).

^l First Iowa Hydroelectric Coop. v. F.P.C., 328 U.S. 152 (1946).

^m Id. at 180.

ⁿ 16 U.S.C. § 802(b) (1976).

Commission to consider state laws when granting a federal license, but not to require an applicant to comply with state law.^o Thus, pre-emption of state licensing by federal licensing is appropriate, given the Congressional call for a "complete scheme" evidencing exhaustive and uniform regulation.

However, the FERC may by regulation require evidence of the applicant's compliance with any of the requirements of a state permit that the Commission considers necessary. Hence, the Commission has the discretionary authority to require compliance with state permit requirements.^p

2. The Public Utility Regulatory Policies Act of 1978

Into the already complicated dual system of hydroelectric power regulation, Congress has injected a surprisingly progressive piece of legislation: The Public Utility Regulatory Policies Act of 1978 (hereinafter cited as PURPA), signed into law by President Carter on November 9, 1978, as part of the 5-bill National Energy Act.^q The eventual impact of PURPA, whose implementing regulations are being drafted

^oFirst Iowa Hydroelectric Coop. v. F.P.C., 328 U.S. 152, 177-178 (1946).

^pId. See F.P.C. v. Oregon, 349 U.S. 435, 445 (1955). The State challenged the adequacy of license provisions approved by the Commission for the conservation of anadramous fish. The Court held that the Commission acted within its power and discretion by granting the license and that the state could not impair the license by requiring the state's additional permission or more stringent requirements.

^qThe other four pieces of legislation comprising the National Energy Act are: National Energy Conservation Policy Act; Energy Tax Act of 1978; Powerplant and Industrial Fuel Use Act of 1978; and Natural Gas Policy Act of 1978.

as of this writing, is far from certain.^r However, a few broad conclusions regarding state and federal jurisdiction can be made based on the legislation, itself, and the Conference Managers Report which accompanied it.

The traditional regulatory scheme of things has been that a person selling electric energy for ultimate distribution to the public would be considered an electric utility and subject to federal jurisdiction if the electricity is sold for resale or in interstate commerce, and state jurisdiction if it is sold intrastate directly to the consumer.^s As explained above, this system results from the Federal Power Act, the Commerce Clause^t and the doctrine of pre-emption.

PURPA seeks to turn this system upside down in order to further the Congressional intent to encourage the development of small power production facilities, such as small-

^rRules implementing the legislation herein under discussion are to be issued by FERC by November 8, 1979, to be implemented by state regulatory authorities and nonregulated utilities by November 8, 1980.

^s16 U.S.C. § 824 (1975), Section 201 of the Federal Power Act.

^tOne of the bases for Commerce Clause invocation is the fact that a utility selling to another utility for eventual resale is interconnecting to an interstate transmission grid and will "affect" interstate commerce even if both the selling and purchasing utilities are located within the same state. See F.P.C. v. Union Electric Co., 381 U.S. 90, reh. denied, 381 U.S. 956 (1965).

scale hydroelectric plants.^u

One aspect of this reordering is that a hydroelectric plant which meets the qualifications set out in § 201 of PURPA, i.e., becomes a "qualifying facility" (hereinafter cited as QF), could have its rates determined by a state public utility commission, in spite of the fact that its sales enter the interstate grid and are intended for resale. Although FERC will retain some jurisdiction by setting out the rate-making standards which the state commissions will be required to follow, the day-to-day administration of the wholesale rate-making involved will fall to the states for the first time.

This contravention of traditional jurisdiction is further extended by a provision in PURPA which gives FERC the discretion to exempt QF's from substantial portions of now-existing state and federal law.^v This exemption authority is premised on the Act's purpose of removing obstacles to the development of small power production facilities. The exemption from certain provisions of federal law, such as parts of the Federal Power Act and the Public Utility Holding Company Act, serves the Congressional goal of removing

^uThe scope of PURPA encompasses much more than the principles discussed in this introduction. Even the Title II sections which provide the jurisdictional authorities discussed herein apply to facilities other than hydro; e.g., cogenerators. For a complete discussion of PURPA's effects on small scale hydroelectric development see FEDERAL LEGAL OBSTACLES AND INCENTIVES TO THE DEVELOPMENT OF THE SMALL SCALE HYDROELECTRIC POTENTIAL OF THE NINETEEN NORTHEASTERN UNITED STATES, Energy Law Institute (Second Draft) (1979).

^v§ 210(e)(1) of PURPA.

the extensive scrutiny of organizational and financial details which accompanies governmental regulation of power companies and acts as a substantial disincentive to alternative energy development.^w The exemption from state law, however, meets an additional concern. Without it, the states might have an argument to the effect that the field of wholesale rate regulation has no longer been pre-empted and they are therefore free to step into the void created by the removal of exhaustive federal involvement. Because this would have the effect of subjecting QF's to precisely the kind of utility-type regulation Congress sought to avoid, this idea of pre-emption by exemption was utilized.

Although provisions exempting QF's from certain state and federal regulations will only be implemented if FERC "determines such exemption is necessary to encourage... small power production,"^x a recent FERC Staff paper on this section states: "It is clear from the Conference Report that Congress intended the Commission to make liberal use

^w"...the examinations of the level of rates which should apply to the purchase by the utility of the...small power producer's power should not be burdened by the same examination as are utility rate applications, but rather in a less burdensome manner. The establishment of utility type regulations over them would act as a significant disincentive to firms interested in ...small power production." Conference Manager's Report, accompanying § 210 of PURPA.

^x§ 210(d)(1) of PURPA.

of its exemption authority."^Y

3. Federal Clean Water Act

A current example of this type of coordination between federal pre-emptive authority and day-to-day administration by the states is found in the area of water quality. Under the Federal Clean Water Act, authority has been conferred upon appropriate state agencies to monitor and enforce various aspects of water quality. Certain state agencies have also been designated to issue § 401 water quality certificates and § 402 "point source" permits. As is the case with electric utility regulation under PURPA, in the area of water quality, the federal law applies and is administered by a state agency. The federal law was enacted pursuant to the Commerce Clause of the Constitution and establishes a minimum standard for the states to implement. Consistent with the law of pre-emption, a state may require a higher standard,^z i.e., a standard which goes even further in carrying out the intent of Congress.

C. The Practical Use of Pre-emption

The above discussion has detailed the legal use of the pre-emption doctrine. The purpose of this section is to describe

^YSTAFF PAPER DISCUSSING COMMISSION RESPONSIBILITIES TO ESTABLISH RULES REGARDING RATES AND EXCHANGES FOR QUALIFYING COGENERATION AND SMALL POWER PRODUCTION FACILITIES PURSUANT TO SECTION 210 OF THE PUBLIC UTILITY REGULATORY POLICIES ACT OF 1978, page 7; Docket No. RM79-55, Federal Energy Regulatory Commission, June 26, 1979.

^zSee Florida Lime and Avocado Growers Inc. v. Paul, 373 U.S. 132 (1963).

the doctrine in practice.

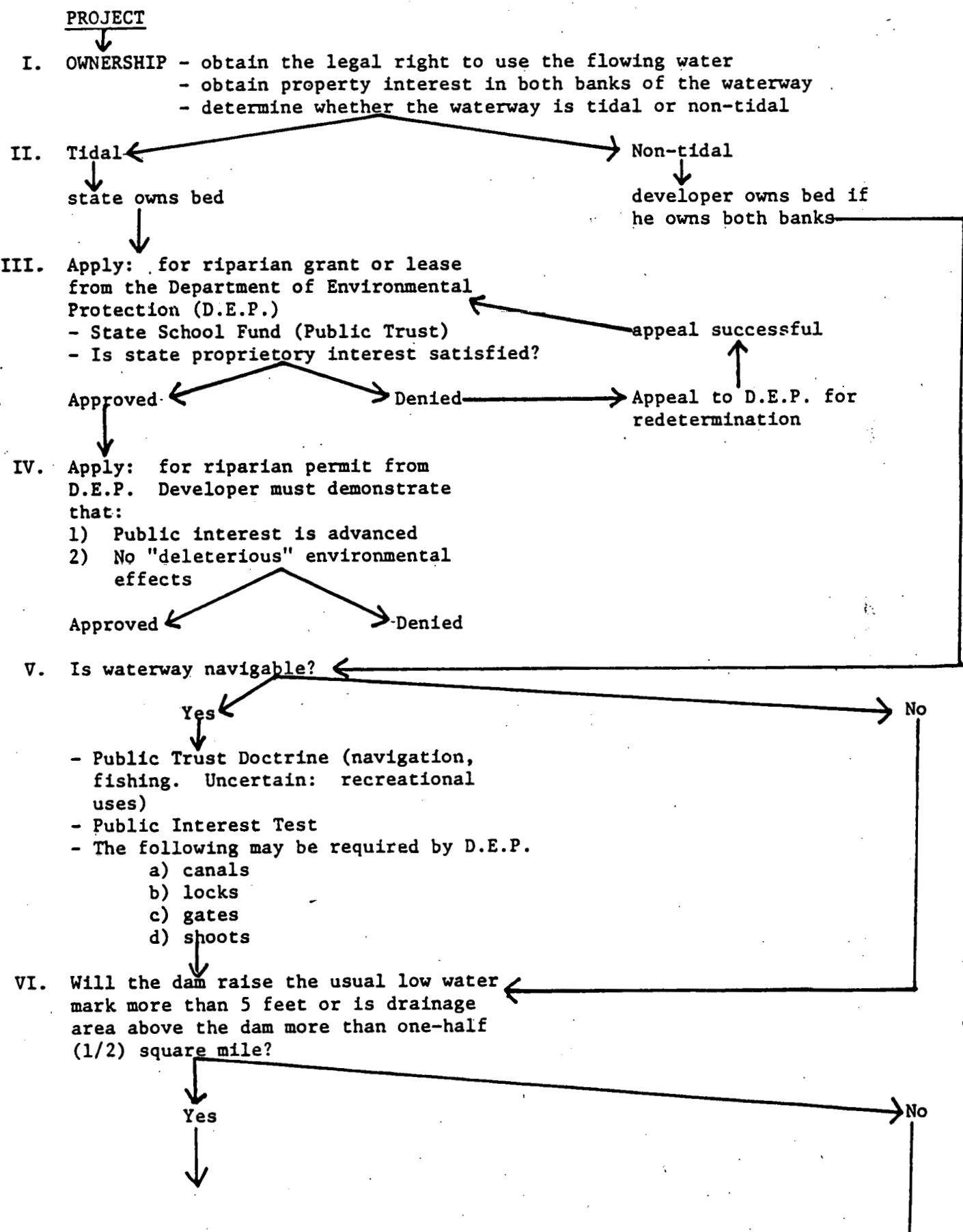
The FERC prefers that a developer comply with appropriate state permits before applying to it for a license. The preference is grounded in two rationales. First, the FERC is aware of the federal-state relationship and the possible political ramifications of totally ignoring state input. Second, the FERC must, in granting the license, make a determination that it is a project best suited to the comprehensive development of the waterway. The state has an interest in the use and development of its watercourses and its opinion of their development is important to the FERC. Hence, the FERC values state input where it is reasonable.^{aa} Thus, the practical application of pre-emption dictates that the hydroelectric developer adhere to the state's legal and regulatory system.

With respect to PURPA, the federal agency, FERC, will establish the guidelines for rates for sales and exchanges of power between electric utilities and qualifying small hydroelectric projects and will prescribe rules for exemptions from state and federal regulation. These standards and rules will be administered by state agencies, i.e., state public utility commissions. Accordingly, the developer of a SSH project should be aware of the FERC standards on rates and rules on exemptions and should know that he/she will be dealing directly with state agencies.

^{aa} See F.P.C. v. Oregon, 349 U.S. 435 (1955).

The regulatory system which is presently in place with regard to clean water will confront the developer at the state level. In most states, this federally-conferred authority will be administered by an agency such as the Department of Natural Resources. These agencies will require the developer to meet certain water quality standards, set by the state and federal government and will mandate that the SSH developer obtain the requisite certificate and permit, as required by the Federal Clean Water Act.

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**FLOW DIAGRAM: REGULATION OF
 SMALL DAMS IN NEW JERSEY**



Apply: for dam construction permit from D.E.P.

- application requires plans, surveys and specifications

Approved

Denied

appeal successful

Appeal to agency for re-determination

Will additional channel work be required above or below a dam?

Yes

No

VII. Apply: for a stream encroachment permit from the D.E.P.

- flood control concerns

- public health, safety and welfare

Approved

Denied

appeal successful

Appeal to D.E.P. for re-determination

VIII. Does the developer plan to build in a specially protected area?

Yes

No

Coastal Wetlands: Apply to D.E.P. for Wetlands permit

- public interest test
- protection of marine fisheries and wildlife
- conditions imposed

appeal successful
(regulation unreasonable; will not apply to developer)

Approved

Denied

Appeal to state court

Hackensack Meadowlands: Apply to Hackensack Meadowlands Commission for construction permit

- construction must comply with Commission's engineering standards
- conditions imposed

appeal successful

Pinelands Region: Apply to Pinelands Environmental Council for review and approval

- project must not significantly impair historic or recreational value of region
- conditions imposed

appeal successful

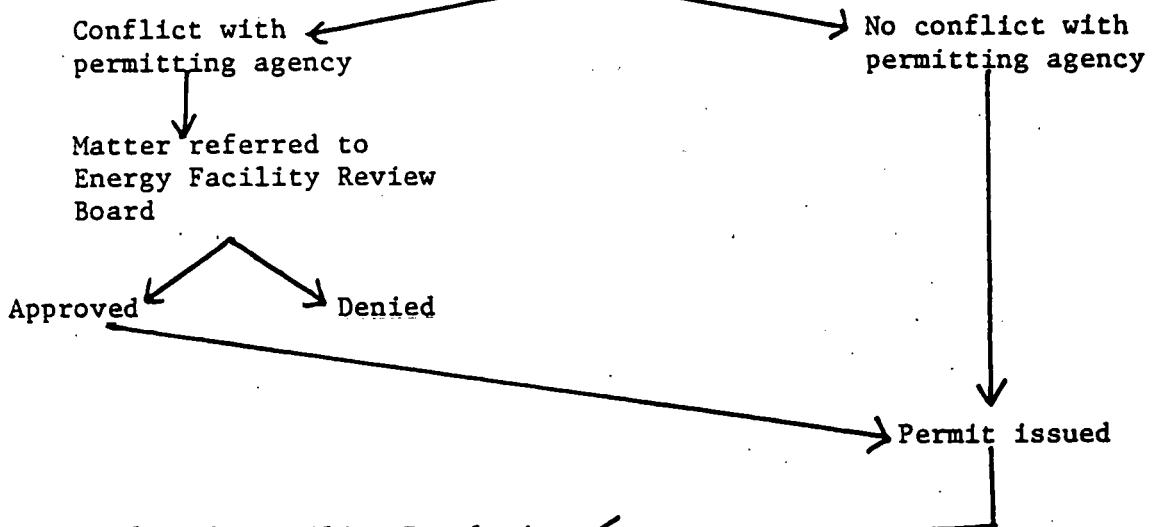
Approved

Denied

Appeal to state court

IX. State Department of Energy (D.O.E.) receives copies of all applications and other pertinent materials

- D.O.E. reviews and comments upon applications
- submits report to permitting agency



X. Board of Public Utility Regulation

- certificate of public convenience and necessity
- rate regulation
- stock and bond issuance regulation

XI. Indirect Considerations

A. Developer's project challenged under Environmental Rights Act

- Public interest test
- necessity of facility considered
- non-deleterious alternatives considered

Developer prevails

Developer loses

appeal successful

Appeal to state supreme court

B. Wild and Scenic River System. Developer's site located on or affects river within system

- D.E.P. determines classification

Project barred

Project permitted with conditions imposed

C. Developer's project affects an area or structure listed on State Register of Historic Places

- State, county, or municipal "action" is present

Project is barred

Project permitted with conditions imposed

XII. Construction, operation and maintenance

- construct fishways if required
- comply with all permit conditions
- obtain liability insurance for dam breach (New Jersey applies negligence theory)
- comply with all B.P.U. regulations

I. NEW JERSEY WATER LAW

A. The Right to Use the Bed, Banks and Flowing Water at a Given Stream Site

1. Requisite Property Interests

The preliminary obstacle that any developer must confront is obtaining authority to utilize the bed, banks and flowing water at his proposed site. This necessarily involves a determination of: 1) ownership of the stream banks and bed and the procedure for obtaining either title or use; 2) existing constraints with regard to the use of the water. In the event that his proposed project will involve the impoundment of water, the developer must also consider the effect that any backflow might have on the land of other property owners.

New Jersey follows the riparian theory of water law.¹ Under this theory, private rights in the flowing water of a river or stream vest in those landowners whose lands border the river or stream. Riparianism contrasts with another theory of water law which has been adopted by a number of Western states, the prior appropriation doctrine. Under prior appropriation, the private right to utilize flowing water vests in the individual who first makes beneficial use of it and the location of any land he might own is immaterial.²

¹ See, e.g., Mayor of Paterson v. East Jersey Water Co., 74 N.J. Eq. 49, 70 A. 472 (1908) aff'd. mem., 77 N.J. Eq. 588, 78 A. 1134 (1910).

² See generally Richard R. Powell, The Law of Real Property, Vol. 5, ¶ 733 et. seq. (1977) (hereinafter cited as Powell).

Riparianism constitutes a cost to the developer inasmuch as his right to use the flowing water at his proposed site is dependent upon the acquisition of property interests in the abutting lands on both sides of the waterway. The usual procedure would be for the developer to purchase or lease the requisite interests from the appropriate landowners. In certain circumstances, he may be authorized to exercise the power of eminent domain.³

In addition to obtaining the necessary interests in the banks and flowing water of a stream, the developer must be able to utilize the streambed. Ownership of the streambed in New Jersey turns upon a determination of whether the watercourse in issue is tidal or non-tidal.⁴ If a stream is subject to the ebb and flow of the tides, title to the underlying land is held by the State up to the high-water mark. Ownership of the bed of a non-tidal stream is held by the respective riparian owners with the title of each riparian extending to the middle of the stream.⁵ In the event that a riparian owns land on both sides of a non-tidal stream, his title extends across the entire stream between the lines of his estate.

³ See, e.g., N.J. Stat. Ann. §§ 48:7-7, 8 (West 1969) with regard to electric companies that qualify as public utilities. See also 16 U.S.C. § 814 (1976) which permits a federal licensee to condemn land upon a showing of a good faith but unsuccessful effort to purchase.

⁴ Arnold v. Mundy, 6 N.J.L. 1 (Sup. Ct. 1821); Shultz v. Wilson, 44 N.J. Super. 591, 131 A.2d 415 (1957) cert. denied, 24 N.J. 546, 133 A.2d 395 (1957). See also Bailey v. Driscoll, 19 N.J. 368, 117 A.2d 265 (1955).

⁵ See Western Electric v. Jersey Shore Realty Co., 93 N.J. Eq. 587, 117 A. 398 (1922).

This manner for determining state ownership of streambeds comports with the English Common Law definition of "navigability". Indeed, earlier state cases equated "navigable" with "tidal".⁶ The definition of navigability presently used by the New Jersey Courts is essentially the same one adopted by the federal government for purposes of the Interstate Commerce Clause: a river or stream is navigable when it is used, or susceptible to being used, as a highway of commerce.⁷ If a stream is determined to be navigable, whether it be tidal (bed owned by state) or non-tidal (bed owned by riparians), it is subject to a superior "public easement of passage." This "easement" operates as a constraint on the utilization of navigable rivers or streams; a particular use must not seriously interfere with the public easement of passage. Given this restriction, and the extensive regulation that arises as a consequence of it (particularly under federal law), whether a proposed Small Scale Hydroelectric (hereinafter SSH) site is located on a navigable stream will be of paramount concern to the developer.

Another concern of the developer will be the extent to which other "public rights" obtain in the water of the State. Historically, New Jersey has viewed public rights in its waters quite restrictively.⁸ In the tidal waters of the state,

⁶ See, e.g., Arnold v. Mundy, supra note 4.

⁷ See Cobb v. Davenport, 32 N.J.L. 369 (Sup. Ct. 1867) and Shultz v. Wilson, supra note 4. See also, Arizona v. California, 283 U.S. 423 (1931) with regard to the federal definition of navigability, i.e., the "navigable in fact" doctrine.

⁸ See Jaffe, State Citizen Rights Respecting Greatwater Resource Allocation: From Rome to New Jersey, 25 Rutgers L.Rev. 571 (1970-71).

the only public right which was recognized, in addition to navigation, was the one of fishing. The right did not extend to non-tidal waters. This narrow view of the "public trust doctrine," as it is frequently referred to, has been the subject of a scathing attack by at least one commentator and cited as a significant factor in contributing to the deplorable condition of the state's waterways.⁹

Recent cases indicate that the "public trust" doctrine may well be broadened in New Jersey, at least with respect to tidal waters, to include public uses for pleasure (boating, sailing, swimming, hunting, skating and enjoyment of scenic beauty).¹⁰ The exact manner in which the doctrine develops, however, remains to be seen. Of course, as public rights in the state's waters expand, additional regulations will inevitably follow. While these public rights clearly serve important social objectives, it must nevertheless be recognized that adequate safeguard with respect to these rights frequently result in significant cost increases, many of which must be borne by the developer.

As previously noted, the developer is confronted with the initial task of obtaining either title or interest to the banks

⁹ Id.

¹⁰ See, e.g., Neptune City v. Avon-By-the-Sea, 61 N.J. 296, 294 A.2d 47 (1972). See also Lecompte v. State, 65 N.J. 447, 323 A.2d 481 (1974).

and streambed at his proposed site. In the event that his site is located on a tidal stream, he must look to the state for permission regarding utilization of the bed.¹¹ In the event that a developer's proposed site is located on a non-tidal stream, he must obtain title or interest from the appropriate riparian landowners. If the stream is "navigable," any interest he acquires will be subject to a superior public right of navigation.

The obvious advantage of locating a SSH site on a non-navigable stream is that the stream is not subject to the public easement of navigation. However, if a stream is non-tidal as well as non-navigable, a disadvantage is that it may occasionally be difficult to locate the owner of the streambed. This is aggravated by the apparent non-existence of a recording system for riparian water rights.¹² In some instances the owner of the streambed may be an individual other than the abutting landowner. On balance it would appear that locating a site on a non-navigable stream is the more attractive alternative in view of the increased regulation that obtains with respect to navigable waterways. However, the number of streams categorized as non-navigable under both state and federal laws is likely to be quite limited, particularly in light

¹¹ See State v. Maas and Waldstein Co., 83 N.J. Super 211, 199 A.2d 248 (1964). Apparently the appropriate agency to consult regarding lease of state-owned streambeds is the Natural Resource Council within the Department of Environmental Protection. See N.J. Stat. Ann. §§ 12:3-7 through 16; 13:1 B-13 (West 1968). See also Atlantic City Elec. Co. v. Bardin, 145 N.J. Super 438, 368 A.2d 366 (1976) for assistance in sorting out the confusing agency reorganization.

¹² See Eva Morreale Hanks, The Law of Water in New Jersey, 22 Rutgers L. Rev. 621, 634 n. 50 (1967-68) (hereinafter cited as Hanks).

of the federal government's broad definition of navigability.

2. The Nature of the Property Right in Flowing Water

Under the riparian theory of water law, private rights in rivers and streams are confined to the use of flowing water.

A riparian proprietor does not own the water that flows by his estate.

There are essentially two theories under the riparian doctrine which define and limit private property rights in flowing water.¹³ Under the first theory, termed "natural flow," each riparian proprietor is entitled to have the stream flow by his land free from any unreasonable diminishment of quantity or unreasonable diminution in quality. Each riparian may use the water for either natural or artificial purposes so long as he does so on his own land. In the event that a riparian proprietor materially affects either the quantity or quality of a stream, another proprietor may bring an action against him regardless of whether or not any injury or damage has resulted.

The second theory under riparian law confines any use of flowing water to a "reasonable one." Under this theory, a riparian proprietor may utilize the water of a flowing stream on either riparian or non-riparian land, so long as his use does not unreasonably affect the rights of other riparians along the stream. Reasonableness is a question of fact to be determined under the circumstances of each case measured

¹³ See generally, 5 Powell ¶ 711-712.

by the importance of the use on the one hand and the gravity of the effects on other riparians on the other.¹⁴ A right of action by one riparian proprietor against another can be maintained only upon a showing that a given use is indeed unreasonable and that the former riparian suffered damage.

New Jersey has been categorized by one eminent commentator as one of four states in the Nation falling under the natural flow theory.¹⁵ However, the present state of the law in New Jersey is not entirely clear; it defies any neat classification.¹⁶ As one state court judge has noted: "An examination of the cases shows that while they sometimes repeat the rule of water use in terms of natural flow and quality, expressions of criteria sounding in reasonable use are also to be found, sometimes in the same case . . ."¹⁷

The use of water on riparian land for domestic purposes stands in a position of priority under New Jersey water law.¹⁸

¹⁴ Smith and Boyer, Survey of the Law of Property, (2nd ed. 1971) at 187.

¹⁵ 5 Powell ¶ 711 at 360.

¹⁶ See generally, Hanks, supra note 12.

¹⁷ Borough of Westville v. Whitney Home Builders, 40 N.J. Super. 62, 122 A.2d 233 (1956). (the Superior Court in this case expressly adopted the rule of "reasonable use" as the measuring rod for stream pollution cases).

¹⁸ See McCord v. Big Brothers Movement, 120 N.J. Eq. 446, 185 A.480 (1936).

This same result would obtain under either the "natural flow" or "reasonable use" rule. Such uses would include household purposes, watering cattle and irrigating a small garden. In scrutinizing stream pollution claims, the New Jersey courts have expressly adopted the rule of reasonable use.¹⁹ In addition, a riparian proprietor may reasonably divert stream water (even onto non-riparian land) for business or manufacturing purposes provided that he returns water to the stream at a point above the land of lower owners.²⁰ The upper riparian need not return the same water so long as he returns an amount approximately equal to that which he extracted.²¹

The area in which New Jersey law departs from "reasonable use" application regards diversion of water for consumptive uses (other than domestic uses on riparian land).²² In such circumstances, the state common law provides that the use will be restrained regardless of the absence of any actual damages. Under this "natural flow" approach, damages are implied. Another way of viewing this situation is that permanent diversions are per se unreasonable.

¹⁹ Borough of Westville v. Whitney Home Builders, supra note 17.

²⁰ Society for Establishing Useful Manufactures v. Morris Canal and Banking Co., 1 N.J. Eq. 157 (1830). See also McCord v. Big Brothers Movement, supra note 18.

²¹ Society for Establishing Useful Manufactures v. Morris Canal and Banking Co., supra note 20.

²² See, e.g., Exton v. Glen Gardner Water Co., 3 N.J. Misc. 613, 129 A. 255 (1925); Mayor of City of Paterson v. East Jersey Water Co., supra note 1.

a) The Rights and Duties of the Developer Relative to Lower Riparian Owners

It is clear that the erection of a dam along a water-course is a permissible use under New Jersey riparian law.²³

The right to construct and maintain a dam, however, is limited by the corresponding rights of other riparian owners. One decision by the Court of Errors and Appeals (now the State Supreme Court) has put the matter as follows:

A man may build a dam across a stream on his own land, provided that thereby he does not appreciably diminish the amount of water which would naturally flow onto the land of the neighbor below or materially affect the continuity of flow. But an upper owner is not making a reasonable use of the stream, and therefore incurs liability, where he erects a dam, the maintenance of which will virtually amount, through the resulting evaporation or percolation, to the drying up of the stream, to the injury of lower owners, or which will materially interfere with the flow or with the continuity of power supplied by the stream to the lower proprietor. ²⁴ (emphasis added)

Some of the Court's language seems to imply that it might use an objective criterion in scrutinizing the use; e.g., "material interference with the flow." The inference is that actual damages to a complaining riparian would be irrelevant. On the other hand, some of the Court's language seems to imply that reasonable use is the standard. It should be noted that the Court, in issuing an injunction against the dam owner in that case, found a substantial deprivation of the plaintiff's rights. Consequently, while part of the Court's opinion may have sounded in "natural flow",

²³ See Cozy Lake v. Nyoda Girls' Camp, 99 N.J. Eq. 384, 131 A. 892 (1926).

²⁴ Id. 131 A. at 894.

application of the law resulted essentially in a "reasonable use" outcome. It is arguable, though not entirely certain, that this is the approach the Court would adopt in all situations involving impoundment on riparian land.

One other case which strikingly illustrates the "natural flow" elements in New Jersey law deserves particular attention in the context of this discussion. In McCord v. Big Brothers Monument,²⁵ the defendant, an upper riparian proprietor, pumped water from a stream for the purpose of recreational use on his riparian land. The pumped water was fed into a natural pond which was used during the summer months by young boys staying at defendant's camp. The only amount of water returned to the stream from the pond occurred as a result of seepage or percolation. The plaintiff operated a gristmill on the stream below the defendant. Plaintiff demonstrated that the extraction of water by the defendant reduced the horsepower of his mill by one-sixth.

The Court determined that the defendant's use was unreasonable and issued a decree enjoining the use. As part of its reasoning the Court noted:

The defendant is not selling the water it transports from the stream, but is giving it away, or granting its use daily for eight or more weeks to 70 boys who are strangers to defendant's riparian lands and who, of their own right, have no privilege to the use of the stream waters. Riparian rights can be claimed only by the owner thereof. . . The transfer to a large number of invitees of the bathing

²⁵ Supra note 18.

use of transported water exceeds the reasonable use to which the riparian proprietor is entitled.²⁶

McCord presents an interesting question for the developer. In the event that a developer produces and distributes electricity to individuals not on his land, will this constitute a "use" of the riparian right by non-riparian persons? Inasmuch as the developer is likely to qualify as a public utility in this situation, a lower riparian as in McCord, would not be able to obtain an injunction. However, may he compel the payment of compensation for the diminishment of his right? Clearly, under New Jersey law, the property right in flowing water may not be taken for public use without just compensation.²⁷ As noted earlier in this paper, as a public utility a developer would be authorized to exercise the power of eminent domain and pay compensation. The point is, however, that under New Jersey law, with its incidents of "natural flow" theory, a lower riparian may quite possibly allege that "diminishment" (other than minimal) constitutes a taking. While the issue may also arise in a strictly "reasonable use" jurisdiction, it would appear that the contention would be somewhat more difficult to sustain (*i.e.*, mere diminishment would be insufficient; some injury to another reasonable use would have to be shown).

b) The Rights and Duties of the Developer Relative to Upper Riparian Owners

If the developer intends to impound water, the backflow

²⁷ cf. Mayor of Paterson v. East Jersey Water Co., *supra* note 1, in which the Court discusses the nature of the right and the taking issue in the context of its opinion.

he creates may effect the land of an upper riparian owner. One approach available to him would be to purchase the land which is likely to be flooded. In the event that he is unable to agree on a purchase price with the seller, the developer may acquire the land through eminent domain proceedings provided he qualifies as a public utility.²⁸

A problem arises with respect to those developers ²⁹ who would not qualify as public utilities. Unlike some states, New Jersey has no "Mill Dam Act" which would permit a private developer to flow a small amount of upper riparian land upon payment of compensation.³⁰ However, it appears that the state common law has in some respects accomplished the same effect as a Mill Dam Act. In a suit to dissolve an injunction issued against a lower mill owner which restrained him from flooding upper riparian land, the New Jersey Court of Equity asserted:

Every proprietor of land has undoubtedly a right to build a mill and raise a head of water on his own land. If in so doing he is about to cause serious and irreparable damage to his neighbor's property, equity will restrain him; but if the injury is comparatively small and may be compensated in damages an injunction ought not to issue. The party injured should be left to his legal remedy. In using small streams for milling purposes, it is almost impossible to prevent partial injury to some proprietor either above or below on the stream. If the injunction is to be used in every case of interference, very few of these ³¹ streams could be appropriated to any useful purpose.

²⁸ See N.J. Stat. Ann. §§ 48:7-7; 48:7-8 (West 1969).

²⁹ See discussion Part II B 3(a) this paper.

³⁰ See, e.g., Mass. Gen. Laws Ann. Ch. 253, § 1 et seq. (West 1959).

³¹ Quackenbush v. Van Riper, 3 N.J. Eq. 350, 354 Am. Dec. 716 (1835). See also, George W. Helme Co. v. Outcolt, 42 N.J. Eq. 665, 9 A. 683 (1887).

While the lower riparian was required to pay damages in that case, his use was not restrained. The Court noted that an injunction would issue only where the flowage caused injury that was irremediable and destructive to the upper estate and an award in damages afforded inadequate satisfaction.

A word of caution is in order with respect to the present discussion. While the state court may be generally reluctant to enjoin the maintenance of a dam which to some degree affects upper riparian land, a wilfull disregard for the property rights of others will be viewed unfavorably by a court, and it may be more inclined to restrain the use. In this regard, the common law varies from a Mill Act.

c) The Developer's Rights and Duties Relative to Land-owners Bordering Impounded Waters

Title to the land underlying lakes in New Jersey is determined in the same manner as streams. Consequently, the title to a lake which is not affected by the ebb and flow of the tide is held by the littoral owners, i.e., by those landowners bordering the lake.³² This title is subject only to a servitude to the public for purposes of navigation if the waters are navigable in fact.³³ A littoral owner's right to use the waters of a private lake or pond

³² Cobb v. Davenport, supra note 7.

³³ Id.

is limited by the lines of his estate beneath the water. He has no right to the use of any portion of such lake above his soil unless he can demonstrate a grant, easement or license.³⁴ Of course one easement which may be asserted is the public one of navigation.

In the event that a developer creates a pond through impoundment, or increases the size of an already existing lake or pond, the question arises as to his rights and duties relative to those individuals bordering the body of water. Of particular concern is any obligation to maintain an existing water level. This problem has been addressed by the New Jersey Legislature. If a reservoir or dam has been in existence for twenty years and the owners of land along the shores above the dam or on the reservoir have made permanent improvements on their land or where the shores have become a permanent populated community, a majority of landowners may petition the Division of Water Resources (hereinafter D.W.R.) and protest against the removal of the dam, reservoir or water.³⁵ In the event that this occurs, a dam owner may not tear down, destroy or abandon the dam, or withdraw the water below the usual low-water mark without the consent of the D.W.R.³⁶ The D.W.R. is authorized to provide a hearing and determine a permanent low-water mark.

³⁴ Walden v. Pines Lake Land Co., 126 N.J. Eq. 249, 8 A.2d 581 (1939).

³⁵ N.J. Stat. Ann. § 58:4-9 (West 1966).

³⁶ Id.

At first blush, this statutory provision appears to present a substantial potential cost to the developer.

However, some relief is afforded him. If it appears that the maintenance of the dam would be an undue burden, the interested landowners above the dam may be ordered by the D.W.R. to pay a part or all of the expense of maintenance.³⁷

3) Liability for Dam Breach

The developer will naturally be concerned with the standard of liability for damages resulting from dam breach. In New Jersey, in order for the developer to be held liable, some fault on his part must be shown, i.e., he must be negligent in either the construction or maintenance of his dam.³⁸ In addition, he will be liable only for those damages foreseeably caused by the breach. This rule of negligence contrasts with another rule imposed in some jurisdictions, i.e., strict liability.³⁹ Under strict liability, a dam owner is answerable for all damages foreseeable caused by breach without regard to any fault on his part. The negligence theory is clearly the more favorable one from the developer's perspective.

II. NEW JERSEY REGULATORY LAW

A. Riparian Grants and Leases

If the developer plans to construct his SSH facility on a

³⁷ Id. § 58:4-10.

³⁸ Righter v. Jersey City Water Supply Co., 73 N.J.L. 298, 63 A.6 (1906).

³⁹ See, e.g., Clark-Aiken Co. v. Cromwell-Wright, 367 Mass. 70, 323 N.E. 2d 876 (1975).

stream which is presently or formerly tide-flowed, he must obtain a lease or grant from the State. The developer should apply to the Natural Resource Council (hereinafter Council) within the State Department of Environmental Protection (hereinafter D.E.P.).⁴⁰ The Council is authorized to lease, grant or convey state-owned submerged lands in the name of the state and may determine the amount of compensation to be paid.⁴¹ Before a lease or grant may be made, the Council must consider the public interest of navigation.⁴²

Since the lease of submerged tide-flowed lands is characterized as a proprietary function of the state, the Council has been accorded wide discretion in the administration of its responsibilities.⁴³ This discretion is not unfettered, however. State constitutional and statutory law provides that all revenues from the sale or lease of state-owned submerged lands must be dedicated to the "Trust for the Support of Public Schools."⁴⁴ Consequently, the Council is prohibited from making a gift of such lands and must sell or lease for a "fair value" which will

⁴⁰ See N.J. Stat. Ann. §§ 12:3-10 et seq; 13:1B-13; 13:10-18 (West 1968 and Supp. 1978-79) (The Council is within the Division of Marine Services in the D.E.P.)

⁴¹ Id. § 12:3-10 (1968). It should be noted that in certain limited circumstances a non-riparian owner may obtain a grant or lease of state-owned submerged lands. This applies, however, only to the tide-waters of the Hudson river, New York Bay, and parts of the Kill von Kull. See id. § 12:3-9 and Fitzgerald v. Faunce, 46 N.J.L. 536 (1884).

⁴² N.J. Stat Ann. § 12:3-10 (1968).

⁴³ See Atlantic City Elec. Co. v. Bardin, 145 N.J. Super 438, 368 A.2d 366 (1976).

⁴⁴ N.J. Const. Art. VIII § 4, ¶ 2 (1947); N.J. Stat. Ann. § 18A:56-1 et. seq.

not impair the assets of the trust.⁴⁵ This restriction applies even in those circumstances in which the land is to be used for a public purpose.⁴⁶

The State of New Jersey may determine at some point to encourage the development of small-scale hydroelectric power; one incentive that it may not utilize, however, is the lease or sale of state tidelands for nominal consideration.

B. District Regulation of Dam Construction, Operation and Maintenance

1. Permits Required In All Circumstances

a) Dam Construction Permit

After the developer has acquired the requisite property interests at his proposed site, he must obtain a dam construction (or alteration) permit from the Division of Water Resources (hereinafter D.W.R.) within the Department of Environmental Protection (hereinafter D.E.P.).⁴⁷ The permit is required whether the developer intends to construct a new dam or repair, alter or improve an existing one. A permit is not required in the following circumstances:

- 1) the dam will not raise the waters of the river or stream more than five feet above the usual mean low-water mark;
- 2) the drainage area above the dam is less than one-half (1/2) square mile in extent;

⁴⁵ See Atlantic City Elec. Co. v. Bardin; supra n. 43.

⁴⁶ Garrett v. State, 118 N.J. Super. 594, 289 A.2d 542 (1972).

⁴⁷ N.J. Stat. Ann. § 58:4-1 et seq. (West 1966). See also § 13:10-1 through 18.1 (Cum. Supp. 1978-79) with regard to agency reorganization.

3) when the water surface created by a dam is less than one hundred (100) acres in extent, a permit is not required for the repair of the dam which raises the height of the water less than eight (8) feet above the surface of the ground unless a complaint is made, in writing⁴⁸ to the D.W.R. which raises a question of safety.

The developer must submit his construction plans to the D.W.R. before a permit will be issued.⁴⁹ The plans must include surveys, drawings and specifications.⁵⁰ The D.W.R. is required to periodically inspect dams for the purpose of determining their safety and may order such alterations, additions and repairs as it deems necessary.⁵¹ The State Attorney General is authorized to enforce a D.R.W. order in any court of competent jurisdiction.⁵²

If the developer is a company authorized by the laws of the state to dam rivers or streams and to erect dams which are not to exceed a certain height, it may nevertheless be authorized by the D.W.R. to construct dams of a greater height, if, in the judgment of the D.W.R., the interests of the economic development of water power so require.⁵³

⁴⁸ Id. § 58:4-1 (1966). It should be noted that the permit requirement extends to municipalities, as well as corporations and individual persons under this section.

⁴⁹ Id. § 58:4-2.

⁵⁰ Id. § 58:4-3. See also Application Form, Appendix A.

⁵¹ N.J. Stat. Ann. § 58:4-4,5 (West 1966).

⁵² Id. § 58:4-6.

⁵³ Id. § 58:4-7.

As noted in the discussion of State Water Law, once a dam has been constructed and water impounded, certain restrictions may obtain against its abandonment or removal.⁵⁴

There is no statutory mandate which requires a formal hearing on the application for a dam construction/alteration permit.⁵⁵ In addition, the State Administrative Procedure Act (hereinafter A.P.A.) does not, of itself, create a substantive right to an administrative hearing.⁵⁶ However, an informal hearing is provided prior to D.W.R. determination,⁵⁷ and apparently a procedure exists for intra-agency review.⁵⁸ In certain circumstances, an administrative hearing may be compelled by "fundamental procedural fairness."⁵⁹ Two prerequisites, however, must exist. First, there must be contested factual issues which may be presented in an evidentiary manner in proceedings which are targeted at a person. Secondly, the party affected by the administrative

⁵⁴ See discussion Part I-A-2-C, this paper.

⁵⁵ N.J. Stat. Ann. §58:4-1 et seq. (West 1966).

⁵⁶ See Id. § 52:14B-1 et seq. (1970) and Application of Modern Industrial Waste Service, Inc., 153 N.J. Super. 232, 379 A.2d 476 (1977).

⁵⁷ Telephone conversation with Mr. John Garafallo, Principle Engineer, Dam Analysis Section, Bureau of Flood Plain Management, D.W.R., D.E.P., March 19, 1979.

⁵⁸ Telephone Conversation with Mr. John O'Doud, Chief, Bureau of Flood Plain Management, D.W.R., D.E.P. March 19, 1979. Mr. O'Doud also indicated that no regulations have been promulgated pursuant to N.J. State Ann. Chapter 58 (dam construction permit).

⁵⁹ See Cunningham v. Dept. of Civil Service, 69 N.J. 13, 350 A.2d 58 (1975).

action must have a "safeguarded interest," i.e., particularized property rights or other special interests must exist.⁶⁰

Within the context of SSH development, "fundamental fairness" may compel a hearing in a situation where a developer, already owning and operating a SSH facility, applies for a permit to make an alteration and is denied. In this circumstance a sufficient "particularized property right or other special interest" would appear to be present.

2. Permits Required in Certain Circumstances

a) Stream Encroachment Permit

New Jersey law provides that "(n)o structure or alteration within the natural and high-water mark of any stream shall be made by any public authority or private person or corporation without application to and approval by the Department of Environmental Protection. . ."⁶¹ The purpose of the section is to preserve the river and stream channels of the state and provide for the safe and proper flow of water within them.

While the face of the statutory language would appear to extend to SSH in all circumstances, apparently this is not the policy of the D.E.P.⁶²

A permit would be required in the event that construction of the facility necessitated some type of channel work

⁶⁰ Id.

⁶¹ N.J. Stat. Ann. § 58:1-26 (West Com. Supp. 1978-79).

⁶² Conversation with Mr. John O'Doud, Chief, Bureau of Flood Plain Management, D.W.R., D.E.P., March 30, 1979.

at a point in the stream below the dam.⁶³ In addition, it appears that a stream encroachment permit may be required in those circumstances where a dam construction/alteration permit is not required, i.e., where the dam will not raise the waters of the stream more than five (5) feet above the usual mean low-water mark or the drainage area above the dam is less than one-half (1/2) mile in extent.⁶⁴

Initial application for a stream encroachment permit should include a brief description of the proposed project and intended use. Additional information and material may be requested by D.E.P.

b) Riparian Permit

In the event that the developer plans to locate his site within a tidal stream, in addition to purchasing or leasing the underlying land from the state, he must also obtain a riparian permit from the Division of Marine Services (hereinafter D.M.S.) within the D.E.P.⁶⁵

The application for a riparian permit must be signed by the developer and submitted in duplicate.⁶⁶ Plans must be

⁶³ Id. See also N.J. Stat. Ann. § 13:1D-29 (West Cum. Supp. 1978-79), the "90 Day Act" (ninety days for D.E.P. to approve or disapprove application), which would apply to construction or work not directly associated with the construction of the facility itself.

⁶⁴ Supra note 62. See also N.J. Stat. Ann. § 58:4-1 (West 1966) with regard to dam construction permit exemptions. The "90 Day Act" would not apply to this situation in view of the fact that the structure is an "electric generating facility." See N.J. Stat. Ann. § 13:1D-29(b) (5) (West Cum. Supp. 1978-79).

⁶⁵ N.J. Stat. Ann. § 12:5-23 (West Cum. Supp. 1978-79). See also Appendix B, this paper.

⁶⁶ See Appendix B, "Rules Applicable for (Riparian) Permit Applications." See also Appendix C (Riparian Permit Application).

drawn in accordance with applicable regulations of the United States Army Corps of Engineers (fifteen copies must be submitted). The place for deposit of any dredged material must be clearly specified. The developer must furnish an affidavit indicating the actual cost of the work to be done, or if unknown, an estimate of the cost.

The developer has the burden of demonstrating that his project will serve the "public interest" and indicating whether or not it will cause "deleterious" environmental effects.⁶⁷ Any statement by the developer regarding the public interest advanced by his project or its effects on the environment is subject to independent review by the D.E.P.

The "environmental statement" which is required as part of the application process is not pursuant to statutory mandate. Initially, a brief statement or completed "Environmental Questionnaire" is all that need be submitted.⁶⁸ If the D.M.S. determines that additional information is desirable, it will inform the developer.⁶⁹ The extensiveness of any additional information will vary according to the nature of the activity involved and its location.⁷⁰ For example, the construction of a nuclear power facility would inevitably necessitate a

⁶⁷ Id.

⁶⁸ See "Environmental Questionnaire," Appendix D.

⁶⁹ Conversation with Mr. Paul McDowell, Principle Engineer, Permit Section, Office of Riparian Land Management, D.M.R., D.E.P., April 5, 1979.

⁷⁰ Id.

substantial amount of additional information.⁷¹

It must be emphasized that the "environmental statement" referred to here is not the equivalent of the "environmental impact statement" which is frequently required pursuant to a state environmental protection act.⁷² Procedures respecting the riparian environmental statements are not formalized; nor is there any provision for multiple agency review.

c) Coastal Wetlands

Coastal wetlands, under the Wetlands Act of 1970, include any "bank, marsh, swamp, meadow, flat or other low-land subject to tidal action in the State of New Jersey . . . " along certain specified rivers, bays, inlets and estuaries.⁷³ The term coastal wetlands does not include any land or real property which is subject to the Hackensack Meadowlands Development Commission.⁷⁴

The D.E.P. is authorized to issue orders which regulate or restrict the use of the coastal wetlands. Prior to the adoption, modification or repeal of any order, the D.E.P. must hold a public hearing in the county in which the coastal

⁷¹ Id.

⁷² See, e.g., Mass. Gen. Laws Ann. Ch. 30, § 62 et seq. (West 1979). New Jersey does require an Environmental Impact Statement pursuant to its Coastal Area Facility Review Act. See N.J. Stat. Ann. § 13:19-1 et seq. (West 1979). This Act does not, however, apply to S.S.H. Id. § 13:19-3(c).

⁷³ See N.J. Stat. Ann. § 13:9A-2 (West 1979).

⁷⁴ Id. See also § 13:17-1 et seq.

wetlands to be affected are located. An order which is adopted by the D.E.P. must be recorded in the office of the county clerk or registrar of deeds, along with a map of the affected area.

In the event that the developer plans to construct his site within a coastal wetland, he must obtain a wetlands permit from the D.E.P.⁷⁵ An application for the permit must include a detailed description of the proposed work and a map showing the area of the wetland directly affected. He must also submit the names of the owners of record of adjacent land and claimants of rights in or adjacent to the wetlands, of whom the applicant has notice. This would necessitate consultation with the appropriate registrar of deeds.

The Commissioner of the D.E.P., in his review of a wetlands permit application, must consider the effect of the SSH facility on the public health and welfare, marine fisheries, shell fisheries and wildlife. He must consider the protection of life and property from flood, hurricane and other natural disasters.⁷⁶

The structure of the Wetlands Act has virtually eliminated the possibility of a court awarding damages upon a finding that a particular order by D.E.P. is so restrictive as to constitute a "taking" of private land for public use without just compensation. A party who wishes to challenge

⁷⁵ Id. § 13:9A-4.

⁷⁶ Id.

a particular D.E.P. order may seek review in Superior Court.⁷⁷ If the Court determines that the order "so restricts the use of an individual's property as to deprive him of the practical use of the property," i.e., constitutes an unreasonable use of the police power, the Court must later enter a finding that the order is not to apply to the plaintiff's land.⁷⁸

d) Hackensack Meadowlands Permit

The Hackensack Meadowland District consists of state-owned low-lands in the northeast section of the state (within Bergen and Hudson Counties). The District was formed in order to provide for the orderly development of the Hackensack "Meadowlands"--a marshy area which had consistently restricted comprehensive development.⁷⁹ The District is under the direction of a commission which is vested with broad powers regarding the development of the area.⁸⁰

In the event that a developer plans to locate his SSH facility within the District, he must obtain a permit from the commission.⁸¹ A permit will issue only upon approval of

⁷⁷ Id. § 13:9A-6.

⁷⁸ Id. For a general discussion of the Wetlands Act and its standard of "unreasonableness" with regard to D.E.P. orders, see American Dredging Co. v. State D.E.P., 161 N.J. Super. 504, 391 A.2d 1265 (1978).

⁷⁹

N.J. Stat. Ann. § 13:17-1 (West 1979).

⁸⁰

Id. § 13:17-6.

⁸¹ Id. § 13:17-12.

the developer's plans and specifications. No permit will issue unless the developer first obtains a certificate from the chief engineer (or equivalent official) of the commission indicating that the proposed construction or alteration meets the commission's engineering standards.

A municipality that falls ~~within~~ the District and plans to construct a SSH facility must also refer its plans to the commission for approval.⁸²

e) Pinelands Environmental Council

The Pinelands is a region of unique scientific, educational, scenic and recreational value in the southern part of the state. The New Jersey Legislature, in its concern for the conservation of the area, formed the Pinelands Environmental Council in 1971. The Council is an agency of the State of New Jersey and is allocated within the D.E.P.; however, the Council is independent of any supervision or control by the Commissioner of the D.E.P.⁸³

The primary purposes of the Council are to provide for the preservation, enhancement and development of the scenic, historic, recreational and natural resources of the Pinelands region and encourage compatible development.⁸⁴

Any project that would destroy or substantially impair

⁸² Id.

⁸³ Id. § 13:18-1.

⁸⁴ Id. § 13:18-8.

significant historic or recreational resources or bring about a major change in the appearance or use of any area within the Pinelands, is subject to review by the Council.⁸⁵

The Council may provide an informal, preliminary discussion with the developer regarding his proposed facility.⁸⁶ The purpose of this informal discussion would be to provide the developer with an opportunity for preliminary (but not binding) approval for his project and to advise him of any recommendation the council may have.

The developer must submit a description of his facility which is sufficient to enable the Council to determine whether the project is in "substantial conformity" with the coordinative, comprehensive plan adopted by the Council and to determine the effect of the project upon the scenic, historic, scientific and natural resources of the Pinelands region.⁸⁷ The preliminary discussion with the Council would serve to inform the developer as to the nature and extent of the information required of him. This will, of course, vary depending upon the location of the proposed project within the Pinelands region.

A developer is entitled to a public hearing in the event that the Council initially disapproves his project.⁸⁸

⁸⁵ Id. § 13:18-13.

⁸⁶ Id. § 13:18-14.

⁸⁷ Id. § 13:18-15.

⁸⁸ Id. § 13:18-15(d).

3. Review and Comment Power of the New Jersey Department of Energy

The authority of the New Jersey Department of Energy (hereinafter D.O.E.) clearly extends to the development of small-scale hydroelectric energy.⁸⁹ Its jurisdiction is co-extensive with the D.W.R. which may not grant or deny a permit for a SSH project without first referring it to the Division of Energy Planning and Conservation (hereinafter D.E.P.C.) within the D.O.E.⁹⁰ The D.E.P.C. is to receive a copy of the developer's application and all other pertinent papers, documents and materials for review and comment. Prior to making a final determination, the D.W.R. must solicit the views of the D.E.P.C. The views of the D.E.P.C. are to be communicated to the D.W.R. in the form of a report describing the findings of the D.E.P.C. with respect to the developer's application.

In the event that a report is not prepared and transmitted to the D.W.R. within ninety (90) days after the D.E.P.C.'s receipt of the application, the D.W.R. shall act upon the application pursuant to its enabling legislation. In the event that the views of the D.E.P.C., as contained in its report, conflict with the views of the D.W.R., there is to be established an Energy Facility Review Board. The board is to consist of the director of the D.E.P.C., an executive officer from the D.W.R., and a designee of the governor. Any decision

⁸⁹ See N.J. Stat. Ann. § 52:27F-3d,e, (West Cum. Supp. 1978-79).

⁹⁰ Id. § 52:27F-15c.

by the board with respect to a specific application, is binding and must be implemented by the D.W.R. ⁹¹

a) Board of Public Utilities Regulation

When the New Jersey D.O.E. was organized in 1977, the Department of Public Utilities was abolished and its functions, powers and duties were transferred to the Board of Public Utilities (hereinafter B.P.U.) within D.O.E. In addition, the Board of Public Utilities Commissioners and the positions of president and commissioners were continued as the B.P.U.⁹² The B.P.U. is independent of any supervision or control by an officer or employee of the D.O.E. unless expressly provided for in the D.O.E.'s enabling legislation.⁹³

The jurisdiction of the B.P.U. extends to all public utilities within the state.⁹⁴ The term public utility includes every individual, co-partnership, association, corporation or joint stock company that owns, operates, manages or controls any electric light, heat or power plant for public use.⁹⁵ A municipal corporation is not included within the general

⁹¹ Id.

⁹² Id. § 52:27F-6.

⁹³ Id.

⁹⁴ Id. § 48:2-13.

⁹⁵ Id. A private developer who operates a hydroelectric plant for his or her own private use and does not sell excess power to anyone is not subject to B.P.V. jurisdiction. In fact, one recent case held that a landlord who bought electricity from a utility and resold it to his tenants was not compelled to submit to the B.P.V.'s jurisdiction. Antique Village Inn v. Pacitti, Robins & Anglin, Inc. 160 N.J. Super

grant of jurisdiction to the B.P.U.⁹⁶ However, the state legislature may extend the B.P.U.'s jurisdiction to include municipalities by the enactment of a specific statute⁹⁷ and has in fact done so in those circumstances where a municipality supplies electricity beyond its corporate limits.⁹⁸

While a municipality operating a utility only within its corporate limits is not considered a "public utility" for purposes of general jurisdiction under the B.P.U., specific legislation permits some degree of regulation and supervision by the B.P.U.⁹⁹ The following specifically applies to municipal utilities:

- a) it must keep its books, records and accounts in the same manner as provided by statute for keeping other books, records and accounts of a municipality, and file a copy of its Annual Report of Audit with the B.P.U.;
- b) a municipal utility must keep its books, records and accounts and make reports to the B.P.U. in a manner and form and to the same extent as the B.P.U. shall from time to time require of other public utilities in similar businesses in all other situations;
- c) it must comply with all rules, regulations and recommendations as to reasonable standards and service to the same extent as the B.P.U. shall from time to time require of other public utilities engaged in similar businesses.¹⁰⁰

⁹⁶ See Jersey City Incinerator Authority v. Dept. of Public Util., 146 N.J. Super. 243, 369 A.2d 923 (1976).

⁹⁷ Id. 369 A.2d at 929.

⁹⁸ N.J. Stat. Ann. §40:62-24 (West 1967). In such circumstances a municipality is deemed a "public utility." It should be noted, however, that the B.P.U.'s jurisdiction over such municipality extends only in respect to acts of supplying electricity beyond the corporate limits.

⁹⁹ Id. § 40:62-2 (Cum. Supp. 1978-79).

¹⁰⁰ Id.

It should be noted that while not all of the B.P.V.'s regulatory powers extend to municipal utilities, the degree to which they are so regulated, as a result of specific provisions, is not insignificant.

The private developer may be subject to extensive regulation by the B.P.U. Any privilege or function granted to him by a political subdivision must first be approved by the B.P.U.¹⁰¹ Approval can be given only after a hearing is provided and the B.P.U. makes a determination that the privilege or franchise is necessary and proper for the public convenience and properly conserves the public interests. The term "necessary", as used in this context, does not mean essential or absolutely indispensable. Rather, it is sufficient if the proposed service is found to be "reasonably requisite" to serve the public convenience.¹⁰² In granting its approval, the B.P.U. may impose such conditions as to construction, equipment, maintenance, service or operation as the public convenience and interests may reasonably require.¹⁰³

The B.P.U. is authorized to order every public utility to keep a system of accounts and to periodically furnish a detailed report of finances and operations.¹⁰⁴ The B.P.U. may

¹⁰¹ Id. § 48:2-14 (1969). See supra note 95.

¹⁰² See Petition of Public Service Coordinated Transport, 103 N.J. Super. 505, 247 A.2d 888 (1968).

¹⁰³ Supra note 62.

¹⁰⁴ N.J. Stat. Ann. §48:2-16 (West 1969).

also, after notice and hearing, require a public utility to carry a depreciation account whenever, in its determination, the protection of stockholders, bondholders or creditors so requires.¹⁰⁵

One of the most significant functions of the B.P.U. affecting developers is its authority, after notice and hearing, to fix the rates that a public utility charges for its service.¹⁰⁶ A public utility must not charge rates which are unjust, unreasonable, insufficient or unjustly discriminatory or preferential.¹⁰⁷ Essentially, a determination of a "just and reasonable" rate requires a balancing of the interests involved. A public utility is entitled to a fair return upon the fair value of its property and the public is entitled to protection against unreasonable exaction.¹⁰⁸

In addition to its authority to fix existing rates, the B.P.U. is also given power over any request for a rate increase by a public utility.¹⁰⁹ The B.P.U. may also require a public utility to furnish safe, adequate and proper service, including furnishing and performance of service in a manner that tends to conserve and preserve the quality of the environment and prevent the pollution of waters and air of the state.¹¹⁰ The B.P.U. may order a public utility to

¹⁰⁵ Id. 48:2-18.

¹⁰⁶ Id. §48:2-21.

¹⁰⁷ Id.

¹⁰⁸ See Atlantic City Sewerage Co. v. Board of Public Utility Commissioners, 128 N.J.L. 359, 26 A.2d 71 (1942) aff'd. 129 N.J.L. 401, 29 A.2d 850.

¹⁰⁹ N.J. Stat. Ann. § 48:2-21 (West 1969).

¹¹⁰ Id. § 48:2-23 (Cum. Supp. 1978-79).

maintain its property and equipment in such condition as to enable it to accomplish these objectives.¹¹¹

B.P.U. approval is required for any sale, lease, mortgage or other disposal of utility property, except when made to the United States Government. B.P.U. permission is also necessary prior to the discontinuance, curtailment or abandonment of any service.¹¹²

While a number of costs are incurred by the developer who qualifies as a public utility (as a result of the significant amount of regulation that obtains), there are also a number of benefits. For example, any corporation organized under the laws of New Jersey for the purpose of generating, transmitting, supplying and distributing electricity for light, heat or power in or outside the state, and which is a "public utility," may construct, maintain and operate dams in any of the rivers or streams within the state.¹¹³ As a general matter, the dams may flow back and raise the water in the rivers or streams above the dam to a height not exceeding ten (10) feet above common low-water mark. However, as noted previously in this paper, the D.W.R. (within the D.E.P.) may authorize the corporation to flow back and raise the water to heights exceeding ten (10) feet above common low-

¹¹¹ Id.

¹¹² Id. § 48:2-24 (1969).

¹¹³ Id. § 48:7-7.

water mark if the interests of the economical development of electric power so requires.¹¹⁴

In order to accomplish its objectives, such corporation may exercise the power of eminent domain.¹¹⁵ The power may not be used, however, until the corporation (developer) applies to the B.P.U. and notice and public hearing is provided for the affected landowner(s).¹¹⁶ The B.P.U. must find that the land or interest sought to be acquired is "reasonably necessary" for the service, accomodation, convenience or safety of the public, and that the taking of the land or interest is not incompatible with the public interest, and would not unduly injure the owners of private property.¹¹⁷

C. Indirect Regulation

There exists a number of considerations, apart from direct permit requirements, that the developer should be aware of. While these may be said to affect him "indirectly," they may nevertheless be quite significant in their impact.

1. Fishways, Canals, etc.

If the developer builds his dam on a navigable stream, the D.E.P. may require the construction of canals, locks, gates, shoots or other openings for the purpose of protecting the interests of navigation.¹¹⁸ In addition, the D.E.P. may re-

¹¹⁴ Id.

¹¹⁵ Id. § 48:17.6. See also § 48:7-8.

¹¹⁶ Id. § 48:3-17.7. See also § 48:7-10.

¹¹⁷ Id.

¹¹⁸ Id. § 48:7-9.

quire that any dam be provided with a fishway for the passage of fish--regardless of whether or not the dam is located on a navigable stream. The D.E.P. must provide the developer with a public hearing prior to making a determination that any such additional construction would be necessary.¹¹⁹

2. Wild and Scenic Rivers Act

The developer must consider whether or not his S.S.H. facility will affect a river or stream which is included within the New Jersey Wild and Scenic Rivers System. The state legislature has determined that many rivers or sections of rivers possess outstanding scenic, recreational, geological, historic or similar values.¹²⁰ Rivers that are selected for inclusion within the system constitute a "public trust" that must be preserved and protected for the benefit of present and future generations.

There exist four classifications within the river system:

- a) Wild River Areas, i.e., those rivers (or sections thereof) that are free of impoundment and generally inaccessible except by trail;
- b) Scenic River Areas, i.e., those rivers (or sections thereof) that are free of impoundment but accessible in places by road;
- c) Recreational River Areas; i.e., those rivers (or sections thereof) that are readily accessible, that may have

¹¹⁹ Id.

¹²⁰ Id. § 13:8-46 (1979).

undergone some development along their shorelines, and that may have undergone some impoundment prior to inclusion in the system;

d) Developed Recreational Rivers, i.e., those rivers (or sections thereof) that are readily accessible, that may have undergone substantial development along their shorelines, and that may have undergone substantial impoundment, but which remain suitable for a variety of recreational uses.¹²¹

Inclusion of a river within the Wild and Scenic Rivers System must be preceded by a public hearing at a location which is convenient to all interested parties.¹²²

Inclusion of a river within the Wild and Scenic River System in New Jersey may stand as a complete bar to SSH development at a particular site. Consequently, the developer should consult D.E.P. (which administers the System) early in his preliminary investigation in order to determine the status of a given river.

In addition to the rules and regulations promulgated by D.E.P. for the administration of a Wild and Scenic River Area, a municipality may form a wild and scenic river commission which may promulgate additional rules and regulations for the management of the area.¹²³ The developer must therefore also consult with the local commissions of affected municipalities in addition

¹²¹ Id. § 13:8-48.

¹²² Id. § 13:8-49.

¹²³ Id. § 13:8-53.

to consulting with the D.E.P.

3. Environmental Rights Act

Any "person" (which includes, among others, corporations, associations, firms, individuals, the state and political subdivisions) in New Jersey may maintain an action in a court of competent jurisdiction against any other person to enforce, or restrain the violation of, any statute, regulation or ordinance which is designed to prevent or minimize pollution, impairment or destruction of the environment.¹²⁴ In the event that a statute, regulation or ordinance is not in issue, any person may nevertheless maintain an action in a competent state court for declaratory and equitable relief against another person for the protection of the environment provided that the action is not "patently frivolous, harassing or wholly lacking in merit."¹²⁵

If a non-frivolous action is brought to a court of competent jurisdiction under the "Environmental Rights Act" (hereinafter E.R.A.), that court must adjudicate the impact of the defendant's conduct on the environment and the public interest.¹²⁶ No conduct may be authorized or approved by the court which does, or is likely to, have a deleterious impact on the environment, so long as there is a feasible and prudent alternative consistent with the reasonable requirements of the public health, safety

¹²⁴ Id. § 2A:35A-4 (Supp. 1978-79).

¹²⁵ Id. § 2A:35A-4(c).

¹²⁶ Id. § 2A:35A-7(b).

and welfare.¹²⁷ The court is authorized to grant temporary and permanent equitable relief, including the imposition of conditions which are designed to protect the environment, or the interests of the public in the environment.¹²⁸

While SSH is likely to be one of the least intrusive sources of energy in terms of deleterious impacts on the environment, the developer must nevertheless consider the possibility that his project may be subject to challenge under E.R.A. It must be recalled that an action can be maintained against the developer so long as the asserted claim, on its face, is not frivolous. In addition, an action may be brought by a single individual. These factors combine to make the developer readily amenable to suit under E.R.A. While he may eventually prevail in any such action, the process of litigation itself could well involve substantial additional costs.

4. A Note on The New Jersey Register of Historic Places and The Coastal Area Facilities Review Act

a) Historic Places

A New Jersey Register of Historic Places exists in the Division of Parks and Forestry within the D.E.P.¹²⁹ The Commissioners of the D.E.P., with the advice and consent of the Historic Sites Council, establishes criteria for receiving and processing nominations and approval of areas, sites, structures

¹²⁷ Id. § 2A:35A-7(a).

¹²⁸ Id. § 2A:35A-6.

¹²⁹ Id. § 12:1B-15.128 (1979).

and objects for inclusion in the Register of Historic Places.¹³⁰

As regards the protection of these historic places, the state, a county, municipality or an agency or instrumentality of any of the foregoing, must not undertake any project which will encroach upon, damage or destroy any area, site or structure within the Register without obtaining consent from the D.E.P.¹³¹ This prohibition has not been construed to extend to the regulation of private property owners. As one state superior court has noted: "(t)he prohibitions in this section apply strictly to actions on the part of the State, county or municipality. No attempt is made to regulate or restrict the rights of property owners."¹³² Apparently the phrase "undertake any project" refers only to active participation on the part of a government entity and not administrative functions. For example, the issuance of a building permit is considered an administrative function; consequently it would not be proscribed under the provisions establishing the Register of Historic Places.¹³³ It appears that the issuance of a dam construction permit by D.E.P. would also fall within the definition of administrative function. In the event that the developer's facility might affect an "historic place" listed on the New Jersey Register,

¹³⁰ Id.

¹³¹ Id. § 13:1B-15.131

¹³² Hoboken Environmental Committee v. German Seaman's Mission, 161 N.J. Super. 256, 391 A.2d 577 at 584 (1978).

¹³³ Id.

the issuance of a dam construction permit alone would not sufficiently rise to the level of a "governmental undertaking" to be prohibited under the applicable statutory section.¹³⁴ On the other hand, more active state participation, possibly funding, may very well constitute the governmental undertaking necessary to trigger the prohibition.

b) Coastal Area Facilities Review Act

A "facility" constructed within the coastal area of the state falls within the provisions of the Coastal Area Facilities Review Act (hereinafter C.A.F.R.A.).¹³⁵ Before a permit may be issued under C.A.F.R.A., an applicant must submit an environmental impact statement which appears to rival the statement required under the National Environmental Protection Act (N.E.P.A.).¹³⁶ Fortunately, for the developer, the provisions of C.A.F.R.A. do not extend to SSH. Only the following fall within the meaning of "facility" for purposes of the Act: oil, gas or coal fired electric generating plants and nuclear power facilities.¹³⁷

In view of the fact that the developer need not comply with C.A.F.R.A., he is afforded a substantial saving -- both in terms of time and of money.

¹³⁴ Supra note 131.

¹³⁵ N.J. Stat. Ann. § 13:19-1 et seq. (West 1979).

¹³⁶ Id. § 13:19-7.

¹³⁷ Id. § 13:19-3(c)(1).

D. Delaware River Basin Commission

The States of New Jersey, New York, Delaware and Pennsylvania are parties to the Delaware River Basin Compact.¹³⁸ The general purpose of the Compact is to promote interstate comity with regard to the use and development of the Delaware River Basin. The Commission which was formed pursuant to the provisions of the Compact is empowered to develop and effectuate plans, policies and projects relating to the water resources within the basin.

The jurisdiction of the Delaware River Basin Commission (hereinafter D.R.B.C.) clearly extends to hydroelectric development. The waters of the Delaware River and its tributaries may be impounded and used by, or under the authority of the D.R.B.C. for the generation of hydroelectric energy.¹³⁹ In order to effectuate this end, the D.R.B.C. may develop and operate, or authorize to be developed and operated, dams and related hydroelectric facilities. Recently the D.R.B.C. adopted a policy of encouraging the development of SSH energy at existing and proposed impoundments in the Delaware Basin.¹⁴⁰

D.R.B.C. jurisdiction also includes a permit requirement for hydroelectric development within the Delaware River Basin. This requirement is in addition to the requirements of the New Jersey licensing system; however, the opportunity for administrative agreements appears to protect against unnecessary duplic-

¹³⁸ See N.J. Stat. Ann. § 32:11D-1 et seq. (West 1963).

¹³⁹ Id. § 32:11D-46.

¹⁴⁰ Resolution No. 79-24, Delaware River Basin Commission.

ity.¹⁴¹

II. FINANCIAL CONSIDERATIONS

A. Taxation

Taxation of public utilities constitutes a major annual expense which SSH developers must consider when determining project feasibility. The New Jersey Constitution provides that property, in general, shall be assessed under general laws and uniform rules and that such laws shall provide for the equalization of assessments and for the levy of any necessary additional taxes.¹⁴² The New Jersey legislature has provided for two taxes on public utility property. Inasmuch as some hydroelectric dams will be classified as public utilities in New Jersey, these two taxes are respectively discussed below.

1. Franchise, Excise and Gross Receipts Tax

Those low head hydroelectric dams that meet the statutory definition of public utilities are required to pay franchise, excise and gross receipts taxes.¹⁴³ That portion of the utility's product is sold or furnished to another utility, which must also pay the taxes, is exempt.¹⁴⁴ The franchise and gross receipts taxes are levied in lieu of a personal property tax;¹⁴⁵ therefore, SSH dams are not subject to a personal property tax on

¹⁴¹ For a more detailed discussion of the permit requirement and the administrative functions of the commission see Schmidt, Legal Obstacles and Incentives to the Development of Small Scale Hydroelectric Power in Delaware, pp. 48-57 (August 31, 1979).

¹⁴² N.J. Const. art. 8, § 1.

¹⁴³ N.J. Stat. Ann. § 54:30-1 (West 1960).

¹⁴⁴ Id.

¹⁴⁵ Id.

equipment and machinery.

All utilities using or occupying public streets, highways and the like by virtue of state or municipal franchises are liable for the taxes.¹⁴⁶ The taxes are assessed by the Director of the Division of Taxation, which is located in the Department of Treasury. The Director computes the taxes by April 1.¹⁴⁷ Taxpayers shall make payment thereof by May 1.¹⁴⁸

The Director's computations are based upon two statutory mandates. First, the legislature required that the Director apportion among the municipalities the value of that portion of the utility's "scheduled property" located in the respective municipalities.¹⁴⁹ "Scheduled property" is specifically defined and listed to include such items as electric generating stations, substations, poles, conductors, street lights, line transformers and underground cables. Each item is assessed a statutory unit value.¹⁵⁰ Second, the Director then computes the franchise tax, the excise tax and the gross receipts tax by placing the above measures into the statutory formula. The formulas for each tax are described below.

The franchise tax is a sum equal to five (5) percent of that

¹⁴⁶ Id. § 54:30A-49 (Cum. Supp. 1978-79).

¹⁴⁷ Id. § 54:30A-54.1.

¹⁴⁸ Id.

¹⁴⁹ Id. § 54:30A-56 (1960).

¹⁵⁰ Id. § 54:30A-58 (Cum. Supp. 1978-79).

portion of the utility's gross receipts as the total length of the utility's lines in the municipality (exclusive of service connections) bears to the total length of the utility's lines in the state. If gross receipts are less than \$50,000, the tax is computed at the rate of two (2) per cent.¹⁵¹

The excise tax is computed in the same formula as the franchise tax. The only distinction is that the excise tax is computed at a rate of .625 per cent.

The gross receipts tax is a sum equal to seven and one-half (7-1/2) per cent of the gross receipts of the utility's business "on, over, in, through or from"¹⁵² its lines.¹⁵³

Municipal tax collectors collect the taxes and forward them to the Director.¹⁵⁴ Payment may be made as follows: one-third is due within thirty days of certification to the utility; one-third is due on September 1; and, the final third is due on December 1.¹⁵⁵ The Director then retains some of the taxes for state use and remits a portion to the municipalities for local use.¹⁵⁶

¹⁵¹ Id. § 54:30A-54(a).

¹⁵² Id. § 54:30A-54(c).

¹⁵³ Id. § 54:30A-54(b).

¹⁵⁴ Id. § 54:30A-62 (1960).

¹⁵⁵ Id.

¹⁵⁶ Telephone interview with Mr. John Volk, Auditor in the Division of Taxation, New Jersey Department of Treasury, April 6, 1979.

2. Local Real Estate Tax

In addition to the franchise, excise and gross receipts taxes, public utilities in New Jersey are subject to local tax assessments on real property. Real property assessments are computed at that per cent of "true value" as established by the county board of taxation.¹⁵⁷ The rate of taxation must not be lower than twenty (20) per cent, nor higher than one hundred (100) per cent of true value. That rate is established by resolution of the county board.¹⁵⁸ The true value is the full and fair value of each parcel as, in the assessor's judgment, would sell at a fair and bona fide sale by contract.¹⁵⁹

Although municipalities may subject hydroelectric dams to local tax assessments, the municipalities are limited as to what items are considered part of the real estate. In 1924, the New Jersey Supreme Court held that local governments may not include dams (the structures themselves) in the real estate tax assessments.¹⁶⁰ The Court reasoned that the dam itself was part of the machinery of the power station used in the production of electricity. Machinery, the Court found, is personal property. Personal property of public utilities is not taxed.¹⁶¹ Therefore, it was improper to include the dam in the

¹⁵⁷ N.J. Stat. Ann. § 54:4-2.25 (West 1960).

¹⁵⁸ Id. §§ 54:4-2.26; 54:4-2.27.

¹⁵⁹ Id. § 54:4-23 (West Cum. Supp. 1978-79).

¹⁶⁰ Eastern Pennsylvania Power Co. v. State Board of Taxes and Assessments, 100 N.J.L. 255, 126 A. 216 (1924).

¹⁶¹ Id.

real estate assessment.

The Legislature codified that Court holding in Chapter 54 of the New Jersey Statutes. All real estate is specifically allowed to be taxed by municipalities.¹⁶² Real estate is defined to exclude dams and reservoirs.¹⁶³ (Emphasis supplied.) Real estate does, however, include the value of buildings and shelters located thereon.¹⁶⁴ The local assessor also may include the value of any water rights incident to the ownership of land.¹⁶⁵ The courts have determined the correct method of valuation to be original cost trended upward to reflect construction cost increases.¹⁶⁶ Assessors may also allow for depreciation based on functional life expectancy.¹⁶⁷

3. Exemptions

Two major exemptions from taxation exist. The first has already been discussed, i.e., dam structures themselves are tax exempt. Second, municipally owned systems are exempt from local real estate assessments.¹⁶⁸ No other tax exemptions exist.

¹⁶² N.J. Stat. Ann. § 54:30A-52 (West 1960).

¹⁶³ Id. § 54:30A-50(b) (Cum. Supp. 1978-79).

¹⁶⁴ Public Service Elec. & Gas Co. v. Township of Woodbridge, 73 N.J. 474, 375 A.2d 1165 (1977).

¹⁶⁵ N. Y., Lake Erie & Western Railroad Co. v. Yard, 43 N.J.L. 632 (1881).

¹⁶⁶ Public Service Elec. & Gas Co. v. Township of Woodbridge, supra note 164.

¹⁶⁷ Id. 351 A.2d at 808.

¹⁶⁸ Landis Township v. Division of Tax Appeals, 136 N.J.L. 310, 55 A.2d 775 (1947).

B. Financial Assistance

1. The New Jersey Economic Development Authority

A spiraling unemployment rate within the state and concern for the deteriorating condition of the natural environment motivated the New Jersey legislature to adopt the Economic Development Authority Act in 1974.¹⁶⁹ It was hoped that state aid and encouragement--specifically through financial assistance--for the commencement of new construction "projects" of all types would help to alleviate the increasingly intolerable conditions within the state.¹⁷⁰ The term "project" as used under the Act clearly extends to hydroelectric power and related construction.¹⁷¹

The Economic Development Authority (hereinafter E.D.A.) is a public body corporate and politic and an instrumentality of the state.¹⁷²

Among its enumerated powers is the authority to extend credit or make loans to any person for the "planning, designing, acquiring, constructing, reconstructing, improving, equipping and furnishing of a project. . ."¹⁷³

An interested developer must submit an application for assistance to the Director of the Division of Economic Development (hereinafter D.E.D.) within the Department of Labor and Industry.¹⁷⁴

¹⁶⁹ N.J. Stat. Ann. § 34:1B-2(a) (West Cum. Supp. 1978-79).

¹⁷⁰ Id. §§ 34:1B-2(c); 34:1B-2(d).

¹⁷¹ Id. § 34:1B-3(h).

¹⁷² Id. § 34:1B-4(a).

¹⁷³ Id. § 34:1B-5(q).

¹⁷⁴ Id. § 34:1B-6.

Prior to making any commitment for such assistance, the E.D.A., after consultation with the Director of the D.E.D., must find that the assistance provided will tend to maintain or provide gainful employment for the inhabitants of the state and shall serve a public purpose by contributing to the general health and welfare.¹⁷⁵

It appears that the developer may also be able to obtain loans directly from the D.E.D. for the purpose of surveying the feasibility of locating a SSH site within the state.¹⁷⁶ The state will pay an amount up to fifty per cent (50%) of the cost of the survey.¹⁷⁷

¹⁷⁵ Id.

¹⁷⁶ Id. § 13:16-13 et seq. (1979).

¹⁷⁷ Id. § 13:16-15(a).

Appendix A.

Form 62-1M

Dam Application No.

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
POST OFFICE BOX 2809
TRENTON, N.J. 08625

APPLICATION FOR PERMIT FOR CONSTRUCTION OR REPAIR OF DAM

, New Jersey

19

To the Division of Water Resources

Gentlemen:

In compliance with the provisions of Title 58, Chapter 4, Revised Statutes

(Insert name and address of public authority, private person or corporation which will be owner of the dam)

hereby makes application for the approval of drawings and for the issuance of a permit to construct (reconstruct or repair) a dam known as _____ (Insert name of dam)

across _____ in _____ New Jersey,
(Insert name of stream) (Municipality and County)

at a point _____ (Give location by distance from mouth of stream, county or municipal boundary)

or other political feature).

for the purpose of _____
(State the purpose of the proposed lake)

in accordance with the following information and with the complete specifications and drawings filed with this application and made part hereof, as follows:

Area of water shed square miles.

Area of water surface - Design Flood Condition acres.
Area of water surface - Normal Condition acres.
Normal Impoundment million gallons.
Capacity of spillway at feet head, is cubic ft. per second.
The character of the foundation material is
•
•
•

As determined by _____

Paper attached:

1. Specifications for structure. (Two (2) Sets)
2. Location map.
3. Drawings. (blue prints not over 30 inches wide) showing, (Four (4) Sets)
 - a. Plan of structure and reservoir, showing adjacent property lines.
 - b. Longitudinal section of dam site.
 - c. Cross sections of dam and spillway.
 - d. Result of borings or other sub-surface investigations at dam site (if made).

The specifications and drawings have been prepared by _____

N.J. LICENSE NO. _____

(Insert name and address of engineer)

Respectfully submitted,

By _____

(Signature)

NOTE: This application, together with drawings, specifications, information and data filed in connection therewith, will remain on file in the office of the Division of Water Resources.

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF MARINE SERVICES
OFFICE OF RIPARIAN LANDS MANAGEMENT
P. O. BOX 1889
TRENTON, NEW JERSEY 08625

RULES APPLICABLE FOR PERMIT APPLICATIONS

1. All applications for permits where a riparian grant or conveyance has been made by the State but not to the applicant must be accompanied by a full and duly certified copy of the deed or other lease upon which it is intended to construct and/or dredge. All permits are revocable at the discretion of the State. No permits will be issued on lands where applicant has not first received a riparian grant or lease or license. As further evidence, affidavit that applicant has not sold, assigned, transferred or in any way disposed of any of the riparian rights as described in filed deed and is still the owner of the riparian rights at the time of filing the application for permit, an abstract of title to said riparian rights owned by the applicant must be furnished. A certificate of title, however, supplied by a title guaranty company, an attorney or the County Clerk may be accepted in lieu thereof. In case the applicant is not the owner of the riparian rights the above proof of title must be filed by the owner along with owner's written permission to applicant to perform the work applied for.

2. The application must be in duplicate, signed by the property owner.

3. Plans must be submitted in at least 15 copies (with one tracing cloth copy), in accordance with applicable law and regulations, including those of the U. S. Army Corps of Engineers Office, except as to location with reference to property lines. For dredging operations, the place for deposit of dredged material must be specified, including the manner of disposition and approvals.

4. General location of work, which may be an accurate cloth tracing from a map of the Coast Survey or Geological Survey, noting on drawing the number of the chart used. This may be an insert in the corner of the locality plan, which latter must be on scale sufficiently large to furnish data for study of the subject under consideration.

5. Location with reference to lines of upland property, roads, sewer lines, utility, riparian conveyances and mean high water. The outline of work to be in red.

6. Construction, giving general dimensions, with sizes and spacing of piers, timbers, beams, penetration of piles.

7. North points should be in the same direction for all plans on the same sheet, and if possible, should be directed toward the top of the sheet.

8. Elevations and soundings are to be referred to mean low water.

9. Sizes of plans must be 8 x 10 $\frac{1}{2}$ inches, single sheet, or folded to that size once from 8 x 21 inches or 19 $\frac{1}{2}$ x 16 inches. In exceptional cases sheets not larger than 27 x 24 inches may be sent. As many sheets as are necessary may be allowed. Margins of one inch for binder are to be left on the top and left-hand side.

10. The signature and seal of a New Jersey Licensed Engineer must be affixed in accordance with Laws of New Jersey.

11. The number of copies required is fifteen; usually blue or black and white prints on linen or sepia tracing with one print therefrom. Clear photographic reproductions of a printed plan will be accepted.

12. Applicant must furnish an affidavit setting forth the actual cost of the work to be done, or if unknown, an estimate of such cost. The State reserves the right to request audit to confirm cost of project. If all or a portion of the labor or material costs are donated or received free of any monetary charge, the applicant will estimate the value of such materials and services received in computing the total cost of the project.

13. ENVIRONMENTAL IMPACT -

Applicants are required to supply information regarding their requests in accordance with application forms furnished by the Division of Marine Services, Department of Environmental Protection. All information shall be supplied in writing or by means of documentation. The applicant is required to provide full information regarding the environmental and ecological effects of the work encompassed by his application. In the case of grants, applicants must give a full and complete description of the work they plan to do on the submerged lands for which application is being made.

THE APPLICANT SHOULD DEMONSTRATE HOW HIS PROJECT WILL SERVE THE PUBLIC INTEREST, AND STATE WHETHER OR NOT IT WILL CAUSE OR TEND TO CAUSE DELETERIOUS ENVIRONMENTAL EFFECTS. STATEMENTS AS TO THE DEGREE OF PUBLIC INTEREST ADVANCED BY THE PROJECT AND THE EFFECT OF THE PROJECT ON THE ENVIRONMENT ARE SUBJECT TO INDEPENDENT EVALUATION AND ANALYSIS BY THE STATE.

(10/76)

APPLICATION FOR REVOCABLE PERMIT

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF MARINE SERVICES
OFFICE OF RIPARIAN LANDS MANAGEMENT
P. O. BOX 1889
TRENTON, NEW JERSEY 08625

APPENDIX C

DATE _____

FILE NO. _____

Gentlemen:

Application is hereby made for issuance of a revocable permit to carry out the following work.

1. APPLICANT:

(NAME) _____

(ADDRESS) _____

(BUSINESS) _____

2. LOCATION OF WORK:

MUNICIPALITY) _____

(NAME OF WATERWAY) _____

3. GENERAL DESCRIPTION OF WORK CONTEMPLATED: _____

4. INTENDED USE OF THE STRUCTURES, IF ANY: _____

5. MISCELLANEOUS DATA:

a. How work is to be done (contract, etc.) _____

b. Certified Estimated Cost (subject to audit & confirmation) _____

c. Date when work is contemplated to be started or contract advertised _____

d. Length of time to complete work _____

e. Names and Addresses of owners of adjoining property, if any, on each side within 500 feet. _____

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6. GENERAL REMARKS:

Applicant understands that the State may demand from applicant information in addition to that set forth herein and may make whatever investigation the State deems appropriate in considering this application. Applicant further understands that neither proper submission of the information herein, nor submission of all additional information demanded by the State in any way entitles applicant to a permit.

There are submitted herewith, in addition to the above information, six (6) copies of specifications and detailed plans, showing location of the proposed construction for which a permit is herewith requested with reference to property lines together with a statement of environmental impact. It is understood that any permit is revocable by the State and is subject to compliance with applicable laws and regulations. Applicant recognizes that issuance of a permit is within the sole and absolute discretion of the State.

Respectfully yours,

ENVIRONMENTAL QUESTIONNAIRE

To assist in the processing of your application for a riparian (waterfront development) permit, the following information is requested:

1. Season of the year in which proposed work is expected to be undertaken.

2. Period of time required to complete the proposed work. Both actual work time and duration of the project are required (i.e., three weeks of work time over a two-month period).

3. Information characteristics of neighborhood (i.e., high, medium or low density; residential, commercial or industrial).

4. Types of adjacent marine structures and approximate distance from the project site.

5. Distance to noise sensitive areas (i.e., schools, hospitals, etc.)

6. Types of construction equipment to be used during construction and number of each type (i.e., bulldozers, trucks, cranes, etc.).

7. Specific location of spoil disposal site. If work is to be done by a contractor, the specific site information must be submitted.

8. Age of man-made canal (if appropriate).

9. Photographs of the project site are requested.

Applicant or Agent