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STUDY OF THE IMPACTS OF REGULATIONS
AFFECTING THE ACCEPTANCE OF
INTEGRATED COMMUNITY ENERGY SYSTEMS

PRELIMINARY BACKGROUND REPORT

MASTER

Public Utility, Energy Facility
Siting and Municipal Franchising
Regulatory Programs in the United States

DUANE A. FEURER
CLIFFORD L. WEAVER
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January, 1980

WORK PERFORMED UNDER DOE CONTRACT NO.

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Ross, Hardies, O'Keefe,
Babcock & Parsons
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UNITED STATES DEPARTMENT OF ENERGY

Division of Buildings and Community Systems
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ABSTRACT

This report is one of a series of preliminary reports describing the laws and regulatory programs of the United States and each of the 50 states affecting the siting and operation of energy generating facilities likely to be used in Integrated Community Energy Systems (ICES). Public utility regulatory statutes, energy facility siting programs, and municipal franchising authority are examined to identify how they may impact on the ability of an organization, whether or not it be a regulated utility, to construct and operate an ICES.

This report describes laws and regulatory programs in the United States. Subsequent reports will (1) describe public utility rate regulatory procedures and practices as they might affect an ICES, (2) analyze each of the aforementioned regulatory programs to identify impediments to the development of ICES, and (3) recommend potential changes in legislation and regulatory practices and procedures to overcome such impediments.

CHAPTER 1
INTRODUCTION

One response to current concerns about the adequacy of the nation's energy supplies is to make more efficient use of existing energy sources. The United States Department of Energy (DOE) has funded research, development and demonstration programs to determine the feasibility of applying proven cogeneration technologies in decentralized energy systems, known as Integrated Community Energy Systems (ICES), to provide heating, cooling and electrical services to entire "communities" in an energy conserving and economic manner.

The relevant "community" which will be appropriate for ICES development will typically consist of a combination of current energy "wasters" -- i.e., installations with large energy conversion facilities which now exhaust usable amounts of waste heat or mechanical energy -- and current energy users -- i.e., commercial or residential structures which currently obtain electricity and gas from a traditional central utility and convert part of it on customer premises to space heating and cooling purposes.

In most current applications, energy conversion facilities burn fuels such as coal, oil or natural gas to produce a single energy stream, such as process steam or electricity, for various industrial processes or for sale to other parties. However, the technology exists to produce

more than one energy stream from most energy conversion processes so that the input of a given amount of fuel could lead to the production and use of far more usable energy than is presently produced. This technology is the foundation of the ICES concept. Current examples of the technology can be found on university campuses, industrial or hospital complexes and other developments where a central power plant provides not only electricity but also thermal energy to the relevant community.

It is generally assumed by DOE that ICES will be designed to produce sufficient thermal energy to meet all the demands of the relevant community. With a given level of thermal energy output, an ICES generation facility will be capable of producing a level of electricity which may or may not coincide with the demand for electricity in the community at that time. Thus, an ICES will also be interconnected with the existing electric utility grid. Through an interconnection, the ICES will be able to purchase electricity when its community's need for electricity exceeds the amount can be produced from the level of operations needed to meet the community's thermal needs. In addition, when operations to meet thermal needs result in generation of more electricity than necessary for the ICES community, the ICES will be able to sell excess electricity through the interconnection with the grid.

ICES may take a variety of forms, from a single owner-user such as massive industrial complex or university campus where all energy generated is used by the owner without sales to other customers, to a large residential community in which a central power plant produces heat and electricity which is sold at retail to residents of the community. Since successful operation of an ICES presupposes that the ICES will be able to use or sell all energy produced, it can be anticipated that all ICES will at some point seek to sell energy to customers or to the electric utility grid from which the electricity will be sold to customers. By their very nature ICES are likely to be public utilities under the laws of many, or even all, states.

The Chicago law firm of Ross, Hardies, O'Keefe, Babcock & Parsons has undertaken a contract with the Department of Energy to identify impediments to the implementation of the ICES concept found in existing institutional structures established to regulate the construction and operation of traditional public utilities which would normally be the suppliers to a community of the type of energy produced by an ICES.

These structures have been developed in light of policy decisions which have determined that the most effective means of providing utility services to the public is by means of regulated monopolies serving areas large enough to permit economies of scale while avoiding wasteful

duplication of production and delivery facilities. These existing institutional structures have led to an energy delivery system characterized by the construction and operation of large central power plants, in many cases some distance from the principal population centers being served.

In contrast, effective implementation of ICES depends to some extent upon the concept of small scale operations supplying a limited market in an area which may already be served by one or more traditional suppliers of similar utility services. ICES may in many instances involve both existing regulated utilities and a variety of non-utility energy producers and consumers who have not traditionally been subject to public utility type regulation. It will also require a variety of non-traditional relationships between existing regulated utilities and non-regulated energy producers and consumers.

Ross, Hardies, O'Keefe, Babcock & Parsons is being assisted in this study by Deloitte Haskins & Sells, independent public accountants, Hittman Associates, Inc., engineering consultants, and Professor Edmund Kitch, Professor of Law at the University of Chicago Law School.

The purpose of this report is to generally describe the existing programs of public utility regulation, energy facility siting and municipal franchising likely to relate to the development and operation of an ICES, and the construction of ICES facilities in the United States. Attention

is given to the problems of the entry of an ICES into a market for energy which has traditionally been characterized by a form of regulated monopoly where only one utility has been authorized implementation of the ICES concept and a series of recommendations for responding to those impediments. oriented to serve a given area and to the necessary relationships between the ICES and the existing utility. In many jurisdictions legal issues similar to those likely to arise in the implementation of the ICES concept have not previously been faced. Thus, this report cannot give definitive guidance as to what will in fact be the response of existing institutions when faced with the issues arising from efforts at ICES implementation. Rather, this report is descriptive of present institutional frameworks as reflected in the public record.

Further reports are being prepared describing the determination and apportionment of relevant costs of service, rates of return and rate structures for the sale and purchase of energy by an ICES. Impediments presented by existing institutional mechanisms to development of ICES will be identified and analyzed. In addition to identifying the existing institutional mechanisms and the problems they present to implementation of ICES, future reports will suggest possible modifications of existing statutes, regulations and regulatory practices to minimize impediments to ICES.

This report is one of a series of preliminary reports covering the laws of all 50 states and the federal government. In addition to the reports on individual states, Ross, Hardies, O'Keefe, Babcock & Parsons is preparing a summary report which will provide a national overview of the existing regulatory mechanisms and impediments to effective implementation of the ICES concept and a series of recommendations for responding to those impediments.

CHAPTER 2

REGULATION OF PUBLIC UTILITIES IN THE UNITED STATES

I. INTRODUCTION

The bulk of federal regulation of public utilities is found in the Public Utility Act of 1935.^{1/} Title I of that Act comprises the Public Utility Holding Company Act, and vests authority in the Securities and Exchange Commission (SEC) to regulate the nation's public utility holding companies. Title II constitutes the Federal Power Act under which the Federal Energy Regulatory Commission (FERC) is authorized to regulate the electric utility industry. Recent amendments to the Federal Power Act grant additional powers to FERC, some of which deal with cogeneration specifically.

In addition to the above titles of the Public Utility Act of 1935, various statutes have been enacted establishing federal regional power administrations which are generally authorized to produce and distribute power as well as to regulate the interconnection of electric energy transmission facilities within given geographical areas.

Finally, under the Natural Gas Act^{2/} the interstate transportation of natural gas and the sale for resale of natural gas in interstate commerce are regulated by FERC. In addition, FERC has been granted regulatory and certifying power with respect to the facilities of companies engaged in such transportation and sales.

II. REGULATION UNDER THE FEDERAL POWER ACT

A. The Federal Energy Regulatory Commission

FERC is responsible for administering the Federal Power Act. It replaces the Federal Power Commission (FPC)^{3/} and is a branch of the Department of Energy. Under certain circumstances, FERC is subject to overriding authority of the Secretary of the Department.^{4/} FERC is composed of five members appointed by the President of the United States with the advice and consent of the Senate for four year terms.^{5/}

B. Jurisdiction of FERC

1. Federal Power Act.

The Federal Power Act contains two subchapters. Subchapter I gives FERC certain powers with respect to hydroelectric power plants operated in connection with navigable waters.^{6/} Subchapter II gives FERC certain powers with respect to the transmission or sale of electric energy in interstate commerce and, with respect to facilities (other than generating facilities) used for such transmission and sales.^{7/}

With respect to both subchapters, FERC has broad rule-making powers.^{8/} FERC recommends a rule, and the Secretary of the Department of Energy may approve, disapprove, or modify it.^{9/} FERC may use rule-making procedures for the establishment of rates and charges under the Federal Power Act.^{10/} Public notice is generally required, and interested persons may present their views.^{11/} The Administrative

Procedure Act^{12/} generally applies to FERC.^{13/}

FERC is also authorized, to the extent it determines it to be necessary to the exercise of its other functions, to exercise various of the former procedural and administrative powers of the FPC as provided in the Federal Power Act.^{14/}

a. Subchapter I.

Subchapter I of the Federal Power Act gives FERC authority to regulate the construction, operation and maintenance of powerhouses and transmission lines for the development and integration of power across, along, from or in navigable waters.^{15/} Subchapter I contains no jurisdiction requirement that a powerhouse be used for generation of electric energy for distribution in interstate commerce, but FERC has licensing authority only over facilities used to generate electricity through the use of navigable waters.^{16/} Subchapter I has been applied to hydroelectric power only. The Supreme Court has held that its provisions are inapplicable to a thermal electric power plant even where it draws substantial amounts of water from a navigable stream for cooling purposes.^{17/} FERC's jurisdiction over powerplants pursuant to subchapter I is not dependent upon the size of the plant.

In connection with the licensing of power plants, FERC is authorized to conduct investigations concerning the utilization of water resources and the marketing of power in the region to be served and to determine the original

cost of and net investment in the project.^{18/}

FERC may regulate the rates charged by electric utilities regulated pursuant to subchapter I if the power generated enters into interstate commerce.^{19/} Where no power enters into interstate commerce, FERC has jurisdiction to regulate rates only if no state agency provides such regulation.^{20/}

The United States may take over works licensed under subchapter I upon at least two years' notice and payment of the licensee's "net investment," not to exceed the fair market value of the property taken.^{21/}

FERC may impose conditions on the issuance of licenses under subchapter I. These conditions must not be inconsistent with other provisions of the Act.^{22/}

States and municipalities are not exempt from the subchapter I licensing provisions. However, they are to be issued licenses without assessment of the usual licensing fee to the extent that the power generated is sold to the public without profit or is used for state or municipal purposes.^{23/}

b. Subchapter II.

Subchapter II of the Federal Power Act gives FERC regulatory powers over the "transmission of electric energy in interstate commerce," the "sale of electric energy at wholesale in interstate commerce," and "all facilities used for such transmission or sale of electric energy."^{24/} The jurisdiction of FERC does not extend to facilities used in

the "generation of electric energy" or to facilities used for "local distribution" or the "transmission of electric energy in intrastate commerce."^{25/} Subchapter II does not apply to "the United States, a State or any political subdivision of a State, or any agency, authority, or instrumentality of any one or more of the foregoing. . . ."^{26/}

To satisfy the requirement of a "sale of electric energy in interstate commerce for wholesale," the jurisdictional transaction need not be across state lines. It is sufficient that the energy sold is eventually distributed interstate.^{27/} The requirement of a "transmission" in interstate commerce has been interpreted similarly. In Connecticut Light & Power Co. v. Federal Power Comm'n.,^{28/} the Supreme Court noted that the test of whether energy flows across state lines is an engineering and scientific test rather than a legal or governmental test. In this case the petitioner's transmissions were held to fall within the "local distribution" exception to the FPC's jurisdiction because all transmission and distribution was intrastate. The Court reached this conclusion even though the petitioner did receive energy transmissions from a second company in another state.

The sale in interstate commerce provision has been applied to companies which participate in interstate power pools or grids.^{29/} However, the Fifth Circuit has rejected theories of "commingling" and "electromagnetic unity of response" propounded by the FPC in support of its attempt to

exercise jurisdiction over an electric utility company in Florida. In Florida Power & Light Co. v. FPC^{30/} the court held that the utility was not subject to FPC jurisdiction where all facilities were within Florida even though the company participated in a power pool with other Florida utilities, one of which admittedly transmitted pooled energy out-of-state. The court held that there was insufficient scientific proof the Florida Light & Power transmitted electricity out-of-state. The actual amount of energy transmitted or sold out-of-state is immaterial for purposes of establishing FERC jurisdiction.^{31/}

Pursuant to subchapter II, FERC's principal powers are to regulate rates and to order interconnection of transmission facilities where interconnection is in the public interest.^{32/} Although FERC has authority to order the interconnection of transmission facilities (transmission facilities are interconnected in order to allow one utility to purchase power from or exchange power with a second utility), this authority is not pre-emptory. Thus, an electric utility which has not been ordered by FERC to interconnect may be ordered to do so by a court in order to remedy violations of federal antitrust laws. In Otter Tail Power Co. v. United States^{33/} the defendant electric utility company had engaged in practices designed to prevent municipalities from establishing their own power systems. Specifically, the defendant had refused to wholesale power to municipal systems or to wheel power to municipal facilities

and had engaged in litigation to delay establishment of municipal systems. The Supreme Court affirmed the trial court's ruling that the company was not insulated from federal antitrust laws by the Federal Power Act, and that interconnections and wheeling could be ordered by the court as a remedy for the antitrust violations even though the FPC had not ordered interconnections.^{34/}

Where the FPC orders interconnection, it may also prescribe the terms and conditions of the arrangement. These terms may include an apportionment of costs between the participating companies and any compensation or reimbursement reasonably due any participant.^{35/}

Although the definitions of the relevant terms do not seem to authorize FERC to order a jurisdictional utility to interconnect with a municipally owned utility, the courts have affirmed such orders. A company may be ordered to interconnect even where the municipality generates its own electricity rather than merely distributing electrical energy transmitted to it by suppliers.^{36/}

The recently enacted Public Utilities Regulatory Policy Act (discussed more fully below) has granted FERC additional authority to order interconnection. FERC may order the interconnection of facilities among electric utilities, federal power marketing agencies, cogenerators and small power producers upon application by any of the above or any state regulatory authority.^{37/} Such an order may be issued, however, only after notice to all affected

parties, and after an evidentiary hearing.^{38/} FERC may issue the requested order if it determines that the order is in the public interest, will encourage conservation, optimize the efficiency of facilities and resources, or improve the reliability of any electric utility system.^{39/}

Under similar conditions, FERC may order wheeling (wheeling, unlike interconnection, involves at least three utilities. Under this arrangement a sale of power from utility A to utility B would be transmitted over the lines of utility C) by any electric utility.^{40/} Orders requiring interconnection or wheeling may not be issued unless FERC determines that the order will not result in uncompensated economic loss by placing an undue burden on or affecting the normal business of anyone subject to the order.^{41/} In addition, all parties subject to the order must be reasonably compensated for all costs incurred as a result of the order.^{42/}

Some of the regulatory powers previously exercised by the FPC pursuant to subchapter II were not transferred specifically to FERC. However, FERC is authorized to exercise these powers if necessary in the exercise of its specific powers.^{43/} These powers include those relating to the regulation of the issuance of securities, the sale, disposition or merger of facilities and interlocking directorships and the authorization to prescribe systems of accounts.^{44/} FERC has no power to require a certificate of public convenience and necessity as a prerequisite to the construction of facilities or initiation of service by jurisdictional utilities.^{45/}

2. PURPA

a. Qualifying Cogenerator

The Public Utilities Regulatory Policies Act (PURPA) became effective on November 9, 1978. The Congressional findings indicate that the passage of PURPA was the result of the belief that the public welfare and national security necessitate the implementation of a program to conserve electric energy through increased efficiency in the use of facilities and resources by electric utilities and to improve the wholesale distribution of electric energy.^{46/} Section 210 of PURPA mandates that the FERC prescribe a variety of rules to encourage the development of cogeneration facilities and small power production facilities.

A "cogeneration facility" is defined as:

. . . a facility which produces --
 (i) electric energy, and
 (ii) steam or forms of useful energy
 (such as heat) which are used for industrial,
 commercial, heating, or cooling purposes.
^{47/}

A "small power production facility" is defined as:

. . . a facility which --
 (i) produces electric energy solely by
 the use, as a primary energy source, of
 biomass, waste, renewable resources, or any
 combination thereof; and
 (ii) has a power production capacity
 which, together with any other facilities
 located at the same site (as determined by
 the Commission), is not greater than 80
 megawatts. ^{48/}

To be a "qualifying" facility for purposes of the Act, a cogeneration or small power production facility must comply with FERC rules respecting such factors as minimum

size, fuel use and fuel efficiency.^{49/} In addition, a qualifying facility may not be owned by a person primarily engaged in the generation or sale of electric power. However, a cogenerator or small power producer is not precluded from qualifying pursuant to this definition if it is primarily engaged in the sale or generation of electric power solely from cogeneration facilities or small power production facilities.^{50/}

These definitions would seem to preclude cogeneration or small power production facilities owned by electric utilities from benefiting from the provisions of the Act. However, House Conference Report No. 95-1750 (hereinafter cited as "Conference Report") specifically states that:

Electric utilities may participate in an entity which owns [cogeneration and small power production] facilities with other persons and such entity could qualify under these definitions. The test in this case is whether the entity which owns the facility is primarily engaged in the generation or sale of electric power other than in connection with its ownership of the cogeneration facilities or small power production facilities.

* * *

It is also the intention of the conferees that [these definitions] will not be construed as prohibiting or discouraging electric utilities from cogenerating. ^{51/}

Thus, electric utilities may participate in joint ventures owning qualifying facilities.

An "electric utility" is defined as "any person or State agency which sells electric energy; such term includes

the Tennessee Valley Authority, but does not include any Federal power marketing agency."^{52/} The definitions of the terms "person" and "state agency" are broad enough so that all conventional forms of utilities, including municipally owned utilities and cooperatives, come within these definitions.

Within one year of enactment of the Act, FERC is to prescribe rules requiring electric utilities to sell electric energy to, and buy electric energy from qualifying cogeneration and small power production facilities. FERC is to consult with representatives of appropriate state and federal agencies, and provide an opportunity for all other interested parties to comment, before prescribing any rules. The rules should include requirements respecting minimum reliability of qualifying facilities.^{53/} FERC has proposed rules but no final rules have been issued.^{54/}

FERC may not prescribe rules authorizing cogenerators or small power producers to make any sales for purposes other than resale.^{55/} The Conference Report makes it clear, however, that cogenerators and small power producers may make retail sales if permitted by state law.^{56/}

b. Cogeneration Rates

The rates paid by electric utilities for purchases from qualifying cogenerators or small power producers must be just and reasonable to the consumers of the utility and must be in the public interest. In addition, electric utilities may not discriminate against cogenerators and

small power producers in purchasing electric energy. No FERC-prescribed rule may provide for a rate for purchase of energy from a cogenerator or small power producer which exceeds the incremental cost to the electric utility of alternative energy.^{57/} "Incremental cost" is defined as:

. . . the cost to the electric utility of the electric energy which, but for the purchase from such cogenerator or small power producer, such utility would generate or purchase from another source. ^{58/}

Thus, a qualifying cogenerator or small power producer must operate efficiently enough to be able to sell electric energy to electric utilities at competitive prices.

The legislative history indicates that Congress included this subsection to assure that customers of electric utilities purchasing energy from cogenerators and small power producers receive electric energy at equitable rates. Congress did not intend that cogenerators and small power producers become subject to the type of examination that generally is given to electric utility rate applications to determine a just and reasonable rate.

The conferees wish to make clear that cogeneration is to be encouraged under this section and therefore the examination of the level of rates which should apply to the purchase by the utility of the cogenerator's or 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 regulation over them would act as a significant disincentive to firms interested in cogeneration and small power production. ^{59/}

In conjunction with this issue, it should be noted that the incremental cost of alternative energy has been set as the upper limit of rates which an electric utility may be compelled to pay a cogenerator or small power producer. This upper limit eliminates the need for subjecting cogenerators and small power producers to utility-type rate regulation with respect to its dealings under §210.^{60/} Neither the Act nor the legislative history gives any indication of what type of procedure, if not traditional rate-making procedures, is to be used in arriving at a rate to be paid by electric utilities for energy purchased from cogenerators and small power producers.

With respect to the definition of incremental cost of alternative energy, the legislative history of the Act indicates that Congress intended that this definition be interpreted liberally.

In interpreting the term "incremental cost of alternative energy," the conferees expect that the Commission and the States may look beyond the cost of alternative sources which are instantaneously available to the utility. Rather, the Commission and States should look to the reliability of that power to the utility and the cost savings to the utility which may result at some later date by reason of supply to the utility at that time of power from the cogenerator or small power producer; for example, an electric utility which owns a source of hydroelectric power and which is offered the sale of electric energy from a cogenerator or small power producer might, if measured over the short term, have a low incremental cost of alternative power because of its access to hydropower; however, it may be the case that by purchasing from the cogenerator or small power producer and saving hydropower for later use, the

utility can avoid the use of expensive electric energy generated by fossil fired units during later months of its seasonal generation cycle. Thus, viewed over the longer period of time, the incremental cost of alternative electric energy might be substantially higher than that measured by the instantaneously available hydropower. 61/

The proposed rules do little to clarify the statutory provisions relating to the issue of how rates for purchases from qualifying facilities are to be set. The rule repeats the statutory standard that rates must be just and reasonable to customers of the electric utility and may not discriminate against the qualifying facility. In addition, the rule lists several factors to be considered in setting rates. These include:

- (1) availability of capacity from the qualifying facility during daily and seasonal peak periods;
- (2) the relationship between energy or capacity from a qualifying facility to the electric utility's energy and capacity needs; and
- (3) the costs or savings resulting from variations in line losses from those that would have existed in the absence of purchases from the qualifying facility. 62/

The rates paid by qualifying cogenerators and small power producers for electric energy purchased from utilities must be just and reasonable, in the public interest and may not be discriminatory against cogenerators and small power producers. 63/ In contrast with the discussion above, rates charged by electric utilities for sales to cogenerators and small power producers are to be determined according to traditional rate-making procedures. Thus, the Conference

Report states that:

Here the phrase "just and reasonable" is intended to refer to traditional utility ratemaking concepts. The conferees do not intend that the cogenerator or small power producer pay any more or any less than is otherwise just and reasonable in terms of the utility receiving the reasonable rate of return for providing service to those kinds of users. However, unreasonable rate structure impediments, such as unreasonable hook up charges or other discriminatory practices, would not be allowed. 64/

With respect to sales to qualifying facilities, the proposed rules provide that electric utilities must provide back-up power, supplementary power, interruptable power and maintenance power to qualifying facilities regardless of the availability of such service to other customers. 65/

The proposed rules provide no additional guidance with respect to the method for setting rates for sales to qualifying facilities. 66/

c. Exemptions for Cogenerators

The Act provides that FERC must, again within one year of the enactment of PURPA, prescribe rules exempting qualifying cogenerators and small power producers, either wholly or partly, from the provisions of the Federal Power Act, the Public Utilities Holding Company Act and state regulation of rates and financial or organizational structure. These rules are to be prescribed after consultation with representatives of appropriate federal and state regulatory agencies and after allowing interested parties a reasonable opportunity to comment. 67/

No cogenerator or small power producer may be exempted from state regulations enacted to

implement FERC rules prescribed pursuant to §210(a).^{68/} In addition, no facility may be exempted from the licensing provisions of the Federal Power Act.^{69/} Small power producers with a production capacity in excess of thirty megawatts may not be exempted under the above provisions unless they produce energy solely by use of biomass as a primary energy source. No such facility, regardless of the fuel used, may be exempted from the provisions of the Federal Power Act.^{70/}

Section 210(e)(1) seems to allow FERC to exempt qualifying cogenerators and small power producers from all state regulation. This provision, however, must be read in conjunction with the provision in §210(a) which provides that no FERC rules may authorize sales of electric energy for purposes other than resale. Thus, it would seem that FERC may exempt a qualifying facility from state regulations only with respect to its wholesale energy sales. FERC's authority under the Federal Power Act does not extend to retail sales. Support for this interpretation is found in the Conference Report which states that FERC's lack of authority to regulate retail sales is not intended to "limit the States from allowing such sales to take place. The cogenerator or small power producer may be permitted to make retail sales pursuant to state law."^{71/} This language clearly seems to preserve the rights of states to regulate retail sales and there is nothing in §210 or its legislative history to suggest that Congress intended to limit or pre-

clude state regulation of retail sales.

Pursuant to the proposed rules, qualifying cogeneration facilities and qualifying small power production facilities with capacity of 30 megawatts or less are exempt from the Federal Power Act except those provisions dealing with the licensing of facilities, and FERC ordered interconnection and wheeling. In addition, these qualifying facilities are not to be considered "electric utility companies" for purposes of the Public Utilities Holding Company Act.^{73/} All qualifying facilities are to be exempted from state regulation relating to rates for sales to electric utilities (this exemption adds support to the above discussion of the extent of FERC's authority to exempt qualifying facilities from state regulation) and financial and organizational aspects of the qualifying cogeneration or small power producer.^{74/}

d. Implementation and Enforcement of PURPA Rules

Primary responsibility for implementation of rules prescribed by FERC pursuant to §210(a) lies with state public utility regulatory agencies or, in the case of utilities not subject to state agency regulatory jurisdiction, the utilities themselves. Within one year after any rule is prescribed by FERC, each state regulatory agency and each electric utility not regulated by a state agency must hold a public hearing and implement the rule.^{75/} Because each electric utility not subject to the jurisdiction of state

regulatory agencies is required to implement FERC-prescribed rules with respect to its own operations, these rules will ultimately be applicable to all electric utilities.

Under section 210(g)(1), judicial review of a proceeding conducted by a state regulatory agency or non-regulated electric utility for purposes of implementing any requirement of a rule prescribed by FERC pursuant to §210(a) may be had pursuant to the provisions of §123.^{76/} Section 123 provides for judicial review in state courts pursuant to state law. No person may seek judicial review unless he participated in the original proceeding or unless state law provides him with a right to judicial review.^{77/} Review of any action taken by a federal agency, however, may be had only in the appropriate federal court.^{78/}

In addition, an action may be brought in state court against an electric utility or a qualifying cogenerator to "enforce any requirement established by a State regulatory authority or nonregulated electric utility pursuant to subsection (f)."^{79/} Again, such an action may be brought only by a party who participated in the original proceeding or as allowed by state law.^{80/} Thus, a person's right to obtain judicial review pursuant to §210(g) is dependent upon such a right existing under state law.

Any rule prescribed by FERC pursuant to §210(a) will be enforceable by FERC against any electric utility, small power producer or cogenerator subject to FERC's jurisdiction under Part II of the Federal Power Act (those

involved in the interstate transmission or wholesale of electric energy) to the same extent as any rule prescribed by FERC pursuant to Part II of the Federal Power Act.^{81/}

The judicial review and enforcement provisions of §210(g) do not apply to any part of the operations of an electric utility, small power producer or cogenerator otherwise subject to FERC's jurisdiction under the Federal Power Act.^{82/}

FERC also may enforce the requirement that state regulatory agencies and nonregulated electric utilities implement §210(a) rules as it would enforce any rule prescribed pursuant to the Federal Power Act.^{83/} Electric utilities, small power producers and cogenerators may petition FERC to enforce the requirement that state regulatory agencies and nonregulated electric utilities implement the rules prescribed by FERC pursuant to §210(a). If FERC takes no action within sixty days, the petitioner may bring an action to enforce these requirements in the appropriate federal district court.^{84/}

Sections 210(g) and (h) deal only with judicial enforcement and review of rules prescribed pursuant to §210(a). They do not mention enforcement or review of rules prescribed by FERC pursuant to §210(e) exempting cogenerators and small power producers from various forms of state and federal regulation. However, §210 has been codified as a part of the Federal Power Act, and, therefore, these rules will be enforced and reviewed as any other rule prescribed

by FERC pursuant to the Federal Power Act. Such review may be had by any party to a proceeding, after petitioning for rehearing, in the United States Court of Appeals.^{85/}

As demonstrated in the discussion above, the choice of the proper forum in which FERC or a private party may seek review or enforcement of a rule prescribed by FERC pursuant to §210(a) is dependent upon the interpretation of the implementation requirement of §210(f). If a state regulatory agency or nonregulated electric utility can satisfy this requirement by holding a hearing or series of hearings at which the FERC prescribed rules are adopted, review of the proceedings at which these rules are actually applied to a purchase or sale of electric energy by a cogenerator or small power producer could be had only in state court. If the §210(f) requirement is interpreted as imposing a continuing obligation to apply these rules to each situation in which a small power producer or cogenerator seeks to purchase or sell electric energy, a party could seek judicial enforcement or review of the application of these rules in federal court.^{86/}

The legislative history of §210 offers little assistance in resolving the question of the appropriate forum in which a party may seek enforcement or review of §210(a) rules. Danny J. Boggs, Deputy Minority Counsel to the Senate Energy and National Resources Committee, has stated that it was Congress's intent that enforcement of these rules be a state responsibility.^{87/} Mr. Boggs's state-

ments, however, do not resolve the question of the proper forum for seeking review of enforcement of these rules. The resolution of this question will have a significant impact on the actual implementation of the rules prescribed by FERC pursuant to §210(a). If an aggrieved party may seek review of actions taken by state regulatory agencies or nonregulated electric utilities only in state court, effective implementation of these rules will depend on the willingness of the state courts to become involved in this regulatory scheme. It is conceivable that a state court may hold that it has no jurisdiction to require a nonregulated electric utility to implement FERC-prescribed rules. In addition, §210(g) may force state courts to resolve rate-making questions for which they lack the necessary expertise.

E. Appeals of FERC Decisions

The provisions governing judicial review of the former FPC orders under the Federal Power Act are applicable to the review of FERC orders.^{88/} A party to a proceeding before FERC may seek judicial review of any FERC order.^{89/} Jurisdiction is exclusively vested in the United States Court of Appeals for the circuit wherein the licensee or public utility to which the order relates is located or has its principal place of business or for the D.C. Circuit.^{90/} The findings of facts by FERC, if supported by substantial evidence, are conclusive. If the court determines that new evidence should be heard, such evidence will be heard by FERC which may then modify its order if appropriate.^{91/}

The appellate court's decision is final subject to review by the Supreme Court upon certiorari or certification.

Judicial decisions involving review of orders by the former FPC applied the administrative law doctrine of exhaustion of administrative remedies.^{92/} It is too early to tell with certainty how this doctrine will be applied to the review of FERC decisions. It is reasonable to assume, however, that the doctrine will be applied as before. In all likelihood, FERC will exercise its discretion to grant rehearings, and an application for a rehearing will be a prerequisite for judicial review.^{93/}

III. REGULATION UNDER THE NATURAL GAS ACT

Under the Natural Gas Act, FERC has authority to establish, review, and enforce rates for the transportation and sale of natural gas, authority to issue certificates of public convenience and necessity, including the abandonment of facilities or services, and the establishment of physical connections, authority to regulate mergers and securities acquisitions, authority over accounting procedures, and authority to make and enforce regulations.^{94/}

FERC has jurisdiction to exercise the above powers over "natural gas companies," as defined in the Act. Natural gas companies are persons "engaged in the transportation of natural gas in interstate commerce, or the sale in interstate commerce of such gas for resale."^{95/} The introductory section to the Act clarifies that the Act is not intended to apply to "local distribution of natural gas or to facilities

used for such distribution or to the production or gathering of natural gas." The introductory section also specifies that the Act does not apply to any person with respect to gas received by such person and facilities used with respect to such gas if all such gas is ultimately consumed within the state, and if a state commission regulates the rates and service of such person and facilities.^{96/}

Judicial decisions have confirmed that sales of natural gas in interstate commerce are only jurisdictional if they are substantially for resale. In California v. Lo-Vaca Gathering Co.,^{97/} the Supreme Court held that where a "substantial part" of the gas sold in interstate commerce was resold, and where it was not physically possible to allocate out the portion not sold for resale, the sales were subject to the FERC's jurisdiction under the Natural Gas Act.

IV. REGULATION UNDER THE POWERPLANT AND INDUSTRIAL FUEL USE ACT

The Department of Energy is responsible for administering the Powerplant and Industrial Fuel Use Act which was enacted on November 9, 1978.^{98/} Pursuant to the provisions of the Act, no "new electric power plant" or "new major-fuel burning installation" (defined as facilities or powerplants on which construction began after the enactment of the Act) may use natural gas or petroleum as a primary energy source.^{99/} The DOE is authorized to exempt certain new powerplants or major fuel-burning facilities either

permanently or temporarily from the provisions of the Act under a variety of circumstances.^{100/} Permanent exemption is allowed in the case of a cogeneration facility which can demonstrate that the economic and other benefits of cogeneration are unobtainable unless petroleum or natural gas or both are used in the facility.^{101/}

Existing powerplants and major fuel-burning installations may not use natural gas as a primary energy source after January 1, 1990. In addition, natural gas may not be used as a primary energy source before January 1, 1990 unless the facility was using natural gas as a primary energy source in 1977. In no case may natural gas be used in greater proportions than the average yearly proportion of natural gas in the years 1974 through 1976.^{102/} The Secretary is authorized to exempt these facilities either temporarily or permanently from the provisions of the Act under a variety of circumstances.^{103/} No specific exemption is provided for existing cogeneration facilities.

V. REGULATION UNDER THE PUBLIC UTILITY HOLDING COMPANY ACT

A. The Securities and Exchange Commission

The Securities and Exchange Commission (SEC) is responsible for administering the provisions of the Public Utility Holding Act.^{104/} The SEC is composed of five commissioners appointed by the President with the advice and consent of the Senate.^{105/} The SEC is authorized to appoint officers and delegate functions.^{106/}

B. Jurisdiction of the SEC

The jurisdiction of the SEC under the Public Utility Holding Company Act extends primarily to "holding companies," which are defined to include:

(A) any company which directly or indirectly owns, controls, or holds with power to vote, 10 per centum or more of the outstanding voting securities of a public-utility company or of a company which is a holding company by virtue of this clause or clause (B) of this paragraph, unless the Commission, as hereinafter provided, by order declares such company not to be a holding company; and

(B) any person which the Commission determines, after notice and opportunity for hearing, directly or indirectly to exercise (either alone or pursuant to an arrangement or understanding with one or more other persons) such a controlling influence over the management of policies of any public-utility or holding company as to make it necessary or appropriate in the public interest or for the protection of investors or consumers that such person be subject to the obligations, duties, and liabilities imposed in this chapter upon holding companies. 107/

A "public utility company" is any "electric utility company" or "gas utility company."^{108/} Electric utility companies include:

. . . any company which owns or operates facilities used for the generation, transmission, or distribution of electric energy for sale, other than sale to tenants or employees of the company operating such facilities for their own use and not for resale. The Commission, upon application, shall by order declare a company operating any such facilities not to be an electric utility company if the Commission finds that (A) such company is primarily engaged in one or more businesses other than the business of an electric utility company, and by reason of the small amount of electric energy sold by such company it is not necessary in the public interest or for the protection of

investors or consumers that such company be considered an electric utility company . . . , or (B) such company is one operating within a single State, and substantially all of its outstanding securities are owned directly or indirectly by another company to which such operating company sells or furnishes electric energy which it generates; such other company uses and does not resell such electric energy, is engaged primarily in manufacturing (other than the manufacturing of electric energy or gas) and is not controlled by any other company; and by reason of the small amount of electric energy sold or furnished by such operating company to other persons it is not necessary in the public interest or for the protection of investors or consumers that it be considered an electric utility company 109/

A "gas utility company" is defined as:

. . . any company which owns or operates facilities used for the distribution at retail (other than distribution only in enclosed portable containers, or distribution to tenants or employees of the company operating such facilities for their own use and not for resale) of natural or manufactured gas for heat, light, or power. The Commission, upon application, shall by order declare a company operating any such facilities not to be a gas utility company if the Commission finds that (A) such company is primarily engaged in one or more businesses other than the business of a gas utility company, and (B) by reason of the small amount of natural or manufactured gas distributed at retail by such company it is not necessary in the public interest or for the protection of investors or consumers that such company be considered a gas utility company for the purposes of this chapter. 110/

It is unlawful for any holding company, unless it has registered as such with the SEC:

(1) to sell, transport, transmit, or distribute, or own or operate any utility assets for the transportation, transmission, or distribution of, natural or manufactured gas or electric energy in interstate commerce;

(2) by use of the mails or any means or instrumentality of interstate commerce, to negotiate, enter into, or take any step in the performance of, any service, sales, or construction contract undertaking to perform services or construction work for, or sell goods to, any public-utility company or holding company;

(3) to distribute or make any public offering for sale or exchange of any security of such holding company, any subsidiary company or affiliate of such holding company, any public-utility company, or any holding company, by use of the mails or any means or instrumentality of interstate commerce, or to sell any such security having reason to believe that such security, by use of the mails or any means or instrumentality of interstate commerce, will be distributed or made the subject of a public offering;

(4) by use of the mails or any means or instrumentality of interstate commerce, to acquire or negotiate for the acquisition of any security or utility assets of any subsidiary company, or affiliate of such holding company, any public-utility company, or any holding company;

(5) to engage in any business in interstate commerce; or

(6) to own, control, or hold with power to vote, any security of any subsidiary company thereof that does any of the acts enumerated in paragraphs (1)-(5) of this subsection.

111/

By registering with the SEC, a holding company subjects itself to the broad regulatory powers of the SEC discussed below.

A company generally will be a "holding company" within the definitional provisions of the Public Utility Holding Act if it has a 10% interest, or control, of an electric or gas utility company. The controlled company

generally will be an electric or gas utility company if it owns or operates facilities used for the generation, transmission or distribution of electrical energy or for the retail distribution of natural gas. However, a controlled company is not an electric utility company if it sells energy to its tenants or employees for their own use rather than for resale, and is neither a gas nor electric utility if the SEC finds under subparagraph (A) of the applicable definitions that the amount of energy sold is small in proportion to the company's other non-utility businesses, or if the SEC finds that the requirements of subparagraph (B) of the applicable definition dealing with intrastate operations and sales to a subsidiary not for resale have been satisfied.

The definition of electric and gas utility companies has been clarified somewhat by SEC regulations and rulings. The SEC recently issued a regulation requiring that a company have gross sales for energy of at least \$100,000 per calendar year in order to come within the definitions of electric or gas utility company.^{112/} However, even where sales of energy exceed \$100,000 the SEC may find that a company is not an electric or gas utility if the company is primarily engaged in non-utility business and by reason of the small amount of energy sold, the public interest does not require protection of investors or consumers. For example, in 1938, the SEC exempted a company which had \$400,000 in annual energy sales.^{113/} In that case, the company used by-product blast furnace gas to generate electricity, the excess of

which was sold to a nonaffiliated electric utility.

The excess sold constituted one-third of the total electricity produced by the company. In exempting the company, the SEC reasoned that the company was engaged primarily in non-utility business, that the production was incidental to that business and that the sales were on a wholesale basis to a non-affiliated public utility which was a subsidiary of an already registered holding company.

Even if a company is a "holding company" because of its control of an electric or gas utility company, exemption from SEC jurisdiction may nevertheless be possible under the express exemption provisions set forth in the Act. The relevant exemptions are:

- (1) such holding company, and every subsidiary company thereof which is a public-utility company from which such holding company derives, directly or indirectly, any material part of its income, are predominantly intrastate in character and carry on their business substantially in a single State in which such holding company and every such subsidiary company thereof are organized;
- (2) such holding company is predominantly a public-utility company whose operations as such do not extend beyond the State in which it is organized and States contiguous thereto;
- (3) such holding company is only incidentally a holding company, being primarily engaged or interested in one or more businesses other than the business of a public-utility company and (A) not deriving, directly or indirectly, any material part of its income from any one or more subsidiary companies, the principal business of which is that of a public-utility company, or (B) deriving a material part of its income from any one

or more such subsidiary companies, if substantially all the outstanding securities of such companies are owned, directly or indirectly, by such holding company.
114/

The exemption in paragraph (1), requires first that the holding company and subsidiaries from which it derives a material part of its income are predominantly intrastate and carry on their business substantially in a single state. A "material" part of its income is income the loss of which would be something more than de minimis to the company concerned.
115/ The operations of a utility are intrastate in character where all its property is in the state and it makes no substantial sales outside that state or at the state line to out-of-state purchasers.
116/ The SEC has not ruled on whether sales within a state to companies transmitting electricity out-of-state or purchases of out-of-state electricity that take place within the state are to be considered interstate.

The exemption in paragraph (2) quoted above would exempt a company that is itself a utility and operates a subsidiary utility. In determining whether a holding company is "predominantly" an operating utility company, as opposed to a holding company, the SEC has compared the assets, net income and gross revenues of subsidiary corporations with the corresponding figures of the parent.
117/ When the subsidiary is wholly owned by the parent company the SEC appears to allow a substantially larger percentage of revenues to be derived from the subsidiary.
118/

The exemption in paragraph (3) quoted above exempts a company which is only incidentally a holding company and either (A) derives no appreciable income from utilities or (B) receives an appreciable income from utilities and owns all the outstanding securities of those utilities so they are essentially departments of the parent. Holding company status has been held to be incidental where "the utility operations served the operational needs of or constituted a by-product of the non-utility operations business Where, however, non-utility operations are conducted as a means of making the utility operations possible, the utility operations are not incidental."^{119/} Another factor relevant to holding company status is the absolute size of the company's utility operations, apart from comparing those operations to non-utility business.^{120/}

The SEC has discretion, subject to judicial review, to deny any of the above exemptions where it finds it to be detrimental to the public interest or the interests of investors and consumers.^{121/}

C. Powers of the SEC

Holding companies which do not qualify for exemption and which carry on activities listed in section 79d (quoted and discussed above) must register with the SEC or else be subjected to severe penalties.^{122/} As a registered holding company under the Act, a company is subject to regulation by the SEC concerning the issuance and sale of securities, acquisitions, intercompany transactions, ser-

vice, sales and construction contracts, accounts, reports,
and systems simplifications.^{123/}

The SEC has authority to issue, amend, and rescind
rules, regulations, and orders.^{124/} With certain limitations,
the SEC is authorized to make public the information contained
in any statement, application, declaration, report, or other
document filed.^{125/}

D. Appeals of SEC Orders

Any person or party aggrieved by an order issued
by the SEC may, after exhausting all administrative remedies,
obtain review in the United States Court of Appeals within
any circuit in which the aggrieved person resides or has his
principal place of business or in the D.C. Circuit.^{126/} The
findings of facts by the SEC are conclusive if supported by
substantial evidence. The judgment of the court is final
subject to review by the Supreme Court upon certiorari or
certification. The Court of Appeals has exclusive juris-
diction to review SEC orders issued under the Public Utility
Holding Company Act.^{127/}

A city may have standing to seek judicial review
as an "aggrieved person" where it asserts nonfrivolous
public interest objections to applications of electric com-
panies.^{128/}

VI. FEDERAL REGIONAL POWER ADMINISTRATIONS

Several federal regional power agencies are
responsible for marketing energy produced at federal pro-
jects. While these bodies are not charged with the regula-

tion of public utilities, they can exercise some authority over operations by electric utilities by imposing conditions in agreements governing the sale of federally produced power. The Tennessee Valley Authority (TVA)^{129/} is a federally created corporate body.^{130/} The TVA is governed by a board of directors comprised of three members appointed by the president with the advice and consent of the senate.^{131/} Board members are appointed for nine-year terms.^{132/}

The TVA's primary responsibility is flood and navigation control on the Tennessee River and its tributaries; however, it is authorized to generate electric power in conjunction with its flood control operations.^{133/} The TVA may sell any electricity not needed for its own operations to states, counties, municipalities, electric cooperatives and privately owned utilities.^{134/} Preference in sales of excess energy is to go to government owned utilities and non-profit cooperatives.^{135/} The TVA is also authorized to construct transmission and distribution lines to farms and small villages not otherwise receiving electric service at reasonable rates.^{136/} These lines may then be leased to private parties for operational purposes.^{137/} In addition, TVA may purchase existing generating facilities and transmission lines in order to provide adequate service at reasonable rates to farms and small villages.^{138/}

In conjunction with the sale of excess electricity to utilities for ultimate distribution to consumers, the TVA may exercise some regulatory control over utilities purchasing

excess electricity. Contracts of purchase may include rate schedules governing the resale of the electricity generated by TVA.^{139/} The contract also can require that rates and services be non-discriminatory.^{140/} If these contractual provisions are breached, the contract may be voided by the TVA.^{141/}

In conjunction with its primary responsibility, that of flood and navigation control, the TVA must approve the construction of dams on the Tennessee River and its tributaries.^{142/} Under this provision, the TVA could control the construction by public utilities of hydroelectric facilities in the area.

The Bonneville Power Administration (BPA)^{143/} was created to perform flood control functions on the Columbia River.^{144/} It, like the TVA, is authorized to generate electric power in conjunction with its flood control obligations and may sell electricity not needed for its operations to utilities owned by public bodies or by private investors.^{145/} It may also build or purchase transmission facilities to facilitate the sale and distribution of excess energy.^{146/} These functions are carried out by an administrator appointed by the Secretary of the Department of Energy.^{147/} In selling excess power the administrator is to give preference to public bodies and non-profit cooperatives.^{148/} Contracts for the sale of excess energy may regulate the rates charged by the purchaser if the energy is resold to consumers.^{149/}

The Secretary of the Department of Energy, acting

through BPA, is authorized to operate and maintain a federal transmission system in the Pacific Northwest, which includes integration with non-federal generating units, and transmission of non-federal power on a fair and non-discriminatory basis to the extent of available transmission capacity.^{150/}

The Fort Peck Project^{151/} involves flood and navigation control on the Missouri River in Montana. Pursuant to this project, the Secretary of the Department of Energy is authorized to dispose of excess electric energy. (This function, until recently, was performed by the Bureau of Reclamation).^{152/} In order to facilitate the sale of excess energy, transmission facilities may be constructed or acquired.^{153/} The Secretary is to give preference in sales to public bodies and non-profit cooperatives^{154/} but has no specific authority to regulate rates for resale of the energy.

Electric power generated at reservoir projects under the control of the Department of the Army and not required for the operation of the project is also available to be sold for consumption by the public.^{155/} Until recently, this energy was marketed by the Department of the Interior through the Southwest and Southeast Power Administrations.^{156/} This energy is now marketed by the Department of Energy through these same agencies.^{157/} Preference in the sale of this energy is to be given to public bodies and cooperatives.^{158/}

FOOTNOTES

1. 15 U.S.C.A. §§79-79Z (1971); 16 U.S.C.A. §§791-831 (1974; Supp. 1978).
2. 15 U.S.C.A. §717 et seq. (1976).
3. 42 U.S.C.A. §7172 (Supp. 1978).
4. Id. §7174(c).
5. Id. §7174(b).
6. 16 U.S.C.A. §§790-823 (1974).
7. Id. §§824-824h.
8. 42 U.S.C.A. §§7171(g); 7172(h); 7173; 7174 (Supp. 1978).
9. Id. §§7174(c).
10. Id. 7173(c).
11. Id. §§7173(c); 7174.
12. 5 U.S.C.A. Chapter 5.
13. 42 U.S.C.A. §7191 (Supp. 1978).
14. Id. §7172(a)(2)(A).
15. Id. §7172(a)(1)(A).
16. 16 U.S.C.A. §797(e) (1974).
17. Chemehueui Tribe of Indians v. F.P.C., 420 U.S. (1975).
18. 16 U.S.C.A. §§797(a), (b) (1974).
19. Id. §813.
20. Id. §812.
21. Id. §807.
22. Id. §§803(g), 804.
23. Id. §803(e).
24. Id. §824.
25. Ibid.

26. Id. §824(f).
27. Public Util. Comm'n v. Attleboro Steam & Elec. Co., 273 U.S. 83 (1927).
28. Connecticut Light & Power Co. v. F.P.C., 324 U.S. 515 (1945).
29. Pennsylvania Power Co. v. F.P.C., 343 U.S. 415 (1951).
30. Florida Power & Light Co. v. FPC, 430 F.2d 1377 (5th Cir. 1970).
31. Id., Connecticut Light & Power Co. v. F.P.C., 324 U.S. 515 (1945).
32. 16 U.S.C.A. §824(b) (1974).
33. Otter Tail Power Co. v. United States, 410 U.S. 366, 375 (1973).
34. See also Gainesville Utilities Dept. v. Florida Power & Light Co., 373 F.2d 292 (5th Cir. 1978).
35. Id.; 16 U.S.C.A. §824a(b) (1974).
36. Florida Power Corp. v. FPC, 425 F.2d 1196 (5th Cir. 1970); New England Power Co. v. FPC, 349 F.2d 258 (1st Cir. 1965).
37. 16 U.S.C.A. §824I(a) (1974).
38. Id. §824i(b).
39. Id. §824i(c).
40. Id. §824j.
41. Id. §824k(a).
42. Id. §824k(b).
43. 42 U.S.C.A. §7172(a)(2)(A) (Supp. 1978).
44. 16 U.S.C.A. §824a(b)-(f) (1974).
45. Note that FERC does have authority to require certificates of public convenience and necessity under the Natural Gas Act. 42 U.S.C.A. §7172(a)(1)(D).
46. 16 U.S.C.A. §2601 (Supp. 1979).

47. Id. §796(18)(A) (1974).
48. Id. §201(17)(A).
49. Proposed rules can be found at 44 Fed. Reg. 38878, §§292.205, 206.
50. 16 U.S.C.A. §§201(16)(C), 201(18)(B) (1974).
51. Conference Report at pp. 89-90.
52. 16 U.S.C.A. §201(22) (1974).
53. Id. §210(a).
54. 44 Fed. Reg. 38877, 61203.
55. Ibid.
56. Conference Report at p. 97.
57. 16 U.S.C.A. §210(b) (1974).
58. Id. §210(d).
59. Conference Report at pp. 97-98.
60. Id. at p. 98.
61. Id. at p. 98-99.
62. 44 Fed. Reg. 61203, §292.105.
63. 16 U.S.C.A. §210(c) (1974).
64. Conference Report at p. 98.
65. 44 Fed. Reg. 61204, §292.105.
66. Ibid.
67. 16 U.S.C.A. §210(e)(1) (1974).
68. Id. §210(e)(3)(A).
69. Id. §210(e)(3)(C).
70. Id. §210(e)(2).
71. Conference Report at p. 97.
72. 44 Fed. Reg. 61205, §292.401.

73. Ibid.
74. Ibid.
75. 16 U.S.C.A. §210(f) (1,2) (Supp. 1978).
76. Id. §210(g) (1).
77. Id. §123(e) (1).
78. Id. §123(c) (2).
79. Id. §§210(g) (2), 123(c) (1).
80. Id. §123(c) (1).
81. Id. §210(h) (1).
82. Id. §210(h) (1).
83. Id. §210(h) (2) (A).
84. Id. §210(h) (2) (B).
85. Id. §6825.
86. Id. §210(h).
87. Mr. Danny J. Boggs, Deputy Minority Counsel to Senate Energy and Natural Resources Committee, Address to Conference on Cogeneration, sponsored by The Energy Bureau, Inc., Washington D.C., March 5, 1979.
88. 42 U.S.C.A. §7172(a) (Supp. 1978).
89. 15 U.S.C.A. §717a(6) (1976).
90. Id. §717.
91. California v. Lo-Vaca Gathering Co., 379 U.S. 366 (1965).
92. 42 U.S.C.A. §7191 (Supp. 1978).
93. 16 U.S.C.A. §825(1) (b) (1974).
94. Ibid.
95. Ibid.
96. See Indiana & Michigan Elec. Co. v. Fed. Power Comm'n., 244 F. Supp. 166 (D. Ind. 1963).
97. 16 U.S.C.A. §825 (1974).

98. Pub. L. 95-620 (1978).
99. 16 U.S.C.A. §§201, 202 (Supp. 1978).
100. Id. §§211, 212.
101. Id. §212(c).
102. Id. §301(a).
103. Id. §§311-312.
104. 15 U.S.C.A. §§79-79z (1971).
105. Id. §79d.
106. Id. §79d-1 (Supp. 1978).
107. Id. §79b(a)(7) (1971).
108. Id. §79b(a)(5).
109. Id. §79b(a)(3).
110. Id. §79b(4).
111. Id. §79d(a).
112. SEC Reg., 17 C.F.R. §250.7 (1977).
113. Interlake Iron Corp., 3 S.E.C. 559 (1938).
114. 15 U.S.C.A. §79c(d) (1976).
115. Pub. Serv. Co. of Oklahoma, 8 S.E.C. 12 (1940).
116. Texas Util. Co., 31 S.E.C. 367 (1950).
117. Union Elec. Co., 40 S.E.C. 1072 (1962).
118. See Northern States Power Co., 36 S.E.C. 1 (1954).
119. Elec. Bond and Share Co., 33 S.E.C. 21, 42 (1952).
120. Standard Oil Co. (N.J.), 10 S.E.C. 1122 (1942).
121. 15 U.S.C.A. §79c(a) (1971).
122. Id. §79t.
123. Id. §§79f-790.
124. Id. §79t.

125. Id. §79u.
126. Id. §79x.
127. Okin v. S.E.C., 46 F. Supp. 481 (S.D.N.Y. (1942), aff'd. per curium 130 F.2d 903 (2d Cir. 1942), cert. denied, 317 U.S. 701 (1943).
128. City of Lafayette v. SEC, 454 F.2d 941 (D.C. App. 1971, aff'd, subnom. Gulf States Util. Co. v. F.P.C., 411 U.S. 747 (1973).
129. 16 U.S.C.A. §831 et seq. (1974).
130. Id. §831.
131. Id. §831a(a).
132. Id. §831a(b).
133. Id. §831h-1.
134. Ibid.
135. Ibid.
136. Id. §831i.
137. Ibid.
138. Ibid.
139. Id. §831k.
140. Id. §831ijk.
141. Id. §831y-1.
142. Id. §832, et. seq.
143. Id. §832.
144. Id. §832a.
145. Id. §832a(b,c).
146. Id., §832a(a); 42 U.S.C.A. §7152(A).
147. Id. §832c(a).
148. Id. §832d(a).
149. Id. §838; 42 U.S.C.A. §7152(a) (Supp. 1978).
150. Id. §§833-833q (Supp. 1978).

151. Id. §833a(a); 42 U.S.C.A. §7152.

152. Id. §833a(b,c).

153. Id. §833c.

154. Ibid.

155. Id. §825s.

156. Id. §§825s - 1, 2.

157. 42 U.S.C.A. §7172 (Supp. 1978).

158. 16 U.S.C.A. §825s (1974).

Chapter 3

SITING OF ENERGY FACILITIES IN THE UNITED STATES

I. PUBLIC AGENCIES WHICH ADMINISTER SITING LAWS

The United States Congress has not yet passed a comprehensive law governing the siting of energy facilities. Such legislation has been proposed, but there is no indication when, or if, it will eventually be passed. There are a number of existing federal laws and regulations designed to protect the environment which may affect the location and development of energy facilities generally. The Council on Environmental Quality may affect siting in administering the National Environmental Policy Act, which requires that Environmental Impact Statements be prepared by federal agencies for every major federal action significantly affecting the quality of the human environment.^{1/} The Environmental Protection Agency ("EPA") is responsible for administering the provisions of the Clean Air Act^{2/} and the Federal Water Pollution Control Act.^{3/} In addition, the Secretary of Commerce has an indirect siting role in approving a state's coastal zone management programs.^{4/} The Army Corps of Engineers has jurisdiction to issue permits for transmission lines or other facilities to be constructed in or over navigable waters.^{5/} Finally, the Federal Wild and Scenic Rivers Act may prevent the siting of energy facilities along designated rivers.^{6/}

II. NATIONAL ENVIRONMENTAL POLICY ACT OF 1969 (NEPA)

The National Environmental Policy Act ("NEPA")^{7/} is implemented and administered by all federal agencies and the Council on Environmental Quality ("CEQ") in accordance with guidelines promulgated by the CEQ. NEPA establishes environmental protection as a national goal, and directs all federal agencies to interpret and administer their existing powers and procedures in accordance with that goal "to the fullest extent possible,"^{8/} to establish new procedures to ensure that environmental values "are given appropriate consideration in decision making along with economic and technical considerations,"^{9/} and to "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources."^{10/}

NEPA, however, has been far more widely identified solely with its environmental impact statement ("EIS") requirements. NEPA requires that the responsible federal agency prepare an EIS for "any major federal action significantly affecting the quality of the human environment."^{11/} Although NEPA does not necessarily require that a project be abandoned where the EIS indicates an adverse effect on the environment, NEPA precludes commencement of all projects subject to NEPA until the final EIS is deemed complete by the CEQ. The object of the EIS requirement is simply to focus attention on adverse environmental

effects, so that they can be objectively weighed against economic and technical considerations. The United States Supreme Court has recently resolved an issue on which the federal circuit courts were split, and held that NEPA "does not set forth significant substantive goals for the Nation, but its mandate to the agencies is essentially procedural."^{12/}

Accordingly, the principal issues presented by NEPA are (1) whether an EIS is required, and (2) whether the EIS actually prepared is substantively and procedurally sufficient. Interpretive judicial decisions and the CEQ regulations provide guidance. The statute itself provides in §102(2) that all federal agencies must:

(C) include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on --

(i) the environmental impact of the proposed action,

(ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,

(iii) alternatives to the proposed action,

(iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and

(v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

Prior to making any detailed statement, the responsible Federal official shall consult with and obtain the comments of any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved. Copies of such statement and the comments and views of the appropriate Federal, State, and local agencies, which are authorized to develop and enforce environmental standards, shall be made available to the President, the Council on Environmental Quality and to the public as provided by section 552 of Title 5, and shall accompany the proposal through the existing agency review processes. . . .^{13/}

The Act also makes provision for limited circumstances in which the EIS may be prepared by a state agency administering a federal grant program; however, final responsibility for the EIS remains with the federal agency on official funding the program.^{14/}

A. When NEPA EIS Required

Most courts approach the question of when an EIS is required by asking (1) whether a "major federal action" is involved, and (2) whether that action will "significantly affect the quality of the human environment." A number of courts have held that any direct federal agency approval of a project, or even the approval of a loan or loan guarantee for a project, will constitute a "major federal action," even where the agency does not otherwise have jurisdiction to disapprove the project on the basis of environmental values. The object is to place the environmental issues in the open, where other agencies with appropriate powers can respond if necessary. An EIS has been required in two cases in connection with Rural Electrification Administration loan guarantees for, in one case, the construction

and operation of a coal-fired steam electric generating plant and, in the other case, the construction of high voltage electric transmission lines.^{15/}

In Natural Resources Defense Council, Inc. v. Hodel,^{16/} the Bonneville Power Administration, a federal agency similar to the TVA which operates hydro-electric generating facilities in the Pacific Northwest, was involved in long-term cooperative planning with its direct service customers, and the region's public and private utilities. The plan involved increased use of the BPA generators to meet peak load demands, and the construction of new transmission and generating facilities by the other parties. The court held that BPA's involvement in the planning process was a major federal action significantly affecting the environment, and required an EIS. There would be a significant effect on the environment because the increased use of the BPA hydro-electric generators to meet peak loads would cause large, rapid fluctuations of water levels which would affect recreational activities, commerce, and aquatic life. Also, the construction of transmission facilities by the non-BPA parties involved in the planning process would require vast acreages of land to be converted from present agricultural, recreational, and other uses, with accompanying disruption of fish and wildlife habitats.

Where a "major federal action" is involved, it need not necessarily "significantly affect the quality of the human

environment." The courts have taken a case-by-case approach to the latter question. In City of New Haven v. Chandler,^{17/} local groups objected to a portion of a proposed project involving the construction of three electrical transmission towers in the New Haven harbor. A permit for the towers was required from the Army Corps of Engineers under the Rivers and Harbors Act because of the harbor location, and that permit was thus a "major federal action." However, overruling local objections, the court found that the impact of the project would not significantly adversely affect the aesthetics of the existing environment or have a negative impact on local urban renewal, largely because the area was already industrial, and the towers would not make a significant difference. The court noted that prior approvals of the project by the Connecticut Public Utilities Commission and Department of Environmental Protection were evidence that the adverse environmental effect was minimal, while local opposition was evidence that the effect was more than minimal; on balance, though, all of the evidence favored a finding that the environmental impact would not be significant, and therefore an EIS was not required.

In City of Santa Clara v. Andrus,^{18/} the City objected to the Secretary of Interior's decision to withdraw an electric power allocation from the Central Valley Project in California and to deny the city "firm" power from that project. The city argued that an EIS was required because the Secretary's action

would force the city to construct its own generating facilities and would cause industry to relocate to other communities. The court disagreed that these consequences were significant enough to require an EIS, reasoning that the Central Valley Project had only a finite amount of power, and that therefore no matter how the electric power were allocated the same consequences would result within the region.

An exception to the EIS requirement has developed even where a major federal action significantly affecting the environment may be involved, if the EIS requirement would conflict with other laws concerning the agency's duties. This exception is based on the language in NEPA requiring only that federal agencies comply with NEPA "to the fullest extent possible."^{19/} That language has been interpreted to mean the fullest extent possible consistent with other law. In Flint Ridge Development Co. v. Scenic Rivers Ass'n. of Oklahoma,^{20/} the Supreme Court held that an EIS was not required in connection with HUD approval of a land developer's disclosure statement under the Interstate Land Sales Full Disclosure Act.^{21/} The Court declined to rule on whether HUD's approval was a major federal action significantly affecting the environment, finding instead that an EIS was unnecessary under the language of NEPA requiring agency compliance only to "the fullest extent possible." Since the Disclosure Act requires automatic HUD approval unless within 30 days HUD suspends the disclosure statement because incomplete or inaccurate, and since this

feature of the Disclosure Act is designed to protect developers from any delay other than because of an incomplete or inaccurate disclosure statement, to permit the lengthy delay necessary for an EIS would contravene the purposes of the Disclosure Act. Therefore, an EIS could not be required.

The CEQ Guidelines provide that any federal legislation constitutes a "major federal action," although not necessarily in every case significantly affecting the environment.^{22/} Federal legislation concerning energy facility siting might significantly affect the environment and consequently require an EIS.

B. Content of the EIS

The CEQ Guidelines set forth detailed requirements for the contents of environmental impact statements. Briefly, the EIS must contain a description of the proposed action and its purpose; the environment affected, including maps and diagrams if relevant; relationships to other federal projects and the overall cumulative effect; population and growth characteristics; relationship of the proposed action to land use plans, policies, and controls in the area; probable impact on the environment, including secondary or indirect consequences; alternatives including "those not within the existing authority of the responsible agency," where relevant; any unavoidable adverse environmental effects; relationship between local short-term uses of man's environment and the maintenance and enhancement of long-

term productivity; and irreversible and irretrievable commitments of resources that would be involved; and a discussion of what interests and considerations offset any adverse environmental effects.^{23/}

Much of the litigation concerning the sufficiency of NEPA environmental impact statements has involved the adequacy of studies and discussions of alternatives to, or modifications of, the proposed project. However, in Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc.,^{24/} the United States Supreme Court recently held that this NEPA requirement means only that "reasonably feasible" alternatives must be considered. The Court found that "energy conservation," as an alternative to construction of the proposed nuclear power plant, was not a sufficiently well-defined alternative in the early 1970's to require extensive discussion. Implicit in the Court's opinion, though, is a recognition that energy conservation may require more extensive treatment as an alternative in future projects.

Lower federal courts have required or considered energy conservation, along with other alternatives such as alternate sites, in connection with projects involving the construction of power plants. In Mason County Medical Ass'n. v. Knebel,^{25/} the court sustained the district court's denial of a preliminary injunction against construction of a 500 megawatt coal-fired system electric generating unit, and related substation, and 345

kilovolt transmission lines, finding the EIS adequate. The EIS was over 1,000 pages long, including appendices. There had been preliminary studies, a public hearing, and a thorough study of reasonable alternatives, including (1) no additional power, (2) alternate sites, (3) alternate generation and fuels, (4) energy conservation, and (5) shared units with other utilities.

In National Wildlife Federation v. Andrus,^{26/} a question was raised as to the sufficiency of an EIS for the 23 megawatt Navajo Dam power plant, located on the San Juan River, the largest tributary of the upper Colorado River, known for fish and wildlife. The court granted an injunction against further construction, finding the EIS inadequate. The EIS contained only two brief comments regarding alternatives, (1) that obtaining power from existing alternate sources would cost more, and (2) that gas or coal-fired turbines would cause more pollution and deplete natural resources. The court emphasized that the EIS must contain a rigorous exploration and objective evaluation of the environmental impact of all reasonable alternatives, particularly those that might avoid some or all adverse environmental effects. Although the court recognized that a "rule of reason" should be applied, the court noted that the EIS here should have discussed (1) building a smaller plant, e.g. 15 megawatts, (2) obtaining power from uncommitted reserves stored in the Colorado River Storage Project system, and (3) delaying construction pending full completion of all environmental studies.

The court specifically disapproved of the agency's "piece-meal" approach, involving statements in the EIS to the effect that future studies would or should be undertaken. On a more general level, the court suggested that the EIS must be complete enough to permit an appropriate weighing of economic and environmental values.

An adequate discussion of reasonable alternatives has also been the primary focus of litigation involving the sufficiency of environmental impact statements for transmission lines. In Greene County Planning Board v. FPC,^{27/} the Second Circuit was presented with the last in a series of cases involving the objections of local groups to the construction of certain transmission lines. At an earlier stage in this litigation, an EIS was required because the Federal Power Commission (FPC) had approved construction of the transmission lines, which were "primary transmission lines" for a hydro-electric power plant licensed under the Federal Power Act. In the present case, the court held that the EIS was sufficient -- it complied with the directives the court had set forth in prior litigation involving the same project. Those directives were that the FPC consider "broad but potentially relevant considerations" such as future power demand and supply, alternative sources of power, and impending plans for further power facility construction. In the present case, the FPC had considered those items and had considered five alternative routes. The Court also held that the FPC was not

required to consider the impact of a 765 kv transmission line merely because the intended 345 kv line would have the capability of eventually being increased to 765 kv.

In Woida v. United States,^{28/} the court sustained an EIS prepared in connection with a Rural Electrification Administration loan guarantee for the construction of a high voltage transmission line. Although noting that an EIS must not be vague, general or conclusory, and that it must be sufficient to form the basis for reasonable evaluation and criticism, the court found the discussion in the EIS of three alternative sites adequate. The court also sustained the REA's preliminary determination that dangers to health and safety from the 400 kv dc high voltage transmission line were minimal and did not require discussion in the EIS.

C. Procedures For An EIS

Procedures for the preparation of a NEPA EIS are set forth in the CEQ Guidelines. Briefly, a draft EIS is prepared and circulated to other agencies for comment. The Guidelines direct that the draft EIS be prepared and circulated at the earliest possible point, and in all cases prior to agency reports or recommendations.^{29/} The comments are considered and evaluated, and then a final EIS is prepared with substantive comments attached, and again circulated to other agencies.^{30/} The final EIS should incorporate any opposing views not included in the draft EIS. Copies of the final EIS are sent to all federal,

state, and local agencies and private organizations that made substantive comments on the draft statement and to individuals who requested a copy of the final statement, as well as the applicant, and the EPA.^{31/} Copies of the draft and final EIS and of all comments received are also sent to the CEQ.^{32/} To the maximum extent practicable, no administrative action (e.g. issuing a necessary permit) may be taken sooner than 30 days after a final EIS, with comments, has been sent to the CEQ and made available to the public, or 90 days after circulation of the draft EIS.^{33/}

The Guidelines provide that where more than one agency is involved in an action, they may prepare a joint EIS or designate a single "lead agency" to assume supervisory responsibility for preparing the EIS.^{34/}

The Guidelines direct each agency to establish its own procedures to implement NEPA, and to "include provision for public hearings on major actions, whenever appropriate, and for providing the public with relevant information, including information on alternative courses of action."^{35/}

III. CLEAN AIR ACT

The Clean Air Act, as amended and revised by the Clean Air Amendments of 1977,^{36/} provides that the owner or operator of a project that will emit air pollutants must comply with air quality and emissions standards developed by the Environmental

Protection Agency (EPA).^{37/} There are two types of standards. First, the EPA has promulgated national ambient air quality standards, representing the level of air quality necessary to protect the public health, and secondary standards necessary "to protect the public welfare from any known or anticipated adverse effects associated with the presence of air pollution in the ambient air."^{38/} Second, EPA has promulgated performance and emissions standards for certain stationary sources. The only stationary source emission standards promulgated thus far relevant to energy facilities apply to fossil-fuel-fired steam generating units of more than 73 megawatts heat input rate, and all fossil-fuel and wood residue-fired steam generating units capable of firing fossil fuel at a heat input rate of more than 73 megawatts.^{39/} Exempted are increases in capacity to accommodate the use of combustible materials other than fossil fuels.^{40/} Certain emissions standards apply only to lignite-fired steam generating units that commenced construction or modification after December 22, 1976.^{41/} The emissions standards established for subject facilities include rates for release of general particulate matter and standards for release of sulfur dioxide and nitrogen oxides.^{42/} In addition, each owner or operator is required to install, calibrate, maintain and operate continuous monitoring systems for most such facilities.^{43/}

In addition to the ambient air quality standards and stationary source performance standards, the EPA has promulgated

regulations designed to prevent the "significant deterioration of air quality even though air quality may be cleaner than the minimum prescribed by national standards."^{44/} The regulations provide for the establishment of three classes of areas in which varying degrees of air quality degradation with respect to particulate matter, sulfur dioxide, and other pollutants would be deemed significant. Class I areas are those where virtually any deterioration of air quality would be considered significant, such as international and large national parks and wilderness areas, some of which are "mandatory" Class I areas and may not be reclassified.^{45/} Class II areas, pursuant to EPA regulation, initially included all other areas, and allow greater incremental increases in deterioration.^{46/} There are provisions for the reclassification of areas, including reclassification to Class III, which allows deterioration up to national ambient air standards.^{47/}

The Clean Air Act Amendments of 1977 added sections to protect the "visibility" of certain mandatory Class I areas, and to remedy any existing impairment of visibility, resulting from manmade air pollution.^{48/} "Visibility impairment" is defined to "include reduction in visual range and atmospheric discoloration."^{49/} Regulations are to be adopted to impose emissions limitations on stationary sources contributing to such visibility impairment in mandatory Class I areas, including fossil-fuel fired steam electric plants of 250 million BTUs per hour heat input having the potential to emit 250 tons or more of any pollutant.^{50/} The

EPA Administrator has authority to exempt stationary sources, but with respect to fossil-fuel fired power plants having capacities of 750 megawatts or more, the owner or operator is required to demonstrate that the power plant is located at such a distance from all areas designated for visibility protection that the power plant does not or will not, by itself or in combination with other sources, emit any air pollution which may reasonably be anticipated to cause or contribute to significant impairment of visibility in that area.^{51/}

The 1977 Amendments also establish requirements for "non-attainment areas," defined as areas exceeding any applicable national ambient air quality standard. These provisions are designed to expeditiously raise the air quality in such areas. Permits are to be required to construct and operate new or modified major stationary sources, and no permit is to be issued where it will frustrate the goal of expeditiously raising the air quality.^{52/} "Major stationary source" is undefined for purposes of these sections.

The EPA does not issue permits under the Clean Air Act. Rather, the states are required to administer and enforce the standards set by the EPA pursuant to "implementation plans," required to be prepared by the states and submitted to the EPA for approval.^{53/} The EPA nevertheless has authority to seek injunctive relief to enforce EPA stationary source performance standards, as well as the particular provisions of any state implementation plan.^{54/}

IV. FEDERAL WATER POLLUTION CONTROL ACT (FWPCA)

The Federal Water Pollution Control Act, sometimes called the "Clean Water Act," was substantially amended and revised by the Clean Water Act of 1977.^{55/} The Act is designed to reduce and eventually eliminate the amount of pollutants discharged into the nation's water, both navigable and non-navigable, inter-state and intra-state.^{56/} The EPA develops water quality standards and pollutant effluent limitations, including limitations on thermal discharges and discharges of specified "toxic" pollutants, and establishes comprehensive effluent performance standards for certain specified "point sources." The principal means of enforcing the standards is the National Pollutant Discharge Elimination System (NPDES).^{57/} Under NPDES, EPA issues permits for the discharge of any pollutants into any of the nation's waters unless a state has developed a permit program approved by EPA covering all waters within its boundaries. Even where a state has developed an approved permit program, it must transmit copies of all applications for permits to EPA, which can prevent issuance of the permit by objecting within 90 days that issuance would be inconsistent with the guidelines and requirements of the FWPCA.

Effluent standards applicable to steam electric generating plants have been promulgated by the EPA.^{58/} Specifically exempted are generating units of less than 25 megawatts rated net generating capacity, and any unit which is part of an electric utility system with a total net generating capacity of less than 150 megawatts.^{59/}

Otherwise, apart from certain pre-existing units, the regulations generally cover steam electric generators utilizing fossil-type fuel or nuclear fuel, with a thermal cycle employing a steam water system as the thermodynamic medium.^{60/} There are special standards for "small units," defined to mean units with rated net generating capacities from 25 megawatts up to 150 megawatts, "old units," which are generating units of 500 megawatts or greater capacity first placed in service before January 1, 1970 and generating units of less than 500 megawatts capacity first placed in service before January 1, 1974, as well as "new sources," which are those the construction of which was commenced after publication of the proposed effluent regulations, October 8, 1974.^{61/} In accordance with the goals of FWPCA,^{62/} the regulations establish requirements both in terms of best practicable technology (BPT) and best available technology (BAT), depending on type of pollutant involved.^{63/}

Completed NPDES permit applications must be circulated to appropriate state governmental agencies for comment, public notice must be given, and if there is a significant amount of public interest, a public hearing must be held.^{64/} EPA may not issue a permit unless the state, or appropriate interstate water pollution control agency having jurisdiction over the waters where the discharge will originate, certifies that applicable effluent standards developed under the FWPCA will be met.^{65/}

Areawide planning for wastewater treatment at the state

level is also provided for by the FWPCA.^{66/} Regional agencies may be established to plan for areawide water quality management, and where no regional agency is created, the state may act as the planning agency. At least one court has held that where a regional agency is not created, the state must act as the planning agency.^{67/} The Governor certifies any areawide plan to the EPA as complying with the FWPCA, and after approval by the EPA, permits under the NPDES system may not be issued except in conformity with the areawide plan.^{68/}

V. COASTAL ZONE MANAGEMENT ACT

The Coastal Zone Management Act^{69/} authorizes the Secretary of Commerce to make grants of financial aid to coastal states or their units of local government for use in developing and administering management programs designed to protect various environmental values associated with the nation's coastal zones. In developing management programs, the recipient states are required to include a planning process for energy facilities likely to be located in, or which may significantly affect, the coastal zone.^{70/} The coastal zone is defined to include coastal waters and submerged lands, as well as adjacent shorelands extending inland to the extent the use of the shorelands has a significant, direct impact on the coastal waters.

The Secretary of Commerce is required to approve the states' proposed management programs, and he is specifically required to find that the programs adequately provide for the

siting of energy facilities in or significantly affecting the state's coastal zone.^{71/} The Secretary is further authorized to administer and coordinate a complete coastal energy impact program of financial assistance for coastal states and their local governments to help meet needs resulting from activities involving energy development.^{72/} The aid may be in the form of grants, loans, or guarantees depending on the nature of the goal sought to be achieved.

The Secretary is generally required to cooperate with other federal agencies and to comply with the requirements of the Clean Air Act and Clean Water Act.^{73/} The Secretary is prohibited from interceding in any land use or water use decision with respect to the siting of any energy facility or public facility for the purpose of making siting at a particular location a prerequisite to, or condition of, financial assistance.^{74/}

VI. WILD AND SCENIC RIVERS ACT

The Wild and Scenic Rivers Act^{75/} provides for the designation of wild, scenic or recreational rivers and adjacent areas for preservation or for potential preservation. Designation may be by act of Congress or by act of a state legislature.^{76/} To date, 15 rivers have been designated for preservation, and 58 additional rivers have been designated as potential rivers for preservation by Congress.^{77/}

All federal agencies are required to consider designated potential wild, scenic and recreational river areas in all planning

for the use and development of water and related land resources.^{73/} Once a river is designated for actual preservation, the Federal Energy Regulatory Commission (FERC) is specifically prohibited from licensing the construction of any power-house, transmission lines, or other project works on or directly affecting the river.^{79/} FERC is also prohibited from granting such licenses with regard to rivers designated only for potential preservation, but this prohibition generally expires three years after such designation.^{80/}

VII. RIVERS AND HARBORS ACT

The Rivers and Harbors Act of 1899^{81/} authorizes the Army Corps of Engineers to issue permits for projects affecting the nation's navigable waters. The definition of "navigable waters" in this context has been significantly broadened by judicial decisions, and the Corps has promulgated new regulations to incorporate the broader interpretation. Navigable waters now include even wetlands, mudflats, swamps, marshes, and shallows.^{82/}

Regulations promulgated by the Corps require permits for any power transmission lines crossing navigable waters, unless the lines are part of a water power project subject to the regulatory authority of the Federal Energy Regulatory Commission.^{83/} The regulations impose minimum clearances for aerial electric power transmission lines.

The Corps has, by regulation, recognized its responsibility for preparing a NEPA statement.

VIII. PROPOSED FEDERAL LEGISLATION

During the last several years, three bills were introduced that would have affected the siting of energy facilities. None were passed, and there is no indication that any will be resurrected in the near future.

A. Electric Facilities Siting Act

Proposed in 1973, the Electric Facilities Siting Act^{84/} would have required states to establish centralized certifying agencies, and require electric utilities to engage in long-term siting planning. The Act would have established a timetable and basic procedural and substantive requirements for the state certification process.

The Act would have also established a centralized federal siting agency in the Department of Interior, entitled the "Federal Electric Siting Panel," composed of the Secretary of Interior, Attorney General, Administrator of the Environmental Protection Agency, Chairman of the Federal Power Commission, or their designees, and representatives of other federal agencies which are required to approve the construction or operation of the electric facility for which certification is sought. The Panel was directed to develop a unified federal application form to serve as the sole form for all necessary federal authorizations, and also to develop a unified state form. The Panel was otherwise to serve as an expediting and co-ordinating agency for the federal certification process.

Exempted from the provisions of the proposed Act would have been those facilities that failed to meet the definition of "electric utility" provided in the Act. Electric utility was defined as essentially any individual or corporation, however organized or owned, which owns or operates, or plans to own or operate, an electric facility.^{85/} "Electric facility" was defined as electric generating equipment and associated facilities designed for, or capable of, operation at a capacity of 300 megawatts or more, or additions to such capacity of 200 megawatts or more, or electric transmission lines and associated facilities designed for, or capable of, operation at a nominal voltage of 230 kilovolts or more between phase conductors for alternating current or between poles for direct current.^{86/} Hydro-electric plants licensed under Park I of the Federal Power Act would have been exempt.^{87/}

B. Energy Facilities Planning and Development Act

The proposed Energy Facilities Planning and Development Act^{88/} was similar to the proposed Electric Facilities Siting Act discussed above. The Act was designed to implement the goals of the Federal Energy Administration Act of 1974.^{89/} The Administrator under that Act would designate a centralized "lead federal agency" to coordinate and expedite the federal approval process for energy facility siting. The Administrator would also develop a single, composite application form, and suggest procedures for consolidating state and federal proceedings

with a view to reducing duplication of effort. The Administrator was authorized to establish timetables for the approval process. The Act would also have provided for judicial review of final orders of federal agencies involved in the certification process for any person who was "aggrieved" by an agency's final order.

The Act would also have required the Administrator to prepare a "National Energy Site and Facility Report" in consultation with the states, industry, and other appropriate federal agencies.^{90/} The Report was to analyze short and long-term energy needs and demand, and indicate the number, type, and general location of energy facilities required to meet national energy objectives. Within one year after the Report was issued, each state would have been required to submit an energy facility management program, including a procedure for coordinated review and approval designed to insure that applications are processed and a final decision rendered within an eighteen-month period. Consideration of state environmental values, land use, and water planning would also have been required in the state management program. The Act would also have provided the Administrator with authority to make grants to states for the development, initiation, and administration of approved or promulgated management programs.

C. Land Use and Resource Conservation Act

The proposed Land Use and Resource Conservation Act

of 1975^{91/} was one among a number of proposed bills that would have provided federal grants for state land use programs. This particular bill would have required state programs to include, among other things, policies and procedures to encourage development of energy, and land use patterns and practices designed to conserve energy.

Additional grants would have been authorized for the purpose of developing state procedures to simplify the processing of permits, licenses, and other governmental decisions which are prerequisites to proposed developmental activities.

Footnotes

1. 42 U.S.C. §§4321-4367 (1976).
2. 42 U.S.C.A. §§7401-7642 (West Supp. 1978).
3. 33 U.S.C. §§1251-1376 (Supp. IV 1974).
4. 16 U.S.C. §§1451-1453 (1974) Supp. IV.
5. 33 U.S.C. 401 et seq. (1976).
6. 16 U.S.C. §§1271-1287 (1976).
7. 42 U.S.C. §§4321-4367 (1976).
8. Id., §4332.
9. Id., §4332(2)(B).
10. Id., §4332(E).
11. Id., §4332(2)(C), (D).
12. Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc., 435 U.S. 519 (1978).
13. 42 U.S.C. §§4332(c), (D) (1976).
14. Ibid.
15. Mason County Medical Ass'n. v. Knebel, 563 F.2d 256 (6th Cir. 1977); Wolda v. United States, 446 F. Supp. 1377 (D. Minn. 1978).
16. 435 F. Supp. 590 (D. Oregon 1977).
17. 446 F. Supp. 925 (D. Conn. 1978).
18. 572 F.2d 660 (9th Cir. 1978), cert. denied, 439 U.S. 859 (1978).
19. 42 U.S.C. §4332 (1976).
20. 426 U.S. 776 (1976).
21. 15 U.S.C. §1701 et seq. (1976).
22. 40 C.F.R. §1500.2(a) (1978).

23. 40 C.F.R. §1500.8 (1978).
24. 435 U.S. 519 (1978).
25. 563 F.2d 256 (6th Cir. 1977).
26. 440 F. Supp. 1245 (D.D.C. 1977).
27. 559 F.2d 1227 (2d Cir. 1976), cert. denied
434 U.S. 1086 (1978) (Greene County IV).
28. 446 F. Supp. 1377 (D. Minn. 1978).
29. 40 C.F.R. §1500.2 (1978).
30. Id., §1500.7(a).
31. Id., §1500.10.
32. Id., §1500.11.
33. Id., §1500.11(b).
34. Id., §1500.7(b).
35. Id., §1500.7(d).
36. Clean Air Act, 42 U.S.C. §1857 et seq., (1976)
transferred to 42 U.S.C.A. §§7401-7642 (West Supp. 1978).
37. 42 U.S.C.A. §7409 (West Supp. 1978).
38. Id., §7409.
39. 40 CFR §60.40(b).
40. Id., §60.40(b).
41. Id., §60.40(d).
42. Id., §§60.42-60.44.
43. Id., §§60.45-60.46.
44. 42 U.S.C.A. §§7470-7491 (West Supp. 1978).
45. Id., §§7472, 7473.
46. 40 C.F.R. §52.21(e)(3) (1978).

47. 42 U.S.C.A. §7474 (West Supp. 1978).
48. Id., §7491.
49. Id., §7491(g) (6).
50. Id., §§7491(b), (g) (7).
51. Id., §7491(c).
52. Id., §7503.
53. Id., §7410.
54. Id., §7413.
55. 33 U.S.C. §§1251-1376 (1976).
56. Id., §1251.
57. Id., §1342.
58. 40 C.F.R. §423 (1978).
59. Id., §423.11.
60. Id., §423.10.
61. Id. §§401.11, 423.10-423.46.
62. 33 U.S.C.A. §1311 (West Supp. 1978).
63. 40 C.F.R. Pt. 423 (1978)
64. Id., §§124.36, 125.34.
65. 33 U.S.C.A. §1341 (West Supp. 1978).
66. Id., §1288.
67. Natural Resources Defense Council, Inc. v. Train, 396 F.Supp. 1386 (D.D.C. 1975).
68. 33 U.S.C.A. §1288(e) (West Supp. 1978).
69. 16 U.S.C. §§1451-1464 (1976).
70. Id., §1454(b) (8).

71. Id., §1455(c)(8).
72. Id., §1456a.
73. Id., §1456.
74. Id., §1456a (i).
75. Id., §§1271-1287.
76. Id., §1273.
77. Id., §§1274, 1976.
78. Id., §1276(d).
79. Id., §128(a); See Chapter 2 for a discussion of FERC.
80. Id., §1278(b).
81. 33 U.S.C. 401 et seq. (1976).
82. 33 C.F.R. §§209.120(d)(2)(b), (h) (1978).
83. Id., §209.120(g)(14).
84. S.935, 93rd Cong., 1st Sess. (1973).
85. Id., §3(a).
86. Id., §3(c).
87. Id.
88. S.619, 94th Cong., 1st Sess. (1975).
89. 15 U.S.C. 761 et seq. (1976).
90. S.619, 94th Cong. 1st Sess. §103 (1975).
91. H.R. 3510, 94th Cong., 1st Sess. (1975).

CHAPTER 4
UNITED STATES

I. AUTHORITY TO GRANT RIGHTS OF WAY

The United States government does not grant utility franchises. However, rights-of-way for electric transmission lines over federal lands are granted by federal agencies for lands under their control which are essentially similar to utility franchises granted by states, counties, and municipalities. The Federal Land Policy and Management Act of 1976^{1/} (the Act) comprehensively provides for the planning and management of federal lands. Subchapter V of the Act, replacing provisions of two earlier acts,^{2/} provides authority to the Secretary of Agriculture to grant rights-of-way over lands within the National Forest System and similar authority to the Secretary of Interior to grant rights-of-way over other public lands. In each case, land designated as wilderness is excluded from the authority granted. In particular, rights-of-way may be granted for systems for the generation, transmission, and distribution of electricity, provided the applicant also complies with any applicable requirements of the Federal Energy Regulatory Commission (FERC) under the Federal Power Act.^{3/} FERC has exclusive jurisdiction with respect to primary or main transmission lines associated with hydroelectric plants, even for federal land which is administered by the Departments of Interior and Agriculture. Otherwise,

with respect to transmission lines for steam plants and non-primary lines associated with hydroelectric plants, the Departments of Interior and Agriculture have final authority.^{4/} Because the Department of Interior has a larger role than the Department of Agriculture, and because regulations of both Departments are substantively similar, the remainder of this Chapter is devoted primarily to a discussion of the Department of Interior's granting of rights-of-ways except where otherwise noted.

II. PROCEDURE FOR GRANTING RIGHTS-OF-WAY

Procedures for obtaining a right-of-way for electrical transmission lines over federal land controlled by the Department of Interior are found in the Code of Federal Regulations.^{5/} Although most of these procedures were promulgated under the authority of statutes no longer in effect, the procedures remain effective under the present Act. The Bureau of Land Management generally administers the procedures for lands under the control of the Department of Interior, and the National Forest Service administers the procedures for lands under the jurisdiction of the Department of Agriculture.

The procedures applicable to grants of rights-of-way for transmission lines over lands under the control of the Department of Interior require that the application disclose the identity and citizenship of the applicant.^{6/} The application must include a description of the connecting generating plant, a description of the transmission line including its voltage

capacity, a statement as to the anticipated number of customers, a detailed description of the environmental impact of the project,^{7/} and must be accompanied by maps indicating the width of the right-of-way desired.^{8/} The proposed site, design, and construction must be consistent with the "Environmental Criteria for Electric Transmission Lines," prescribed jointly by the Secretary of Interior and the Secretary of Agriculture.^{9/} If the project involves the storage, diversion, or conveyance of water, the applicant must file a statement by the proper official, or other evidence, showing that he has a right to use the water.^{10/}

The applicant is required to reimburse the United States for administrative and other costs incurred in processing the application, including the preparation of the NEPA environmental impact statement.^{11/} This reimbursement is generally not required of state or local governments or agencies where the lands will be used for governmental purposes and will continue to serve the general public. A relatively small nonreturnable payment must accompany the application.^{12/}

Where an application is deficient, the authorized officer may in his discretion provide the applicant with an opportunity to correct the deficiencies, or may reject the application.^{13/}

III. CRITERIA APPLIED TO GRANTS OF RIGHTS-OF-WAY

The principal criteria in granting rights-of-way for transmission lines over lands administered by the Department of Interior are contained in "terms and conditions" established

for such grants by Department regulations (discussed below).^{14/} If all of the terms and conditions are agreed to, an application may be approved if it is determined that the beneficial purposes and effects of the project will not be outweighed by an adverse environmental impact.^{15/} In this regard, the authorized officer is to suggest any possible alternative routes or methods of construction. The Secretary must also be satisfied that the applicant has the technical and financial capability to construct the project for which the right-of-way is requested in accordance with the requirements of the chapter.^{16/}

IV. CHARACTERISTICS OF RIGHTS-OF-WAY

A. Duration, Termination, Transfer

Rights-of-way for transmission lines over federal land granted by the Secretary of Interior or Secretary of Agriculture are generally limited to reasonable terms, to be determined in light of all circumstances concerning the project.^{17/} By regulation, rights-of-way granted by the Secretary of Interior are limited to 50 years, subject to renewal.^{18/}

Rights-of-way granted by the Interior Department are generally subject to cancellation for failure to construct within five years.^{19/} After termination, any property and improvements allowed to remain for six months automatically vest in the United States.^{20/}

A change in the jurisdiction of the agency controlling the land, or a disposition of the land by the United States does not affect the continuing vitality of the right-of-way.^{21/} Any transfer of the right-of-way must comply with various regulations.^{22/}

B. Exclusivity

Utilization of power transmission rights-of-way in common, or "right-of-way corridors," is required to the maximum extent possible. The Secretary of the Interior and Secretary of Agriculture reserve the right to grant additional rights-of-way on or adjacent to each right-of-way granted.^{23/}

C. Other Characteristics

Various statutory sections and regulations require that "terms and conditions" be imposed on grants of transmission rights-of-way. Grants are required by statute to contain terms and conditions which will minimize damage to scenic and esthetic values and fish and wildlife habitat, and otherwise protect the environment. The grant must also comply with applicable air and water quality standards pursuant to applicable Federal or State law, and comply with state standards for public health and safety, environmental protection and siting, construction, operation, and maintenance of rights-of-way if those standards are more stringent than applicable Federal standards.^{24/}

In addition, terms and conditions may be imposed where

necessary to protect federal property and economic interests, to manage efficiently the lands which are subject to the right-of-way or adjacent thereto, and to protect other lawful users of the lands adjacent to or traversed by the right-of-way.^{25/}

Regulations further provide that an applicant, by accepting a right-of-way for a power transmission line, agrees to protect all telephone, telegraph, and power transmission lines from contact, and highways and railroads from obstruction. He further agrees to maintain his transmission lines in such manner as not to endanger life or property at crossings and all places in proximity to his transmission lines, in accordance with the National Electric Safety Code.^{26/} The applicant for a right-of-way for a generating facility or for a transmission facility in excess of 33 kilovolts capacity agrees to have the application referred to the Secretary of Interior to determine any conflicts of the proposed facility with the power-marketing program of the United States. In case of conflict, the application may be denied or conditioned on satisfactory modification of the project.^{27/}

An applicant for a right-of-way for a transmission facility having a voltage capacity of 66 kilovolts or more must file a stipulation agreeing with certain limitations to allow the Department of Interior to interconnect and utilize excess capacity, or to increase the capacity of the transmission facility at the Department's expense.^{28/} These regulations were

recently interpreted by the Ninth Circuit to authorize the Secretary of Interior to require an applicant to allow reasonable wheelings of power as a condition to a grant of a right-of-way.^{29/}

An applicant for a power transmission line right-of-way is generally required to pay a charge for the use of the lands in an amount equal to their fair market value.^{30/} No charge is imposed for municipally operated projects, non-profit or Rural Electrification Administration projects, or projects involving use by a federal agency.

FOOTNOTES

1. 43 U.S.C.A. §§1701-1782 (West Supp. 1978).
2. 43 U.S.C. §§959, 961 (1976).
3. 43 U.S.C.A. §1761(a)(4) (West Supp. 1978).
4. Utah Power & Light Co. v. Morton, 504 F.2d 827 (9th Cir. 1974).
5. The Department of Agriculture's regulations are codified at 36 C.F.R. §§251.50-251.65 (1979); the Department of Interior's Regulations are codified at 43 C.F.R. Subparts 1821, 2802, 2850 (1978).
6. 43 U.S.C.A. §1761(b) (West Supp. 1978); 43 C.F.R. §§2802.1-1, 2802.1-3, 2802.1-4 (1978).
7. 43 C.F.R. §2851.2-1(c) (1978).
8. Id., §2802.1-5.
9. Id., §2851.2-1(c)(6)(ii). The criteria are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20420.
10. 43 C.F.R. §2802.1-5(b) (1978).
11. Id., §2802.1-2(a)(1).
12. Id., §2802.1-2(a)(3)(i). The fee is \$50 per mile for less than 5 miles, \$500 for 5 to 20 miles, and \$500 per each 20 miles thereafter.
13. Id., §2802.2-1.
14. The terms and conditions are discussed below in Part IV, Other Characteristics.
15. 43 C.F.R. §2851.2-1(c)(6)(iii) (1978).
16. 43 U.S.C.A. §1764(;) (West Supp. 1978).
17. Id., §1764(b).
18. 43 C.F.R. §2851.1-1(b) (1978).
19. Id., §§2802.2-2, 2802.2-3.

20. Id., §2802.5.
21. Id., §2802.3-2.
22. Id., §2802.4.
23. 43 U.S.C.A. §1763 (West Supp. 1978).
24. Id., §1765.
25. Id.
26. 43 C.F.R. §2851.1-1(a)(1), (4) (1978).
27. Id., §2851.1-1(a)(3).
28. Id., §2851.1-1(a)(5).
29. Utah Power & Light Co. v. Morton, 504 F.2d 728 (9th Cir. 1974).
30. 43 C.F.R. §2802.1-7 (1978).