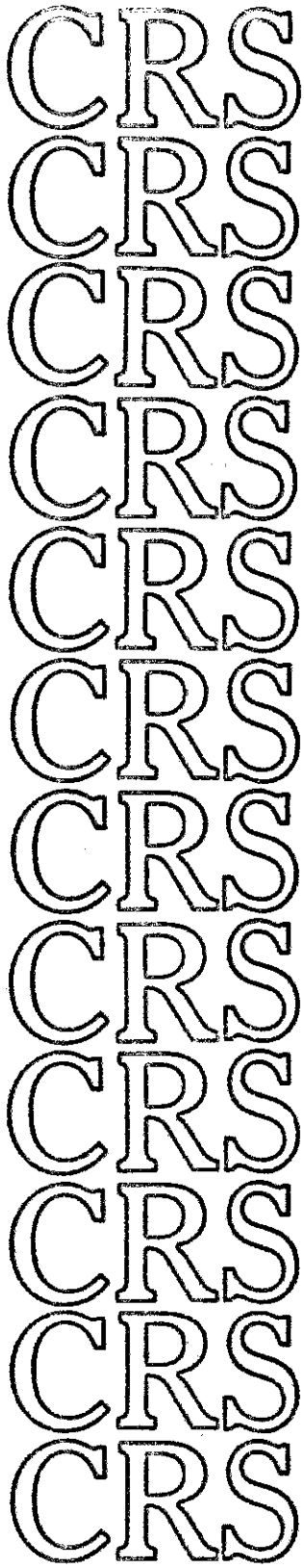

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A STUDY OF ELECTRIC POWER PLANT SITING

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Table of Contents

	Page No.
Summary	i
Introduction	1
Potential Problem Areas	1
State Regulation	6
A Survey of the States	6
Some Regulatory Examples	8
Ohio	9
Illinois	12
Indiana	14
Kentucky	16
West Virginia	19
State Regulatory Activity	19
Federal Regulation	20
Environmental Regulation	21
Electric Regulation	24
Legislative Possibilities	32
Alternatives to Federal Regulation	33
Appendix A	34

Summary

External costs imposed on society by electric power plants have been largely internalized, but still elicit much controversy. This is particularly true where several states share a river or other body of water. No single state may be able to control development in a regional context.

Generally, the problems of power plant siting will be most acute in central and southeastern U.S. where construction is expected to be substantial. Most (80%) states have the authority to regulate siting, based on a CRS survey, and exercise it. This latter point is indicated by the fact that 8% of the states refused to permit construction and 25% had ordered a delay. The major criteria for plant siting was environmental compatability, with need a relatively close second.

Several states, such as Ohio, have a commission specifically designated to oversee power plant siting. Other states work through the Public Utility commission, state energy office, or the environmental department. In some cases a combination of these is used. There is some question as to how much weight the states place on regional considerations as opposed to state considerations, although there is nothing to prevent them from cooperating with each other. The states, however, are not compelled to do so in the absence of a Federal requirement or an interstate compact.

Some Federal requirements do exist. Section 208 of the Clean Water Act encourages regional land and water planning and requires identification and regulation of sources to obtain the desired water quality. The Clean Air Act of 1977 also requires the preparation of state implementation plans to attain the standards. This could have a substantial impact on power plant siting.

In addition, a further Federal exercise of authority over regional planning appears legally permissible. The Federal Energy Regulatory Commission currently regulates interstate sales of electricity and has a broad authority to license interstate activities. This latter item might be used as a planning device for regional power development.

Aside from the above, the Congress can regulate intrastate activities that impact interstate commerce.

A STUDY OF ELECTRIC POWER PLANT SITING

Introduction

With the growth of the environmental movement has come recognition that electric facilities such as generating plants impose costs on society that were not generally included in the price of the product. As a consequence, construction of such plants has generated considerable controversy.

In large measure, the external costs imposed by electric power plants have now largely been internalized through the workings of various regulations and the actions of State Commissions. Despite this internalization, however, controversy still surrounds the question of plant siting. Some believe the plants to be unnecessary because of lower demand, some oppose construction of nuclear units specifically, and still others worry about the environmental damage resulting from such plants.

This latter point is particularly appropriate where several States share a river or body of water. In such a case, no single State may be able to control overall power plant development. Inasmuch as construction along such interstate waterways, together with potential environmental problems, is of interest to the Congress this report has been prepared.

Potential Problem Areas

There is a good deal of controversy over the future growth rate of electric demand, and the consequent need for new plants. For the purposes of this report, however, we only need to know how the utilities perceive future demand, the size and number of plants they plan to build in what areas of the nation and the probability of that construction taking place.

In this connection it must be kept in mind that the planning horizon is now somewhere between 10 and 15 years. As a consequence, plants not expected to be

needed for ten years are already in the regulatory and planning mill, so that the utilities should have a relatively clear idea of what they expect to build. In any such long-term forecast, however, errors are bound to occur, either above or below what actually transpires, since none of us can foretell the future.

In any case, Table 1 indicates utility construction plans as of the Fall of 1977. This information is broken into 3 major time periods: 1980; 1981-84; 1985-89. Those plants scheduled for operation in 1980 are presumably already under construction. Those scheduled for the 1981-84 period are probably somewhere in the regulatory pipeline or possibly under construction, while those anticiapted for the later period are in the regulatory pipeline or still in the early planning stages.

In preparing this table we have leaned on data relating to the regional reliability councils established by the FERC (formerly FPC). These are voluntary organizations for the coordination of planning, construction and operation of a national bulk power system. The councils are made up of representatives of utilities, regardless of ownership. Several of the regions, however, are rather extensive in area, and we have subdivided these into smaller units (See attached map).

The data indicate rather substantial construction activity throughout the central U.S. The areas primarily involved run in a diagonal from ECAR, thru MAIN, the Southwest Power Pool, and down into Texas. In addition, the southeastern area also indicates major expansion of electric capacity. It thus appears that only the northeastern and western U.S. will not be impacted in a serious manner.

We are now faced with determining the probability of the planned construction actually taking place. For this purpose, we can use the reserve margins forecast by the regional reliability councils. The councils compute the anticipated reserve for each of the regions. This information can be used to indicate the need for generating plants in that electric utilities build facilities in order to meet their expected peak demand. That is, they must have sufficient capacity available on the system to supply maximum demand. Inasmuch as most utilities are required by law

Table 1

New Capacity by Expected Year of Operation[1/]

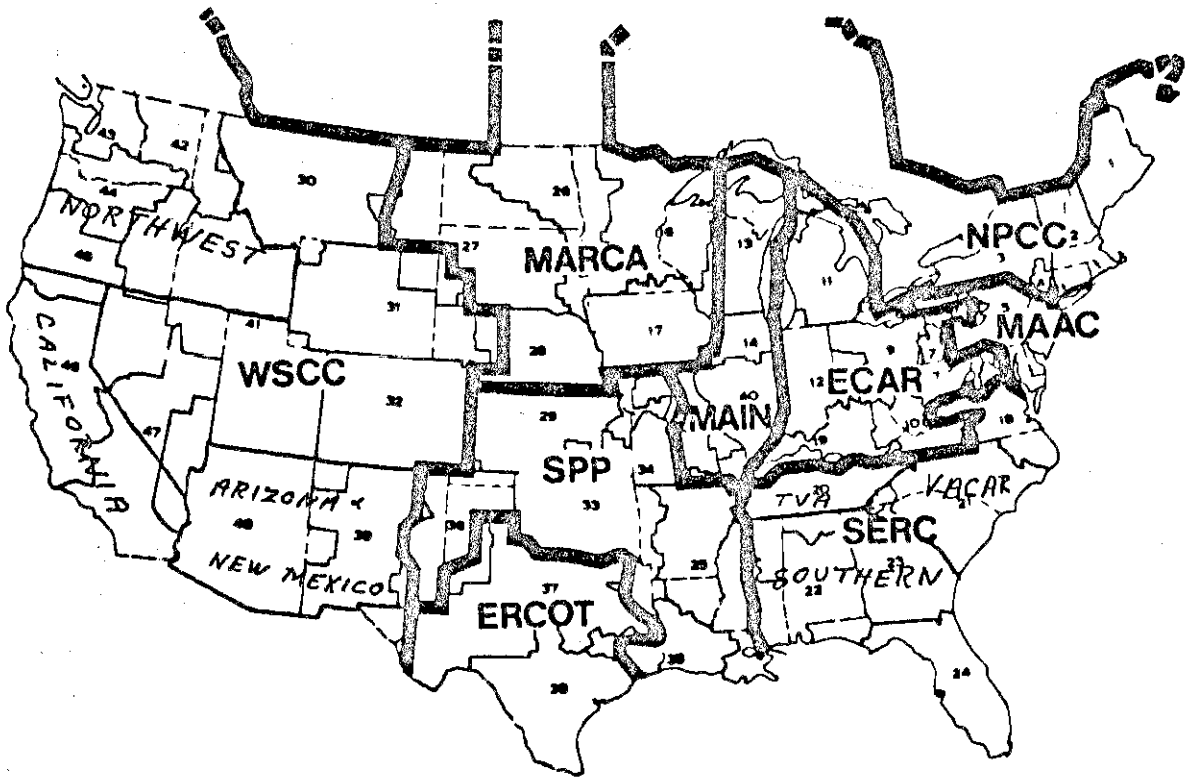
AREA	1980 No.	1980 MW	1981-84 No	1981-84 MW	1985-89 No	1985-89 MW	Reserve Margin 1986 [2/] %
New England	-	---	5	5780	2	2300	23.5
New York	1	820	6	5870	10	4370	22.6
MAAC	3	1066	8	6912	4	4422	28.4
ECAR	8	5891	19	14,370	8	7603	17.9
MAIN	4	1766	21	8479	4	3883	14.8
ERCOT	2	1800	10	8245	3	2590	23.1
MARCA	2	1000	8	5269	-	---	14.2
SPP	10	4696	21	11,976	11	8113	16.8
TVA	2	2390	6	7378	3	3803	19.4[3/]
SOUTHERN	10	2421	11	7228	4	3533	14.9
VACAR	2	1620	15	10,626	7	7640	19.1[3/]
CALIFORNIA	4	1521	2	2074	4	1874	
Arizona-New Mexico	1	347	4	3285	2	2470	
Northwest	2	1630	5	5328	2	2528	29.0
Rest of WSCC	4	1175	11	4210	1	400	

1/ Electric Power Survey Committee, "1977 Electric Power Post-Summer Survey", Edison Electric Institute, As of Oct. 1, 1977, Appendix I.

2/ FPC, Bureau of Power Staff Report: Proposed Generating Capacity Additions 1977-1986 as Reported April 1, 1977, Docket R-362, Order 383-4, Sept. 6, 1977, Data includes the effect of purchases and sales. All margins are computed at summer peak except as noted.

3/ Winter peak.

Regional Reliability Councils of the National Electric Reliability Council



ECAR	East Central Area Reliability Coordination Agreement	**MAIN**	Mid-America Interpool Network	**SERC**	Southeastern Electric Reliability Council
ERCOT	Electric Reliability Council of Texas	**MARCA**	Mid-Continent Area Reliability Coordination Agreement	**SPP**	Southwest Power Pool
MAAC	Mid-Atlantic Area Council	**NPCC**	Northeast Power Coordinating Council	**WSCC**	Western Systems Coordinating Council

to supply electricity at the time the customer wishes such service, companies maintain redundant capacity in order to guard against forced outages, required maintenance, the uncertainty inherent in demand projections and weather conditions which may increase or decrease demand at a given point in time. This redundancy is generally known as the reserve margin. Reserve margins, while capable of being computed using rather complex systems which we will not go into here, generally follow a rule of thumb that the excess capacity should be equal to the largest unit on the system. A more sophisticated method would compute the reserve margin to account for the loss of load probability at the peak. On average, to maintain a criteria of no more than one outage in 10 years, a reserve margin of approximately 20% would be necessary to assure service at the time of maximum demand.

Table I also indicates the expected reserve margin during the system peak period in 1986. These computations assume construction of planned new plants. It will be noted that some shortages may be expected in the sense that reserve margins will be substantially below the average 20% in the ECAR, MAIN, MARCA, SPP, and southern regions. The rest of the country should have adequate reserves. In those areas in which reserve margins are anticipated to be lower than desirable, construction will probably proceed as planned. In the other areas, there is a possibility that planned construction will be deferred in order to allow reserve requirements to come into a somewhat more normal balance and because the pressure for construction will not be as great. In considering these figures, however, we must keep in mind that the computations assume a given demand level. If actual demand is less than forecast, reserve margins will be higher and vice versa, with consequent reduced pressure to build new plants.

In any case, the foregoing indicates a rather high probability of electric generating plant construction in both the middle and southern United States.

State Regulation

Most of the states regulate the construction of new electrical generating plants. This regulation generally takes the form of a public hearing dealing primarily with the need for the plant and its environmental compatability. In doing so, the state would presumably be concerned with impacts within its borders rather than on a regional basis. To some extent, however, it is likely that the intervenors in the case, who by and large would represent environmental groups, would introduce regional environmental considerations. The unknown would be the weight the state regulatory body would place on such evidence in determining whether to approve or disapprove the plant.

A Survey of the States

CRS recently conducted a survey of the fifty states and District of Columbia to determine their authority and criteria for construction of new electrical generating plants. Forty one States and the District replied. Eighty percent of those replying indicated that the State had authority and responsibility for determining the justification for construction of a new electrical generating plant. Eighty-nine percent of those can approve, reject or delay the application of an electric utility to build a new plant based on criteria such as the need for energy, cost of alternative types of electrical generation, and so forth. The States review load forecasts, consider plant mix, financial commitments, etc, in determining whether to grant approval. Despite this look at the need and benefits accruing from a new plant, the overriding consideration is environmental compatability.

Some 8 percent of the States had denied a certificate for construction of a new electrical generating plant, and 25% had ordered a delay. The major reason given for denial or delay was "environmental considerations", followed by lack of need. In a few instances, "improper plant mix" or "excessive financial commitment" was noted.

In the case where the need for the plant, as indicated by reserves, was apparent, 94% indicated they would not automatically approve the utility request; 68% of those stated they would reject the lowest cost alternative if environmental and siting considerations were not acceptable. In a few cases other reasons for rejection, such as financial ability, safety, reliabilty, etc., were also noted. Twenty-three percent stated the plant would be approved unless a careful review indicated a cheaper alternative.

In the opposite case (where need is not apparent based on reserves), 50% stated they would not approve a plant unless it was needed to meet reserve requirements. An additional 30% indicated approval unless a careful review showed another alternative to be less costly, while 20% would approve unless the overwhelming weight of evidence showed another alternative to be less costly.

In the final case, where peak growth slows but base load increases with need being met by using intermediate load plants at higher cost, 73% stated the lower cost alternative could be rejected if it were not environmentally acceptable. There were other reasons also given as noted earlier. An additional 18% indicated approval if careful review indicated potential savings.

The survey indicates that most of the responding States consider both need and environmental compatability in approving an application for new plant construction, with the environment as the more equal of the two criteria. In any case, in virtually no instance would a plant be automatically approved, nor would lower lifetime costs be considered as a reason for construction at the expense of the environment.

The following eight States have no authority to regulate the construction of new electrical generating plant facilities: (1) Alaska, (2) Georgia, (3) Indiana, (4) Louisiana, (5) Michigan, (6) South Dakota, (7) Tennessee, and (8) Washington. In the case of Tennessee it should be noted the bulk of the plant siting would

involve facilities of the Tennessee Valley Authority, an independent Federal agency. TVA, however, is also the largest utility in the United States. In addition, the following 9 States did not reply to our questionnaire: (1) Alabama, (2) Illinois, (3) Kansas, (4) Kentucky, (5) Missouri, (6) Oklahoma, (7) Pennsylvania, (8) Rhode Island, and (9) Utah. If we were to assume these 9 also lacked authority, close to one third of the States in the U.S. would be unable to directly control generating plant siting within their borders. The regulatory body could exercise indirect authority by adjusting the companies allowable rate of return or its rate base, or otherwise making it difficult for the company to borrow funds in order to build. Alternatively, the commission could disallow a given plant so that the company would not be able to recoup its cost. This would be a rather drastic measure and would be taken only with the greatest reluctance by most regulatory bodies.

From the above, we can conclude that the majority of the States are active in regulating the construction of electrical generating facilities within their borders, and that this regulation gives precedence to environmental considerations. The need for the plant is a second major and potentially equal consideration. The main consideration of plant siting on a regional basis would be primarily through intervenor testimony.

The Regional Electric Reliability Councils which are made up exclusively of utility people, do consider plant siting on a regional basis. The major concern of the councils, however, would be with the planning process for development and delivery rather than environmental considerations. These are undoubtedly considered, but would presumably play a secondary role.

Some Regulatory Examples

Environmental regulation has two basic components: first, the intent of the mandate as set forth in the law; and second, the manner in which the

agency implements its regulations. The licensing or permit process, how long it takes, and the level of detail required to obtain a license or permit are usually good measures of how the agency is interpreting the intent of the regulations.

We will concentrate on the first component and examine State laws and procedures establishing environmental institutions in several States. A series of power plants are proposed for the Ohio River Basin and we have selected this area for study. Illinois, Indiana, Kentucky, and Ohio, all of which contain land in the Ohio River Basin, will serve as our examples. Of prime concern to policy makers is whether the present legal and institutional framework can protect the region's environment from an adverse impact by the scheduled power plant constuction, particularly when these are viewed in a regional context.

Ohio. -- The agency in Ohio having the most direct responsiblity for environmental aspects of power plant development is the Ohio Environmental Protection Agency [1/] with its regulations on Air Pollution Control,[2/] Solid Waste disposal,[3/] and Water Pollution Control.[4/]

The Ohio Environmental Protection Agency (OEPA) derives the bulk of its authority from the air pollution, solid waste disposal, and water pollution regulations. OEPA has the responsibility for adopting emission limitations, ambient air quality standards, and can promulgate rules and regulations for carrying out and enforcing the adopted limitations and standards. The agency is further empowered to issue operating permits, construction and modification authorizations. In addition, the OEPA has such powers as are required to assure compliance with its rules and regulations. OEPA, in the area of solid-waste disposal, has licensing

1/ Ohio Rev. Code Chap. 3745.
2/ ORC, Ch. 3704.
3/ ORC, Ch. 3734.
4/ ORC, Ch. 6111.

and inspection authority to facilitate the implementation of the regulation. OEPA is also the chief administrative and enforcement authority for control of water pollution in the State. The primary enforcement tool for water pollution control is the State-administered National Pollutant Discharge Elimination System (NPDES). Municipal and individual waste water effluent limitations standards are essentially the same as those promulgated at the Federal level.

The foremost agency with responsibility in energy matters, however, is the Ohio Power Siting Commission[5/] which has jurisdiction over the siting of major utility facilities, including electric generating plants over 50 Mw and associated facilities, electric transmission lines if 125 kilovolts or more, and certain gas transmission lines. The Power Siting Commission is composed of the Chairman of the Public Utilities Commission of Ohio, the Director of the Ohio Environmental Protection Agency, the Director of Health, the Director of Development, and a public member appointed by the governor. Excepting replacement of an existing facility, construction of any major utility facility requires a certificate from the Power Siting Commission.[6/] In order for the Power Siting Commission to grant a certificate, it must find that the construction, operation, and maintenance of the facility will create minimal environmental impact will serve the public convenience and necessity, and in the case of transmission is consistent with regional plans.[7/]

No State agency or political subdivision may require a certificate or other approval after the Power Siting Commission has issued a certificate.[8/] During construction and for the first two years of operation, a facility is subject to

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5/ ORC, Ch. 4906.
6/ ORC, Ch. 4906.04.
7/ ORC, Ch. 4006.10.
8/ ORC, Ch. 4906.13.

the jurisdiction of both the Power Siting Commission and the OEPA as far as environmental impact is concerned.

Of particular significance is the language regarding regional plans for expansion of the electric power grid and interconnected facilities serving the state. It appears, however, that this statutory requirement only imposes the obligation of considering the regional aspects in the approval process for transmission lines.

Thus, it can be seen that Ohio law not only acknowledges some need for planning in connection with regional power development, but imposes the obligation on the Siting Commission to make an affirmative finding of the compatibility of certain proposed facilities with regional development.

The Ohio statutes similarly encourage planning by requiring operators of "major facilities" to develop annual ten year forecasts of loads, resources and prospective sites.[9/] And, the siting commission is authorized to conduct joint proceedings with the Federal government and agencies of other States.[10/] In addition to the specific siting regulations the public utilities commission is authorized to regulate the activities of electric light companies engaged in the business of supplying electricity for light, heat or power purposes to customers within the State.[11/]

Among other things, the State commission has express statutory authority to assure adequacy of service by ordering repairs, improvements, or addition to the plant and equipment of electric companies "to promote the convenience or welfare of the public."[12/] A similar requirement is applicable to municipal electric companies.[13/]

9/ Ohio Revised Code, #4906.15
10/ Ohio Revised Code, #4906.14
11/ Ohio Revised Code, #4905.03 and 4905.04
12/ Ohio Revised Code, #4905.38
13/ Ohio Revised Code, #4905.39

The State commission also has broad authority to regulate the transactions between public utilities. This authority, however, appears to be confined to the regulation of transactions between utilities within Ohio.[14/]

Illinois.--Environmental protection in Illinois was completely reorganized in 1971 by virtue of the Illinois Environmental Protection Act.[15/] This Act created three State level agencies: the Illinois Environmental Protection Agency, the Pollution Control Board, and the Illinois Institute for Environmental Quality with the mandate to deal with statewide environmental problems and to implement water, air, and solid waste disposal legislation.

The Illinois Environmental Protection Agency has the authority of surveillance and monitoring of pollution control regulations, preparing and presenting enforcement cases before the Pollution Control Board, formulating and enacting pollution control regulations, and recommending regulations to the Pollution Control Board.[16/] The agency has the authority to require the submission of plans and specifications for applicants who require permits to operate under its permit and certification programs. The agency also has the power to inspect fuel combustion equipment for the discharge of thermal, chemical, and sewage wastes.[17/]

The Pollution Control Board is vested with the authority to approve standards in the State. The Board may adopt rules and regulations prescribing standards for air emissions, water effluents, thermal discharges, operating permits, and monitoring equipment inspections.[18/] Of particular importance to the siting of energy facilities are the emission standards and thermal discharge standards. The Board also has the authority to regulate nuclear facilities.[19/]

14/ Ohio Revised Code #4905.48
15/ Illinois Environmental Protection Act, Ill, Rev. Stat., Ch. 111 1/2 1001.
16/ Ch. 111 1/2, 1004(f)
17/ Ch. 111 1/2, 1004(m), 1005 (Notes)
18/ Ch. 111 1/2, 1005(b)(c).
19/ Ch. 111 1/2, 1005(e).

The Board has interpreted its powers broadly so as to consider problems of pollution, solid waste disposal, and thermal discharges. The five-member board also has the authority to conduct hearings upon complaints charging violation of the Act. It thus has significant review power over the decisions of the State Environmental Protection Agency.

The Illinois Institute for Environmental Quality is the research institution created by the Environmental Protection Act, to investigate practical problems and implement programs relating to the technology and administration of environmental protection; to obtain, store, and process relevant data; to recommend technological, administrative, and legislative changes and developments respecting environmental quality, recycling, reuse and conservation of natural resources, and solid wastes. The Institute by legislative mandate is required to undertake research on practical problems of a long-run nature, such as the development of regional systems of solid waste collection and disposal.[20/]

In the areas of greatest concern to energy development, air and water, the Illinois Environmental Protection Agency is the chief administering body. It has inspection and surveillance powers which are backed by the power to bring enforcement action before the Pollution Control Board. It is important to note that Illinois has not yet been approved for self-administration of the National Pollution Discharge Elimination System (NPDES) permit program by the Federal Environmental Protection Agency. As a result dischargers in the State are subject to effluent limitations determined at the federal level.[21/] The State regulations pertaining to water are the Illinois Water Pollution Control Regulations which specify State water quality standards, State water use classification, State effluent standards for discharge into State waters, and State provisions for the NPDES program.[22/]

20/ Ch. 111 1/2 1006.
21/ Pollution Control Guide, 1912-Para. 1914, 1975.
22/ Ibid., p. 1911-1912.

In addition to the unapproved permit program the State has a separate set of industrial and commercial waste water standards, which establish specific requirements for all dischargers in the State with regard to monitoring and reporting procedures of effluent discharges, and performance criteria for all existing and future sources of water pollution.[23/]

The Air Pollution Control Division of Illinois EPA handles the day-to-day surveillance of air contamination sources, air quality and enforcement activities, and compliance functions associated with emission limitations.[24/]

The Pollution Control Board, in a manner similar to water pollution policy, establishes ambient air standards and emission limitations, conducts hearings on complaints and violations, and if necessary takes enforcement action.[25/] The Illinois ambient air standards are identical to the Federal ambient air standards.[26/]

Indiana.-- There is no one specific State statute which regulates energy generation facilities in Indiana; however, there are several State agencies and statutes which impact power plant development in the State. The most important of these are: (1) Environmental Management Board (Environmental Management Act of 1972);[27/] Air Pollution Control Board (Air Pollution Control Act of 1961 as amended);[28/] and (3) Stream Pollution Control Board (Stream Pollution Control Act of 1931 as amended.)[29/]

The Indiana Environmental Management Act established an overall governing law for pollution control. The Environmental Management Board (EMB) is created by its provisions and it serves as the central pollution control agency in the State. In addition to creating a central pollution control agency, the Act provides for the

23/ Ibid., p. 1915.
24/ Pollution Control Guide, 4371, Para, 4531.15.
25/ Ch. 111 1/2 1005(d)
26/ Pollution Control, Commerce Clearing House, p. 4534
27/ IC 1971, 13-7-1-1 et seq.
28/ Ibid.
29/ IC 1971, 13-1-3.

formulation of a statewide environmental control and development policy. Provisions of this Act provide for regulations to control various areas of pollution including air and water, a State permit program for discharges into State waters, as well as enforcement procedures and penalties for violation of State promulgated pollution laws and regulations. The EMB is authorized to delegate its control powers to other agencies that have greater technical ability to perform the control function. The Act also continued the authorities of the Stream Pollution Control Board (SPCB) and the Air Pollution Control Board (APCB). Each of these boards maintains designated functional areas of control, regulation, and monitoring of pollution in the State. As a result of this authority to delegate, and the continuation of the powers and authorities of the SPCB and APCB, these latter two boards are much more active and have far greater impact on water and air pollution matters than does the EMB.

The Indiana Air Pollution Control Law established in 1961 the Air Pollution Control Board which is empowered to promulgate rules and regulations relating to air pollution. This statute gives enforcement authority to the APCB which can make orders and determinations and hold hearings.

The Stream Pollution Control Board was created in 1943 by the Indiana Stream Pollution Control Act. It is through this Act and the Environmental Management Act that the SPCB is the State water pollution control agency for all State responsiblities outlined in the Federal Water Pollution Control Act as amended in 1972.[30/] The SPCB has the authority to take all necessary and appropriate action to enforce the provisions of the Federal law(s) as they affect the State. The SPCB has the basic authority and powers to regulate and control sources of water pollution in the State. These sources include many energy conversion

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30/ IC 1971, 13-1-4-1 et seq. and 13-7-2-10.

facilities. The SPCB is the state agency designated by the U.S. Environmental Protection Agency to operate the National Pollution Discharge Elimination System (NPDES) permit process.

Kentucky.--Of the many agencies in Kentucky concerned with the regulation of energy development facilities and their impact on the environment, the most important is the Department of Natural Resources and Environmental Protection[31/] with its Divisions of Water Quality, Air Pollution, and Solid Waste.[32/] Also important is the Environmental Quality Commission.[33/]

The Department for Natural Resources and Environmental Protection is the central pollution control agency in the State. This agency was authorized by the Environmental Protection Act of 1972[34/] which created the Department of Environmental Protection. This Department was merged with the Department of Natural Resources to create the new organizational arrangement, the Department of Natural Resources and Environmental Protection. The authority and duties of this Department are to administer and enforce the rules and regulations promulgated under the Environmental Protection Act; provide comprehensive environmental planning on the scientific, technical, and educational aspects of such in the state, assist on an ad hoc basis local authorities on special problems and other broad activities normally associated with a lead State agency. All air, water, and land pollution activities as they relate to prevention, abatement, and overall regulation are the responsibility of the Department.[35/]

The chief administrative officer of the Department has the title of Secretary and has broad authority in cases where the Secretary determines that a

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31/ KRS CH. 224.011.
32/ KRS Ch. 224-04-1.
33/ Kell, p. N-2.
34/ KRS, Ch. 224.033 subsections 10 and 20.
35/ KRS, Ch. 224.993, 224.110.

permanent danger is posed to the people or the environment in the State. He may issue immediate cease and desist orders which are followed by a hearing procedure that results in final recommendations for action to the Secretary. Statutory penalties for violations of the Department's rules are provided for by statutes, including provisions for civil damages that may be sought from violators of the Act.

Within the Department, the Water Pollution Division has responsibility for water pollution control matters including the National Pollution Discharge Elimination System (NPDES) permit system. With respect to energy conversion facilities, most of which will be point source discharges, the permit system provides a direct means of control. The non-point source impacts of such energy conversion facilities will also come under the supervision and control of the Water Pollution Division.

Within the Department, the regulation and control of air pollution matters is delegated to the Division of Air Pollution. To the extent that energy conversion facilities create air pollution problems, they are under the control of the Division of Air Pollution. With the approval of the Department, cities and counties may adopt air pollution control measures for their jurisdictions in addition to the promulgations of the Department's Division of Air Pollution.[36/] These local boards may require more stringent regulations than the Division. The Department has authority to regulate these local boards. In the case of power plant siting, power companies are required to file certificates of compatibility for new sites, either with the Deparment or with a local authority, where one exists.[37/]

36/ KRS, Ch. 77.015

37/ KRS, Ch. 278

The Division of Solid Waste has the direct responsibility to enforce State policy which requires disposal of solid wastes by environmentally and healthfully sound methods. The Division issues permits to facilities that deal with solid waste disposal. Except for household disposal on private property which creates no general nuisance, there is a prohibition for solid waste disposal without this permit.[38/]

The Environmental Quality Commission is also established under the Environmental Protection Act of 1972.[39/] It serves as an advisory body to the Department of Natural Resources and Environmental Protection. In addition, all new regulations promulgated by the Department must be reviewed by the Commission and the Commission may reject new rules or regulations. In this event, the Secretary of the Department must file a memorandum with the Commission justifying the new action and the Department may be required to hold hearings when federally derived functions are involved.[40/]

Aside from these general environmental functions, Kentucky requires a certificate of "convenience and necessity" prior to the construction of electrical power facilities.[41/]

In addition to these construction certificates, the State requires electrical companies to obtain certificates of environmental compatability from the State Public Service Commission.[42/] This certificate must contain such information as the State requires and must include a description of the proposed project, and its effects on air, water, and noise quality.[43/]

38/ KRS, Ch. 224.260
39/ KRS, Ch. 224.041, .045
40/ KRS, Ch. 224.055
41/ KRS, ch. 278.020
42/ KRS, Ch 278.025
43/ Ibid.

Transmission line permits for over 400 kilovolts in capacity require a determination by the State commission that the route will "reasonably minimize adverse impact on the scenic and environmental assets of the general area concerned."[44/]

West Virginia.--West Virginia, also bordering on the Ohio River, requires the issuance by the State commission of a certificate of "public convenience and necessity" prior to the construction of certain electrical facilities.[45/] In addition, West Virginia requires the issuance of a certificate of "public convenience and necessity" prior to the construction of transmission lines of 200 Kv or over. Application for the certificate requires an environmental impact statement and a justification for the facilities.[46/]

State Regulatory Activity

Thus, the scope of State regulatory activity includes rather broad licensing requirements for the construction of most major electrical facilities including high voltage lines, and at least some assessment of environmental impact is required under State laws.[47/]

With regard to State cooperation on regional development of power facilities to serve several States, it would seem that the States have several alternative methods available to them as planning devices. Cooperation with other States is certainly not legally precluded. The Ohio statute serves as an example of the breadth of planning cooperation which could be more extensively utilized. However, as a matter of law, even though States may cooperate or voluntarily require

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44/ KRS, Ch. 278.027
45/ West Virginia Code, #24-2-11
46/ West Virginia Code, #24-2-11a
47/ See generally, Section L, Federal and State Commission Jurisdiction and Regulation--Electric, Gas and Telephone Utilities. Federal Power Commission (1973). Copy attached as Appendix A.

consideration of multistate regional planning, absent Federal requirements or an interstate compact, States cannot be compelled to consider regional factors in planning. That function is a matter subject to Federal authority.

The Federal Government, through the Environmental Protection Agency, has promulgated environmental standards to which the Nation and States must adhere. There is some focus on regional environmental issues; for example, Section 208 of the Clean Water Act does encourage area wide land and water management planning for regions with substantial water quality problems.

A precedent for Federal involvement in regional environmental issues may have been established in 1976 when the U.S. Congress required the EPA to study the potential impacts of supplying coal to planned power plants in the Ohio River Basin. EPA later expanded the study to consider all possible "energy" impacts in the region. The final draft of the Ohio River Basin Energy Study (ORBES), Phase I, was recently published. One of the questions the study raised was whether a regional institutional mechanism was needed to control the siting of new fossil-fueled electrical generating plants in the ORBES region to avoid unacceptable regional-scale environmental impacts (for example, the "cascading" effect of air pollutants). The mere fact that this question was raised, when coupled with the environmental regulatory structure already "in place" with its regional tendencies, creates an optimism that the environmental impact of power plant development on a regional scale can be adequately addressed.

Federal Regulation

Federal regulation over electric power siting falls into two general categories: that exercised by environmental agencies and that by the normal power regulating bodies. The latter tends to be somewhat limited.

Environmental Regulation

The Federal Environmental regulations having the greatest direct impact on power plant development are derived from the following statutes: National environmental Policy Act (NEPA),[48/] Clean Water Act of 1977,[49/] Clean Air Act of 1977,[50/] Resource Conservation and Recovery Act of 1974.[51/] Generally these statutes lodge most of the responsibility for their implementation with the U.S. Environmental Protection Agency (EPA) in cooperation with state environmental agencies.

The importance of NEPA is in its enviromental impact statement requirements relating to major Federal actions affecting the environment. Unless specifically excluded by other legislation, many of the regulatory actions and licensing actions of Federal agencies are subject to the NEPA environmental impact statement requirements. These impact statements have served to document the environmental consequences of a proposed action and to build into a Federal agency's decision-making process a continuing awareness of environmental considerations.

NEPA also established within the Executive Office of the President, the Council on Environmental Quality (CEQ) assigned with the responsibilities to study the condition of the Nation's environment; to coordinate Federal environmental efforts and programs, and to see that all Federal activities take environmental considerations into account.

48/ National Environmental Policy Act of 1969, 42 U.S. C. 4321 et seq.
49/ Clean Water Act of 1977, 33 U.S.C. 1251 et seq. (Sup. V, 1975).
50/ Clean Air Act of 1977, 42 U.S. C. 1857 et seq. (1970 and Supp. V, 1975).
51/ Resource Conservation and Recovery Act of 1976, U.S.C.A. 6901 et seq. (Supp. Dec. 1976).

There are numerous provisions of the Clean Water Act of 1977 (FWPCA) which apply to energy related facilities which would include extraction processes and the generation processes. Such facilities will most likely be termed point source discharges under the terms of the Act. Pertinent provisions of the Act include the establishment of water quality standards (ambient standards) for all receiving waters,[52/] national effluent limitation standards,[53/] National Pollution Discharge Elimination System (NPDES) permit system,[54/] and Section 208 Areawide Planning.[55/] The Act also provides for identification and control of pollution from non-point sources including mining operations and construction operations. The Act is comprehensive in that it attempts to identify all sources of pollution and to regulate these so as to improve water quality.

Special permits for dredge or fill material,[56/] national effluent standards for toxic pollutants,[57/] and national performance standards for new sources[58/] are provided for by the Act for EPA implementation. Implementation of this comprehensive approach to water pollution control from point sources is now significantly affecting the siting of major industrial and energy facilities, the design of such facilities if their operations will produce objectionable effluent, the construction process itself, with its attendant effects of erosion and sedimentation, and the subsequent operation of such facilities.

In addition, Section 208 of the Clean Water Act which encourages areawide land and water management planning for regions with substantial water quality problems and EPA's draft guidelines for State use in planning for future developments which would constitute point and nonpoint pollution sources, have considerable

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52/ 33 U.S.C. 1313 (Supp. V, 1975).
53/ Id. 1316
54/ Id. 1342
55/ Id. 1288
56/ Id. 1344
57/ Id. 1317
58/ Id. 1316

implications for land use and facility siting. State "208 plans" are now being developed in the ORBES study region. Not only must Section 208 level planning be accomplished in urban-industrial areas, it must be performed for all areas of each State. The Section 208 areawide plan is a comprehensive plan in which the source such as a steam-electric generating plant will be identified in the plan and the amount of their discharge regulated by terms of the plan so as to obtain or maintain the required water quality. The same would be true with respect to surface run-off (nonpoint sources) that would result from construction of an energy conversion facility.

The Federal air pollution control program now being implemented by the Environmental Protection Agency under the authority of the Clean Air Act of 1977 represents a sweeping national approach to air quality.

Pursuant to Section 109 of the Act, the administrator of EPA has established national primary and secondary ambient air quality standards. These standards for certain air pollutants such as particulates and sulfur oxides are pertinent to energy conversion facilities. Section 111 of the Act requires that the administrator promulgate "standards of performance" governing emissions of air pollutants by new stationary sources. As in the case of ambient air quality standards involving particulates and sulfur oxides, these new source standards of performance also relate to these specific pollutants that are connected with the generation of electrical energy, particularly from fossil fuels.

Section 110 of the Act requires each State to prepare a State implementation plan (SIP) which will result in the State attaining the national primary and secondary ambient air standards. Section 160 of the Act requires that the SIP contain a policy of non-degradation of existing clean air. The SIP of a State can have substantial impact upon the siting of electric generating facilities. It must include, among other matters, a procedure for review prior to construction

or modification of the location of new sources to which a standard of performance has been established for this industrial category.[59] If the State fails to prepare and adopt its own SIP, the administrator has the duty to promulgate an SIP for the State.[60]

The Resource Conservation and Recovery Act of 1976 provides for amendments to the Solid Waste Disposal Act.[61] To the extent that waste from electric generating facilities can be considered hazardous, they will come under new standards which apply to the generators and transporters of such hazardous wastes, as well as those who are treating, storing, or disposing of these.

In addition, there are provisions for State or regional solid waste plans.[62] The terms of these plans could affect methods by which wastes are disposed from electric generating facilities and extraction processes such as surface-mining and deep-mining. In the case of electric generation facilities using fossil fuels, certain wastes are generated in large quantities in the form of sludge from electrostatic precipitators and scrubbers. These could come under provisions of the State or regional solid waste plans. State solid waste plans are just a small part of a comprehensive set of environmental regulations enacted during the last few years.

Electric Regulation

Present Federal regulatory authority over electricity is vested with the new Department of Energy and the Federal Energy Regulatory Commission, an independent regulatory commission created within that Department. The Department of Energy Act, Public Law 95-91, 91 Stat. 565 (August 4, 1977), transferred the existing statutory

59/ 40 C.F.R. 60.40 (1976).
60/ 42 U.S.C. 1857c-5(c) (Supp. V, 1975).
61/ 42 U.S.C. 3251 et seq. (1970).
62/ P.L. 94-580, Subtitle D, 4001-9, 42 USCA 6941-0

functions relating to the Federal regulation of electricity by the Federal Power Commission to the Department of Energy.

Generally, the Federal authority to regulate electricity is confined by statute to the regulation of wholesale electricity rates for electricity traveling in interstate commerce and to other activities of electrical utilities engaged in interstate commerce and to other activities of electrical utilities engaged in interstate transmission of electricity. See generally, 16 U.S.C. Code Section 284 et seq. This jurisdiction has been exercised by the Federal Power Commission (now FERC) since its creation in 1920.

Pursuant to the authority of Sections 201 et. seq. of the Federal Power Act, 49 stat. 848 (1920), 16 U.S. Code Section 824 et seq., the FPC authorizes the interconnection of electrical facilities,[63/] authorizes the sale, merger and other disposition of electrical facilities,[64/] authorizes the issuance of securities, and fixes rates and charges for production and transmission of electrical energy.[65/]

These powers are applicable to interstate activities as defined in the FERC jurisdiction by 16 U.S. Code Section 824: S824. Declaration of policy; application of subchapter; definitions

> (a) It is declared that the business of transmitting and selling electric energy for ultimate distribution to the public is affected with a public interest, and that federal regulation of matters relating to generation to the extent provided in this subchapter and subchapter III of this chapter and of that part of such business which consists of the transmission of electric energy in interstate commerce and the sale of such energy at wholesale in interstate commerce is necessary in the public interest, such Federal regulation, however, to extend only to those matters which are not subject to regulation by the States.
>
> (b) The provisions of this subchapter shall apply to the transmission of electric energy in interstate commerce and to the sale of electric energy in interstate commerce and to the sale of electric energy at wholesale in interstate commerce, but shall not apply to any other sale of electric energy or deprive at State or State commission of its lawful

63/ 16 U.S. Code Section 824a.
64/ 16 U.S. Code Section 824b.
65/ 16 U.S. Code Sections 824d and 824e.

authority now exercised over the exportation of hydroelectric energy which is transmitted across the State line. The Commission shall have jurisdiction over all facilities for such transmission or sale of electric energy, but shall not have jurisdiction, except as specifically provided in this subchapter and subchapter III of this chapter, over facilities used in local distribution or only for the transmission of electric energy in intrastate commerce, or over facilities for the transmission of electric energy consumed wholly by the transmitter.

(c) For the purpose of this subchapter, electric energy shall be held to be transmitted in interstate commerce if transmitted from a State and consumed at any point outside thereof; but only insofar as such transmission takes place within the United States.

The jurisdiction under this authority has been the subject of substantial litigation[66/] without an exhaustive analysis of that litigation, it might be concluded that the FPC has broad authority in the application of its statutory jurisdiction.[67/] It might be noted, however, that relatively recent "pooling" of electrical energy for interstate sales has raised issues relating to the tracing of sources of electric energy for the purposes of determining FPC jurisdiction.[68/]

The statutory definition of jurisdiction has presented, as the consequence of its legal interpretation, the difficulty of determining exactly what electric facilities may be regulated by FERC.[69/]

Under Sections 4(e) and 6 of the Federal Power Act,[70/] the Department of Energy issues loans for the construction of certain "dams, water conduits, reservoirs,

66/ Public Utilities Regulation - Jurisdiction of the Federal Power Commission: Factual Determination of Interstate Flow Required, 46 Washington Law Review 837 (1971).

67/ See generally, Federal Power Commission v. Florida Power & Light Co., 404 U.S. 453 (1972); Connecticut Light & Power Co. v. Federal Power 324 U.S. 515 (1945).

68/ Federal Power Commission v. Southern California Edison Co., 376 U.S. 205 (1974); Cincinnati Gas & Electric Co. v. Federal Power Commission, 376 F. 2d 506 (5th Cir. 1967), cert. denied 389 U.S. 842; Public Service Co. of Indiana, Inc. v. Federal Power Commission, 375 F. 2d 100 (7th cir. 1967), cert denied. 387 U.S. 931; Arkansas Power & Light Co. v. Federal Power Commission, 368 F. 2d 376 (8th Cir.1966).

69/ See footnote 67, supra.

70/ 16 U.S. Code Section 797(e) and 799.

power houses, transmission lines, or other project works necessary or convenient for the development, transmission and utilization of power...", subject to the jurisdiction of the Department.

The breadth of this licensing authority allows the Federal government extensive planning and regulatory authority over the development of jurisdictional power facilities. At the same time, however, states also retain broad concurrent jurisdiction over electric power.

The primary authority of the Department of Energy to promote electrical power reliability is provided in its authority to create regional districts for the voluntary interconnection and coordination of various electric facilities. (16 U.S. C. Section 824a).

The most significant aspect of Section 824(a) is that the interconnection on the part of the utilities owning the facilities is voluntary. The role of the Commission is that of encouragement, which might take the form, under other powers of the Commission such as the rate-making powers,[71/] of special rates, etc. The actual decision to interconnect must be initiated by the utility or the state commission and may involve several considerations, not the least of which is the possible invocation of the commission's jurisdiction.[72/]

Under the language of this provision the Department of Energy has no authority to order the sale or exchange of energy when such action would impair adequate service to the customers of the seller.[73/] And it is also well established that interconnection, sale and "wheeling" of power are voluntary and not within the authority of the Commission to order on its own initiative.

71/ 16 U.S. code Section 824d.

72/ See, Indiana & Michigan Electric Co. v. Federal Power Commission, 365 F.2d 180 (7th Cir. 1966), cert, denied 385 U.S. 972 (1966).

73/ Otter Tail Power Co. v. United States, 410 U.S. 366 (1973).

> So far as wheeling is concerned, there is no authority granted the Commisssion under Part II of the Federal Power Act to order it, for the bills originally introduced contained common carrier provisions which were deleted. The Act as passed contained only the interconnection provision set forth in S202(b) [16U.S. code Section 824a(b)]. The common carrier provision in the original bill and the power to direct wheeling were left to the "voluntary coordination of electric facilities. 74/

It appears that the only circumstances under which the Department of Energy may order interconnection on its own initiative are war and certain emergency power shortages, as provided by 16 U.S. Code Section 824a(c). Under these temporary circumstances the interconnection of facilities not already under the regulation of the Department of Energy does not invoke the Federal jurisdiction.75/

Even though there is an obligation to insure adequacy of service under the provision of 16 U.S. Code Section 824g, it does not appear that there is a judicial interpretation which reflects attempts at enforcement of the obligation.

Under present Federal law, there exists a broad regulatory authority in the licensing of interstate power activities which may be utilized as a planning device for regional power development. The planning of construction requires the consideration of environmental impact under the National Environmental Policy Act.

The primary limitation on present Federal regulatory activity is the inability of the Federal Government to require mandatory interconnection. A further Federal exercise of authority over regional planning is legally permissible.

It would appear that the present statutory authority over electrical power delegated by the Congress to the Department of Energy is well within the bounds

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74/ Id., at 375.

75/ 16 U.S. Code Section 824 (a)(d).

of constitutional limits. In fact, it does not appear that serious constitutional questions involving the delegation of this authority have ever reached the Supreme Court of the United States.

Certainly broader delegations of authority, with more expansive definitions of Federal jurisdiction, could be made to the Department of Energy or some other Federal entity in such a fashion to withstand constitutional tests. Specifically, it appears that a very strong case can be made for the exercise of Federal regulation over any intrastate activities now regulated by the states, such as retail rate-making and structure, and regional siting decision.

Congress is authorized to regulate interstate commerce by Article I, Section 3 of the U.S. Constitution, which provides in part:

> The Congress shall have Power... To regulate commerce with foreign Nations, and among the several States...

In addition to the Commerce Clause, Congress is given the authority under Article I, Section 8 of the Constitution, "To make all Laws which shall be necessary and proper for carrying into Execution the foregoing Powers..."

These powers to regulate interstate commerce have been held to be broad and sweeping.[76/] In brief, it may be said that the power to regulate commerce is not strictly limited to the regulation of commercial activities which actually cross state lines. The commerce power includes a power to make police regulations to prevent or ameliorate economic, social and other problems not strictly limited to regulating forms and transactions of commercial interstate intercourse. The implementation of the commerce power is not restricted to reaching those matters which actually travel or move in interstate commerce, but extends as well to all those matters in intrastate commerce, which singly or as a class so affect interstate commerce as to require Federal regulation, or which if left unregulated

76/ See, Katzenbach v. McClung, 379 U.S. 294 (1964).

by Federal power would debilitate or undermine the efficacy of Federal regulation.

Thus, purely local matters may be brought under the jurisdiction of the Federal commerce power.[77/] And, the power to regulate interstate commerce may also include the power to regulate intrastate commerce.[78/] The congressional power to regulate "extends to those activities intrastate which so affect interstate commerce or the execution of the power of Congress over it, as to make regulation of them appropriate means to the attainment of a legitimate end, the effective execution of the granted power to regulate interstate commerce."[79/]

Those things beyond the regulatory reach of the Congress are limited to activities "...which are completely within a particular State, which do not affect other states, and with which it is not necessary to interfere, for the purpose of executing some of the general powers of the government."[80/]

Where Congress finds that the subject matter of activities affects interstate commerce, the courts have held that such findings are entitled to considerable weight.[81/] So long as there appears to be a rational basis for such findings, the courts are not concerned with the manner in which Congress reaches its factual conclusions and will defer to a congressional finding of a burden on interstate commerce.[82/]

77/ Wickard v. Filburn, 317 U.S. 111 (1942).

78/ United States v. Wrightwood Dairy Co., 315 U.S. 110 (1942).

79/ Wrightwood Dairy, supra, at 119.

80/ Gibbons v. Ogden, 9 Wheat. 1, 195 (1824).

81/ United States v. Gainey, 380 U.S. 63 (1965); and Leary v. United States, 395 U.S. 6 (1969).

82/ Maryland v. Wirtz, 392 U.S. 183 (1968); Heart of Atlanta Motel, Inc. v. United States, 379 U.S. 241 (1964); and Katzenbach v. McClung, supra.

The courts have consistently upheld the exercise of congressional power in adopting a plenary regulatory system where activities of interstate and intrastate commerce are mixed.[83/]

Thus, the principle that Congress may regulate activities pursuant to the Commerce Clause which are intrastate activities that affect interstate commerce is a well established interpretation.

It would, therefore, seem that the Congress would have little difficulty in legislating, and the courts little difficulty in upholding, the constitutionality of a much broader exercise of Federal jurisdiction over the generation, transmission, and sale of electrical energy than is presently exercised at the Federal level.

The extent to which a delegation of new authority on a Federal level would raise conflicts with the authority presently exercised by the States would, of course, depend upon the powers vested with the Federal authority. The mere existence of a conflict with State laws would not defeat such legislation, since Federal powers could be exercised which would have the effect of preempting State laws.[84/] And, although some adjustment of State laws might be required, the Supremacy Clause of the U.S. Constitution would obviate any conflict with State laws (Article VI, Clause 2, U.S. Constitution).[85/]

83/ See, Katzenbach v. McClung, supra, (implementation of civil rights regulations on local food establishments); Illinois Natural Gas Co. v. Central Illinois Public Service Co., 314 U.S. 498 (1942) (regulation of natural gas); United States v. Darby, 312 U.S. 100 (1941) regulation of wage rates under Fair Labor Standards Act); Mulford v. Smith, 307 U.S. 38 (1939)(regulation of intrastate and interstate sale of tobacco); United States v. Rock Royal Co-op, 307 U.S. 533 (1939) (regulation of commodities sales); and Railroad Commission of Wisconsin v. Chicago, B.& Z.R. Co., 257 U.S. 563 (1972), The Shreveport Case, 234 U.S. 342 (1914), The Minnesota Rate Cases, 230 U.S. 352 (1913) (all dealing with regulation of interstate and intrastate railroad rates).

84/ See Federal Power Commission v. Southern California Edison Co., 376 U.S. 205 (1964), rehearing denied, 377 U.S. 913.

85/ See, Killian, The Constitution of the United States of America: Analysis and Interpretation, pages 866-887.

Legislative Possibilities

The range of state actions which are permissible under present Federal law appear to allow substantial latitude for greater cooperative regional planning among states. States may also participate to a substantial degree in Federal decisions on power facility siting, development, and planning for more effective regional coordination.

As has been said, more expansive Federal authority could be exercised. Congress has considered on several occasions more extensive Federal regulation which could permit an imposed Federal direction of electrical power facility development. Following the electrical power outages in the late 1960's in the northeast, Congress held extensive hearings and considered several legislative proposals which would have resulted in more extensive Federal powers.[86/] Expansion of Federal regulation in the planning of electrical power development has been considered by the Federal Power Commission, and examined by the Congress.[87/]

More recent Federal legislative proposals have advanced the concept of the creation of enhanced Federal regulation in the form of a National Power Grid.[88/] Such a concept has been examined and reviewed by the Congress[89/] and would in many ways impose Federal planning and control over the development of regional electric power facilities.

86/ See, Electric Power Reliability--1969--1970, Hearings before the Subcommittee on Communications and Power of the House Committee on Interstate and Foreign Commerce, 91st Congress, 1st and 2d Sess. (1969, 1970).

87/ Power Plant Siting and Environmental Protection, Hearings before the Subcommittee on Communications and Power of the House Committee on Interstate and Foreign Commerce, 92d Cong., 1st Sess. (1971), at 414 et seq.

88/ See, S. 1991, 95th Cong., 1st Sess. (1977).

89/ See, for example, "National Power Grid System Study--An Overview of Economics, Regulatory, and Engineering Aspects," A Study Prepared by the Congressional Research Service for the Subcommittee on Minerals, Material and Fuels of the Senate Committee on Interior and Insular Affairs, 94th Cong., 2d Sess. (1976).

The Carter Administration's energy bill as acted on by the House of Representatives included extensive provision for interconnection of electrical facilities, and regional planning.[90/]

Alternatives to Federal Regulation

The preceding legal analysis indicates that the Federal Government may already have sufficient authority to compel regional planning for electrical power plants. This is already in existence through the regional reliability councils, but these are composed of utility representatives only. To achieve a more balanced view of regional power plant siting may require a broadening of these groups to reflect other community interests. Possibly, FERC could be prevailed upon to insist on such broader participation.

Alternatively, it might be useful to require the reliability councils to annually expose the proposed regional plan to various State and local groups for comment. Rejection of the comments would require a detailed rebuttal.

The simplest mechanism, however, might be to require all states regulating power plant siting (and these are the majority) to specifically consider regional environmental impacts in their deliberations.

90/ See, H.R. 8444, chapter 3, 95th Cong., 1st Sess. (1977).

Appendix A--Section L, Federal and State
Commission Jurisdiction and Regulation--Electric,
Gas and Telephone Utilities, Federal Power Commission (1973).

97

The authority of the commissions to control initiation of service, construction or abandonment of facilities and other related actions by electric, gas and telephone utilities is shown in table 39. The areas in which electric, gas and telephone utilities operate are generally prescribed by certificates of convenience and necessity issued by regulatory commissions having jurisdiction. Franchises and permits from municipalities or other local authorities are also generally required in these States and in States not issuing certificates. Table 39 also shows the States in which indeterminate permits, the delivery across State borders of electric and gas, and allocation of unincorporated territory among utilities are subject to control by State commissions.

There are forty-seven State commissions which derive the authority to certificate from statutes. Some State commissions derive the authority from judicial and/or administrative interpretations. Hawaii, Montana, Texas and the District of Columbia have no authority to certificate. New Jersey does not have the authority to certificate; however, certification is on the basis that utilities must provide safe, adequate and proper services. There are twenty-four States in which the certification is mandatory.

Table 41 indicates those commissions which have set legal standards or criteria for certification to include guidelines or standards for evaluating: the effects of planned rights of way, sites and facilities on the environmental values; the proposed needs of the utilities; and procedures to assure public participation. Other areas covered by table 41 are State commissions policies related to requiring underground lines, interstate compacts pertaining to hydroelectric development, granting of eminent domain and granting of damages.

When the authority as outlined in table 41 rests with another agency, such authority and agency is shown in table 41a.

STATE	The Commission has authority to require certificates of convenience and necessity for - Initiating service: Electric: Private	Electric: Public	Electric: Cooperative	Gas: Private	Gas: Public	Telephone	Constructing major additions - Generating plant: Electric: Private	Electric: Public	Electric: Cooperative	Gas: Private	Gas: Public	Telephone	Transmission lines: Electric: Private	Electric: Public	Electric: Cooperative	Gas: Private	Gas: Public	Telephone
FPC				X												X		
FCC						X												X
ALABAMA	X			X		X	X						X			X		
ALASKA	X	X	X	X	X	X												
ARIZONA	X		X	X		X												
ARKANSAS	X		X	X		X	X		X				X		X	X		X
CALIFORNIA	X		X	X			X8/						X13/	X13/	X13/			
COLORADO 27/	X	X	X	X	X	X	9/	9/	9/	9/	9/	9/	9/	9/	9/	9/	9/	9/
CONNECTICUT 28/																		
DELAWARE 29/	X		X	X		X												
DISTRICT OF COLUMBIA																		
FLORIDA						X												
GEORGIA				X		X										X		
HAWAII							10/			10/		10/	10/			10/		10/
IDAHO	X			X		X	X						X					
ILLINOIS							X			X			X14/			X14/		14/
INDIANA																		
IOWA																		
KANSAS	X	5/	X	X	5/	X							X	X	X	X	X	
KENTUCKY	X		X	X		X	X		X				X	5/	X			
LOUISIANA	X		X	X		X	X		X	X		X	X		X	X		X
MAINE	X1/	X1/	X1/	X1/	X1/	X1/	X1/	X1/	X1/				X1/	X1/	X1/			
MARYLAND	X2/	X2/	X2/	X2/	X2/	X	X	X	X				X	X	X			
MASSACHUSETTS													X15/	X15/		X15/	X15/	
MICHIGAN	3/		3/	3/		X3/										X		
MINNESOTA 30/						X												
MISSISSIPPI	X	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X
MISSOURI	X			X		X												
MONTANA 31/																		
NEBRASKA						X												
NEVADA	X		X	X		X	X		X	X		X	X		X	X		X
NEW HAMPSHIRE							X						X					
NEW JERSEY 32/																		
NEW MEXICO	X		X	X			X		X	X			X		X	X		
NEW YORK	X	6/		X	6/	X	11/	6,11/					X	X	X	X	X	11/
NORTH CAROLINA	X4/			X		X	Nuclear											
NORTH DAKOTA	X			X		X							X			X		X
OHIO	X			X		X	12/	12/	12/	12/	12/		12/	12/	12/	12/	12/	
OKLAHOMA29/																		
OREGON 33/													X16/	X16/	X16/	16/	16/	16/
PENNSYLVANIA	X	X		X		X												
PUERTO RICO				X		X				X		X				X		X
RHODE ISLAND	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SOUTH CAROLINA	X			X		X	X						X					
SOUTH DAKOTA						X												
TENNESSEE	X			X		X												
TEXAS 34/																		
UTAH	X		X	X		X	X		X	X			X17/		X			X
VERMONT	X	X	X	X		X	X	X	X				X	X	X			
VIRGINIA	X		X	X		X	X		X				X		X	X		
VIRGIN ISLANDS29/ 35/																		
WASHINGTON				X	X													
WEST VIRGINIA	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WISCONSIN	X	X	7/	X	X	X	X	X	7/	X	X		X	X	7/	X	X	
WYOMING	X	X	X	X	X	X	X	X	X				X	X	X	X	X	
JAMAICA 36/																		
Totals 37/																		
Yes	31	11	20	34	10	36	21	7	14	10	4	6	27	12	19	19	8	9
No	23	43	34	20	44	18	33	47	40	44	50	48	27	42	35	35	46	45

The Commission has authority to require certificates of convenience and necessity for -

STATE	Construction major additions- Distribution lines: Electric: Private	Public	Cooperative	Gas: Private	Public	Telephone	Other plant: Electric: Private	Public	Cooperative	Gas: Private	Public	Telephone	Abandonment of facilities or service: Electric: Private	Public	Cooperative	Gas: Private	Public	Telephone
FPC										X						X		
FCC						X												X
ALABAMA							X			X		X	X		X	X	X	X
ALASKA													X	X	X	X		X
ARIZONA													X		X	X		X
ARKANSAS							X		X	X		X	X		X	X		X
CALIFORNIA				X						X			X		X	X		X
COLORADO 27/	9/	9/	9/	9/	9/	9/	9/	9/	9/	9/	9/	9/	X	X	X	X	X	X
CONNECTICUT 28/													X		X	X		X
DELAWARE 29/																		
DISTRICT OF COLUMBIA																		
FLORIDA																		
GEORGIA				X												X		X
HAWAII	10/			10/		10/	10/			10/		10/	X			X		X
IDAHO	x14/			x14/	14/		x14/			x14/	14/		X		X	X		X
ILLINOIS													X	X	X	X		X
INDIANA																		
IOWA	X	X	X	X	X			5/	X				X	X	X	X	X	X
KANSAS	X	5/	X						X				X	5/	X	X	5/	X
KENTUCKY	X		X				X		X				X		X	X		X
LOUISIANA	X		X	X		X	X		X				X		X	X		X
MAINE													1/	1/	1/	1/	1/	1/
MARYLAND													X	X		X	X	X
MASSACHUSETTS													X		X	X		X
MICHIGAN										X								X
MINNESOTA 30/																		X
MISSISSIPPI	X	X	X	X	X	X							X	X	X	X	X	X
MISSOURI													X			X		X
MONTANA 31/													X	X		X	X	X
NEBRASKA																		X
NEVADA	X		X	X		X							X		X	X		X
NEW HAMPSHIRE													X	19/	X	X		X
NEW JERSEY 32/	18/	18/	18/	18/	18/	18/	18/	18/	18/	18/	18/	18/	X		X	X		
NEW MEXICO	11/	6/11/		11/	6/11/	11/	11/	6/11/		11/	6/11/	11/	X	X		X	X	X
NEW YORK													X			X		X
NORTH CAROLINA	X			X		X												
NORTH DAKOTA																		
OHIO													X			X		X
OKLAHOMA 29/													X			X		X
OREGON 33/																		
PENNSYLVANIA				X		X				X		X	X	X		X		X
PUERTO RICO																X		X
RHODE ISLAND	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SOUTH CAROLINA	X												X			X		X
SOUTH DAKOTA																		X
TENNESSEE	X			X		X	X			X		X	X			X		X
TEXAS 34/																		
UTAH	X		X			X	X		X			X	X		X	X		X
VERMONT													X	X	X	X		X
VIRGINIA	X		X	X			X		X	X								
VIRGIN ISLANDS 29/35/																		
WASHINGTON																		
WEST VIRGINIA	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WISCONSIN	X	X	7/	X	X		X	X	7/	X	X		X	X	7/	X	X	X
WYOMING	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
JAMAICA 36/																		
Totals 37/																		
Yes	16	6	11	15	6	9	12	4	9	12	4	8	35	14	22	37	11	39
No	38	48	43	39	48	45	42	40	45	42	50	46	19	40	32	17	43	15

100

STATE	The Commission has authority to -																				
	Issue indeterminate permits					Regulate state exports							Allocate unincorporated territory among utilities								
	Electric			Gas		Electric				Gas			Electric			Gas					
	Private	Public	Cooperative	Private	Public	Telephone	Private	Public	Cooperative	Private	Public	Telephone	Private	Public	Cooperative	Private	Public	Telephone			
FPC						X															
FCC																					
ALABAMA	X			X									X					X			
ALASKA	X	X	X	X	X	X							X	X	X	X	X	X			
ARIZONA							X		X	X			X		X	X		X			
ARKANSAS													X	X	X	X	X	X			
CALIFORNIA	X		X	X		X							X		X	X		X			
COLORADO 27/	X	X	X	X	X	X							X	X	X	X	X	X			
CONNECTICUT 28/																					
DELAWARE 29/	X		X	X		X	X		X	X			X		X	X		X			
DISTRICT OF COLUMBIA																					
FLORIDA													X					X			
GEORGIA																X		X			
HAWAII																					
IDAHO													X			X		X			
ILLINOIS	X		X	X		X	X21/			X		X	X		X	X		X			
INDIANA													X	X	X	X		X			
IOWA	X	X	X	X	X	X							X	X	X	X	X	X			
KANSAS		5/			5/			5/			5/		X	5/	X	X	5/	X			
KENTUCKY	X		X	X		X							X	X	X	X	X	X			
LOUISIANA													X		X	X		X			
MAINE																					
MARYLAND																					
MASSACHUSETTS	X	X		X	X	X							23/	23/	23/	23/	23/	23/			
MICHIGAN																		X			
MINNESOTA 30/						X												X			
MISSISSIPPI													X	X	X	X	X	X			
MISSOURI	X			X		X							X			X		X			
MONTANA 31/																					
NEBRASKA																					
NEVADA													X24/		X24/	X24/		X24/			
NEW HAMPSHIRE							X22/		X22/				X	X		X		X			
NEW JERSEY 32/																					
NEW MEXICO													X		X	X					
NEW YORK	X	6/		X	6/	X	X	X		X	X		25/	6/25/		25/	6/25/	25/			
NORTH CAROLINA													X26/			X26/		X26/			
NORTH DAKOTA	X			X		X							X			X		X			
OHIO													X			X		X			
OKLAHOMA 29/	X			X		X												X			
OREGON 33/													X	X	X	X		X			
PENNSYLVANIA	X	X		X		X							X	X		X					
PUERTO RICO																					
RHODE ISLAND	X	X	X	X	X	X							X	X	X	X	X	X			
SOUTH CAROLINA	X			X		X							X			X		X			
SOUTH DAKOTA						X												X			
TENNESSEE																					
TEXAS 34/																					
UTAH													X		X	X		X			
VERMONT													X	X	X	X		X			
VIRGINIA	X		X			X							X		X			X			
VIRGIN ISLANDS 29/35/																					
WASHINGTON																		X			
WEST VIRGINIA													X	X	X	X	X	X			
WISCONSIN	20/	20/	7/	20/	20/		X	X	7/												
WYOMING													X	X	X	X	X	X			
JAMAICA 36/																					
Totals 37/																					
Yes	17	6	9	16	5	18	6	2	3	4	1	1	32	14	22	30	9	37			
No	37	48	45	38	49	36	48	52	51	50	50	53	22	40	32	24	45	17			

1/ Finding of public convenience and necessity required if another utility is already offered or is authorized to offer a comparable service in the same area. 35 M.R.S.A. 13-A.
2/ Authorize exercise of franchise rather than issue certificate of Public Convenience and Necessity.
3/ Present certificate authority limited to gas transmission pipelines, telephone companies and, in the case of gas and electric companies, to situations where one utility proposes to extend service into a municipality presently receiving like and contemporaneous service from another utility.
4/ Answered with "private" meaning investor-owned and "public" meaning municipal or governmental.
5/ Same as for private utilities and cooperatives for facilities outside of 3 miles from the corporate limits of municipalities - commission has no jurisdiction within the 3-mile limit.
6/ "No," except for service outside the municipality. General Municipal Law, Sec. 361, 364; Public Service Law, Sec. 68.
7/ "No," unless cooperative extends activities to include functions that make it a utility under the statutes.
8/ Generating plants in excess of 50 MW.
9/ Not necessary to obtain certificate for extension of its line, plant or system if contiguous to its existing system and if such extension is not into area of another utility of like character, and if extension is necessary in the ordinary course of its business.
10/ Although certification is not required, all capital expenditures in excess of $500,000 or 10 percent of the total plant in service must be submitted to the commission for review.
11/ The certificates of public convenience and necessity heretofore issued by the commission for the most part authorize construction of electric, gas and telephone plant of all sorts, without time limit, within specified municipalities. Therefore, the utility needs no additional certificate, other than for a transmission line under Public Service Law, Article 7, to construct additional plant within its previously certified area. A certificate is required, however, before a utility may construct plant of any sort outside its previously certificated area.
12/ Participates through membership on Power Siting Commission, which has authority as indicated.
13/ Transmission lines in excess of 200 KV.
14/ Certificates are required if new areas are to be served by the facilities. The State is completely covered for telephone service.
15/ Department has power to rezone property for construction of utility facilities and make takings in Eminent Domain Proceedings.
16/ Limited to when condemnation is required.
17/ Once a utility has been certified by the commission the general policy followed by the commission is to not require further certification for major additions within the service area of the utility.
18/ Certificate needed for extensions into new territory not contiguous to existing service or being served by another utility.
19/ Only where service is outside municipal limits.
20/ Indeterminate permits in Wisconsin come into existence by operation of law resulting from any grant from the State or a municipality to any public utility to own, operate, manage or control any plant for the furnishing of a public utility service. Whether an indeterminate permit exists in any given situation depends essentially upon the existence of such underlying grant.
21/ To the extent that it is not in conflict with interstate commerce.
22/ Only electricity generated by water power.
23/ All territory is incorporated.
24/ Upon proper application.
25/ "No," except where duplicate franchises may have been granted to more than one utility.
26/ Unless contiguous territory not served by another public utility.
27/ Colorado Public Utilities Commission has no jurisdiction over municipally owned utilities operating inside corporate limits except as to gas safety.
28/ There are no co-ops in this state.
29/ 1967 data - no reply to 1972 survey.
30/ Commission has no authority over gas and electric utilities.
31/ Certificates, Permits and Licensees - None in Montana.
32/ The key word here is authority. The commission does not have the authority to certify. However, the commission can do all these things on the basis that utilities must provide safe, adequate and proper services.
33/ Answers relate to allocation of territory not a certificate of convenience and necessity statute.
34/ No certification authority in Texas for gas, telephone or electric.
35/ Electric facilities owned and operated by the government and are not regulated by the commission. No natural gas service in the Virgin Islands other than "bottled gas" which is not regulated by the commission.
36/ Provision of additional generation and transmission facilities which demands heavy capital expenditure requires approval of the commission.
37/ Totals do not include FPC or FCC.

STATE	The Commission's authority to certificate is derived from -				The Commission's authority to certificate is contingent upon the prior approval or authorization of -				The certification authority is given to another agency	Where the Commission does not have the authority to certificate facilities, legislation is now pending which would grant authority to -				Certification is mandatory
	Statute	Judicial interpretation	Administrative interpretation	Other	Federal agency	Regional agency	Other State agency	Local agency		Your State agency	Other State agency	Regional agency	Local agency	
FPC	X													X
FCC	X													X
ALABAMA	X								X21/					X
ALASKA	X													X
ARIZONA	X													
ARKANSAS	X													X
CALIFORNIA	X	X	X											25/
COLORADO	X													
CONNECTICUT	X										X			X
DELAWARE 27/														
DISTRICT OF COLUMBIA	1/	1/	1/											
FLORIDA	X2/													X26/
GEORGIA	X3/													
HAWAII										X				
IDAHO	X													
ILLINOIS	X													X
INDIANA	X													
IOWA	X	X	X						X22/					
KANSAS	X								X					X
KENTUCKY	X													
LOUISIANA	X			X 7/										X
MAINE	X													X
MARYLAND	X						10/	15/						
MASSACHUSETTS	X		X					16/						
MICHIGAN	X4/						X 11,12/			X				
MINNESOTA	X5/							X17/						X
MISSISSIPPI	X	X												X
MISSOURI	X													X
MONTANA 28/														
NEBRASKA	X													X
NEVADA	X													X
NEW HAMPSHIRE	X	X					X13,14/							X13/
NEW JERSEY	X	X	X		8,9/		8,9/	8,9/		23/	23/	23/	23/	23/
NEW MEXICO 29/	X													
NEW YORK	X							18,19/		24/	24/	24/	24/	X
NORTH CAROLINA	X	X	X											X
NORTH DAKOTA 30/	X													
OHIO	X													
OKLAHOMA 27/														
OREGON 31/	X													
PENNSYLVANIA	X													
PUERTO RICO	X													X
RHODE ISLAND	X													X
SOUTH CAROLINA	X													X
SOUTH DAKOTA	X		X					X 20/						
TENNESSEE	X													
TEXAS 32/														
UTAH	X													X
VERMONT	X		X											X
VIRGINIA	X													
VIRGIN ISLANDS 27/														
WASHINGTON	X 6/													6/
WEST VIRGINIA	X	X												X
WISCONSIN	X													
WYOMING	X													
JAMAICA	X													X

1/ No authority to certificate.
2/ Telephone only, no CCN granted to gas or electric.
3/ Only telephone and gas.
4/ Present certificate authority limited to gas transmission pipelines, telephone companies and, in the case of gas and electric companies, to situations where one utility proposes to extend services into a municipality presently receiving like and contemporaneous service from another utility.
5/ Telephone only.
6/ Certificates of convenience and necessity are required of gas companies only.
7/ The Louisiana Constitution gives broad authority to the commission to regulate all aspects of sales and service of regulated utilities and carriers.
8/ Sometimes.
9/ Department of Env. Prot., Trenton, N. J. - able to participate as party, Municipal Councils, Title 40 and Title 48 - able to participate as party, EPC; AEC; Delaware Water Commission.
10/ Department of Assessments and Taxation create corporate franchise.
11/ In certain cases.
12/ Interdepartmental Committee on Water and Land Resources, Department of Natural Resources, Lansing, Michigan 48926; Governor's Advisory Council for Environmental Quality, Office of the Governor, Lansing, Michigan 48902. Authority: Governor's Executive Directive 1971-10 and Act 127, P.A. 1970, M.C.L.A. 691.1201. Effective December 13, 1971, Environmental impact statement review procedure must be part of decision making process in gas pipeline certifications. Any interested state agency may participate as an intervenor in proceedings before the commission.
13/ Electric only.
14/ Site Evaluation Committee - for electric facilities only. RSA 162-F.
15/ Political subdivisions grant other franchises and in each instance commission has power to authorize the exercise of the franchises.
16/ Cities and towns must authorize opening of streets, pole locations and overhead lines crossing public ways only.
17/ Minnesota statutes 237.18 provide that if a telephone company surrenders a municipal franchise, it shall receive a franchise from the commission.
18/ Local consent of the municipality involved is required before the commission may issue a certificate of public convenience and necessity to an electric or gas corporation. Public Service Law, Sec. 68, Transportation Corporations Law, Sec. 11, subd. 3. Local consents are also required in the case of a telephone company, if its subd. 1; Transportation Corporations Law, Sec. 27. Local consents are not required as a prerequisite to the issuance of a certificate of environmental compatibility and public need for the construction of electric and gas transmission lines, if the commission finds such requirement would be "unreasonably restrictive". Public Service Law, Sec. 126, subd. 1(f).
19/ Any municipality in which utility plant is to be constructed may appear in the certification case, cross-examine, present testimony and submit briefs on relevant issue.
20/ Municipalities - franchises.
21/ Municipalities in some cases.
22/ Municipalities, as far as rights on streets and alleys.
23/ The key word here is authority. The commission does not have the authority to certificate. However, the commission can do all these things on the basis that utilities must provide safe, adequate and proper services.
24/ In 1972 the State's Public Service Law as amended to establish a Board on Electric Generating Siting and the Environment, intended to have one-stop siting jurisdiction. The Chairman of the Public Service Commission acts as Chairman of the Board. The other members are the Commissioners of Environmental Conservation, Health and Commerce and an Ad Hoc member appointed by the Governor who shall be a resident of the judicial district in which the facility as primarily proposed is to be located.
25/ Commission does, however, have authority to order construction of facilities.
26/ Yes, for telephone; no for gas and electric.
27/ No reply to 1972 survey.
28/ Certificates, Permits and Licensees - None in Montana.
29/ No jurisdiction over telephones.
30/ Transmission lines only.
31/ Answers relate to allocation of territory not a certificate of convenience and necessity statute.
32/ No certification authority in Texas for gas, telephone or electric.

104

STATE	The Commission has authority to -													
	Set legal standards or criteria for certification to include -													
	Guidelines or standards for evaluating --								Procedures to assure public participation in the certification proceedings through --					
	The effects of planned rights of way, sites and facilities on environmental values affecting -					Relative environmental impacts of alternative sites	The projected utility needs	When positive, the future plans for facilities proposed for next 10 years are prepared and published annually	Public notice of certification proceedings	Opportunity for public hearing thereon	Mandatory public hearing	Requirement for pre-hearing consultation between applicant and interested persons or groups	Rights of intervention in the certification proceeding	Other safeguards
	Air pollution controls	Water pollution controls	Water rights and usage	Use of land	Radiological control									
FPC	X	X	X	X	X	X	X		X	X	X	X	X	
FCC						X	X	No	X	X	X	X	X	
ALABAMA							X		X	X			X	
ALASKA	X	X	X	X	X	X	X		X	X	X	X	X	
ARIZONA									X	X	X		X	
ARKANSAS				X			X	No	X		X		X	
CALIFORNIA	X	X		X	X	X	X	8/	X	X	X17/	X	X	X17/
COLORADO	X	X	X	X	X	X	X	No	X	X	18/		X	
CONNECTICUT														
DELAWARE 80/														
DISTRICT OF COLUMBIA														
FLORIDA									X15/	X	X	X	X	X22/
GEORGIA														
HAWAII														
IDAHO				X		X			X	X		X	X	
ILLINOIS	X	X	X	X	X	X	X	No		X	X	19/	X21/	X23/
INDIANA									X	X			X	
IOWA							X	No	X	X		X	X	
KANSAS									X	X	X	X	X	
KENTUCKY							X	No	X	X	X		X	
LOUISIANA									X	X		X	X	
MAINE	1/	1/	1/	1/	1/	1/	X	9/		X			X	24/
MARYLAND									X	X	X		X	
MASSACHUSETTS				X			X		X	X	X	X	X	X25/
MICHIGAN									X	X		X	X	
MINNESOTA														
MISSISSIPPI									X	X	X	X	X	
MISSOURI									X	X	X		X	
MONTANA 81/														
NEBRASKA									X	X	X		X	
NEVADA	X					X	X		X	X		20/	X	26/
NEW HAMPSHIRE	X	X	X	X	X	X	X	Elec	X	X	X		X	
NEW JERSEY	X	X	X	X	X	X	X	No	X	X	X	X	X	X27/
NEW MEXICO	X	X				X	X	10/	X	X	X	X	X	
NEW YORK	2/	2/	2/	2/ 7/	2/	2/ 7/	2/ 7/	11/	X	X	X	X	X	X28/
NORTH CAROLINA						X	X	No	X	X			X	
NORTH DAKOTA									X	X		X	X	X29/
OHIO														
OKLAHOMA 80/														
OREGON									X	X	X		X	
PENNSYLVANIA						X	X	12/						30/
PUERTO RICO	X	X	X			X			X	X	X		X	
RHODE ISLAND	X	X	X	X	X		X	No	X	X	X		X	
SOUTH CAROLINA	X	X	X	X	X	X	X	Yes	X	X			X	
SOUTH DAKOTA									X	X			X	
TENNESSEE									X	X	X		X	
TEXAS														
UTAH	3/	3/	3/	3/	3/	3/	3/	3/	X	X	X		X	
VERMONT			X			X	X	No	X	X	X		X	
VIRGINIA			X	X		X	X		X	X			X	
VIRGIN ISLANDS 80/														
WASHINGTON	4/	4/	4/	4/	4/				X16/	X			X	
WEST VIRGINIA									X	X			X	
WISCONSIN	X5/	X5/		X5/		X	X	No	X	X			X	
WYOMING	X 6/	X		X	X	X	X	13/	X	X			X	
JAMAICA								82/						
Totals 83/														
Yes	13	12	10	14	9	17	22		39	40	23	14	41	7
No	41	42	44	40	45	37	31		15	14	31	40	13	47

STATE	The Commission has authority to -																	
	Set legal standards or criteria for certification to include -		Publish such standards or criteria for certification in -				Require authorization of hydroelectric developments or require authorization for the diversion or use of water	Require the installation of				Set the criteria for the commencement or completion of the installation of underground lines	When positive, the dates or time limitation for			
								Underground transmission lines for		Underground distribution lines for			Underground transmission lines		Underground distribution lines	
	Procedures for formation of regional certifying bodies	Procedures for consideration of multi-State impacts in certification proceedings	Statute	Agency regulation	Judicial decision	Other		Future facilities	Relocation of existing facilities	Future facilities	Relocation of existing facilities		Future	Existing	Future	Existing
FPC		X		X	X			X	X	X	X					
FCC																
ALABAMA		X	X	X	X		X	X	X	X	X	X				
ALASKA		X					X	X	X	X	X					
ARIZONA										X	X					
ARKANSAS		X	X	X	X	X37/	X	X	X	X	X	X46/	46/		46/	
CALIFORNIA				X35/			X			X		X	49/	49/	51/	49/
COLORADO		X		X				X	X	X	X	X				
CONNECTICUT																
DELAWARE 80/																
DISTRICT OF COLUMBIA				X36/												
FLORIDA								X	X	X	X	X	None	None	3/22/71	None
GEORGIA																
HAWAII		X		X37/		X37/				X	X					
IDAHO		31/	X32/	X32/	X32/		X	X	X	X	X	X	None	None	52/	None
ILLINOIS																
INDIANA																
IOWA				X38/	X38/			44/	44/	44/	44/	44/				
KANSAS	X	X		X39/				X		X						
KENTUCKY				X												
LOUISIANA			X33/	X33/												
MAINE				X40/		X	X	X45/	X45/	X45/	X45/	45/				
MARYLAND								X		X		X				
MASSACHUSETTS								X	X	X	X	47/				
MICHIGAN								X	X	X	X	X	None	None	X53/	None
MINNESOTA																
MISSISSIPPI			X	X	X											
MISSOURI				X		43/		X	X	X	X	X	43/	43/	43/	43/
MONTANA 81/																
NEBRASKA				X												
NEVADA			X	X			X	X	X	X	X	X				
NEW HAMPSHIRE		X		X			X									
NEW JERSEY		X	X	X				X	X	X	X	X				
NEW MEXICO				X				X	X	X	X	48/				
NEW YORK		X		X			2/	X	X	X	X	X	50/	50/	6/28/72	50/
NORTH CAROLINA		X		X	X			X	X	X	X		None	None	None	None
NORTH DAKOTA				X41/				X	X	X	X					
OHIO																
OKLAHOMA 80/								X		X	X	X	None	None	None	None
OREGON										X						
PENNSYLVANIA																
PUERTO RICO	X			X												
RHODE ISLAND	X	X	X	X			X	X	X	X	X	X	None	None	None	None
SOUTH CAROLINA				X				X	X			X				
SOUTH DAKOTA																
TENNESSEE																
TEXAS																
UTAH			X34/					X	X	X	X					
VERMONT			X				X	X	X	X	X					
VIRGINIA				X				X	X	X	X					
VIRGIN ISLANDS 80/	X	X		X				X	X	X	X	X	None	None	None	None
WASHINGTON																
WEST VIRGINIA			X					X	X	X	X	X				
WISCONSIN		X		X42/				X	X	X	X	X	None	None	None	None
WYOMING								14/	14/	14/	14/	14/				
JAMAICA																
Totals 83/																
Yes	4	13	11	27	6	3	11	28	24	31	25	20				
No	50	41	43	27	48	51	43	26	30	23	29	34				

STATE	Foregoing authority (ies) rests with other agencies (See table 41a)	Interstate compacts affecting hydroelectric development (see Appendix 3)	The agency which has authority to grant eminent domain	The agency which grants damages if different from agency making the initial determination	Certificates of convenience and necessity contingent upon a favorable recommendation from any environmental agency	The Commission requires a certificate of compliance with the new environmental -		
						Federal Standards	State Standards	Federal and State Standards
FPC								
FCC								
ALABAMA			Courts	Courts				
ALASKA								
ARIZONA	X	X	Judicial	Judicial				
ARKANSAS	X		Courts	Courts	X68/	X	X	X
CALIFORNIA	X	X	None	None	69/	X77/	X77/	X77/
COLORADO	X	X	Statute					
CONNECTICUT		X						
DELAWARE 80/								
DISTRICT OF COLUMBIA	X		Congress					
FLORIDA	X		Leg.	Courts				
GEORGIA	X		None	None				
HAWAII			Courts	Courts				
IDAHO		X	Courts					
ILLINOIS			54/	Courts	70/			
INDIANA			Statute	Courts				
IOWA	X		55/	Courts	71/			
KANSAS	X	X						
KENTUCKY			P.S.C.	Courts	X	X	X	X
LOUISIANA		X	Leg.	Courts				
MAINE	X		56/	65/	X	X	X	X
MARYLAND		X	Leg.	Courts				
MASSACHUSETTS	X		57/	Courts	72/	72/	72/	72/
MICHIGAN	X		Courts		73/			
MINNESOTA		X						
MISSISSIPPI			Statute	Courts	X74/	X	X	X
MISSOURI	X		54/	Courts	X	78/	78/	78/
MONTANA		X						
NEBRASKA		X	58/	66/				
NEVADA		X	59/	Courts	X75/		X	
NEW HAMPSHIRE			P.U.C.		X76/	X	X	X
NEW JERSEY	X	X	60/	Courts				
NEW MEXICO	X	X	Courts				79/	
NEW YORK	X	X	Courts					
NORTH CAROLINA	X		Courts	Courts	X	X	X	X
NORTH DAKOTA	X	X	Statute	Courts				
OHIO	X		Courts	Courts				
OKLAHOMA 80/		X						
OREGON	X	X	Courts	Courts				
PENNSYLVANIA	X	X	61/	61/				
PUERTO RICO	X				X			X
RHODE ISLAND			P.U.C.			X		
SOUTH CAROLINA			Statute	Courts	X	X	X	X
SOUTH DAKOTA		X						
TENNESSEE								
TEXAS		X	Courts					
UTAH		X	Courts	Courts				
VERMONT			62/					
VIRGINIA		X						
VIRGIN ISLANDS 80/								
WASHINGTON		X	63/	Courts		4/	4/	4/
WEST VIRGINIA	X		Courts	Courts				
WISCONSIN	X		64/	67/	X	X	X	
WYOMING		X	Courts			X	X	X
JAMAICA	X							
Totals 83/								
Yes	25	25			11	11	11	10
No	29	25			43	43	43	44

1/ While the Public Utilities Commission may have some of this authority pursuant to language in 35 M.R.S.A. 13-A, the greater portion of this jurisdiction in the State of Maine rests with the State Environmental Improvement Commission.
2/ The certificates of public convenience and necessity heretofore issued by the commission for the most part authorize construction of electric, gas and telephone plant of all sorts, without time limit, within specified municipalities. Therefore, the utility needs no additional certificate, other than for a transmission line under Public Service Law, Article 7, to construct additional plant within its previously certificated area. A certificate is required, however, before a utility may construct plant of any sort outside its previously certificated area.
3/ There are no specific statutory provisions in relation to these items but the commission probably has some authority under a general jurisdiction section of the statute.
4/ No case has yet arisen.
5/ Generally, all matters involving environmental and ecological consideration are in a state of development from recently enacted state and federal legislation.
Affirmative answers given because in granting authority for project under Sec. 196.49 Wisconsin Stats. condition requiring appropriate approval from agency having direct jurisdiction (Department of Natural Resources) are contained in authorization.
6/ Authority by statute lies in the Wyoming Air Quality Council.
7/ In addition to the certificates of public convenience and necessity required before a utility may construct plant in new territory, gas or electric companies, before constructing a transmission line of substantial size anywhere, must obtain from the commission a certificate of environmental compatibility and public need.
8/ File 10 year plan annually, 20 year plan biennially.
9/ Currently there is no such requirement, however, general purpose statutory language probably gives P.U.C. authority to require same.
10/ Environmental authority only for plants 300 megawatts and over, and transmission lines 230 kv and over. Plant siting limit to air and water pollution considerations.
11/ No formal requirement, but the electric companies do publish such information.
12/ The commission requires electric utilities to file capacity additions and load forecasts for 10 year period.
13/ Provided for in the Commission Environmental Protection Rules.
14/ Construction of underground transmission and distribution lines not mandatory but is currently receiving consideration of the Ministry of Local Government.
15/ Only telephone and motor carriers required to obtain CCN.
16/ Certificates of convenience and necessity are required of gas companies only.
17/ If hearing is requested.
18/ Public hearing is mandatory unless matter is uncontested.
19/ May be done, but not a requirement.
20/ Optional.
21/ Except as a landowner.
22/ Notice required to be given public officials.
23/ Notice to State and Municipal agencies and groups deemed to have an interest.
24/ Certificates of public convenience and necessity issued only to Radio Common Carriers. All other utilities are accepted as found.
25/ Right of appeal to the Supreme Judicial Court.
26/ Court appeal.
27/ (a) Taking of exceptions to report after hearing. (b) The key word here is authority. This commission has the authority to do almost anything it wants in order to make utilities provide safe, adequate and proper service.
28/ The commission has comprehensive authority to conduct its hearings in such fashion as will best facilitate the gathering of information and the airing of opposing views, as for example in the choice of the location of the hearing.
29/ Proceedings held in areas other than State Capitol.
30/ Not applicable, although such participation is permitted in other areas where jurisdiction is exercised.
31/ A written procedure has not been adopted, but one could be developed should the need arise.
32/ Illinois Public Utilities Act Sec. 8.
33/ For Radio Common Carriers only.
34/ Title 30, V.S.A. Sec. 248.
35/ General Order No. 131.
36/ Commission Rules and Regulations.
37/ Commission Rules of Practice and Procedure.
38/ Iowa Departmental Rules.
39/ State Statute.
40/ 35 M.R.S.A. 13-A.
41/ 28-32-03, N.D.C.C.
42/ Regulations filed with Wyoming Secretary of State.
43/ Case by case determination.
44/ Commission has started hearings July 17, 1972, on this matter.
45/ There is no specific authority in the Maine Statutes, however, persuasive arguments can be advanced to support authority in general purpose language of the Statute.
46/ In August 1969, the commission ordered all future distribution lines serving new residential developments, to be planned underground. In June 1971, the legislature suspended the order's effect for a period of two years.
47/ Has authority but rarely exercised.
48/ Authority not exercised.
49/ Not specified.
50/ Hearings are in progress in the commission's Cases 25352 (Electric Companies) and 25396 (Telephone and Telegraph Companies) to determine whether and to what extent existing and future transmission lines and existing distribution lines should be placed underground. Following hearings in those cases, rules have been adopted requiring that most electric, telephone and telegraph distribution lines constructed after June 28, 1972, be placed underground in residential areas.
51/ Mandatory requirement for extensions to new residential subdivisions and commercial and industrial developments.
52/ The four largest utilities presently place all new distribution lines underground free of extra cost in subdivisions of seven or more houses.
53/ Required after January 1, 1971, for new residential subdivisions and commercial services.
54/ After approval of this commission, a local court.
55/ This commission and The Iowa Executive Council.
56/ Public Utilities Commission - Eminent Domain authority for transmission lines only. 35 M.R.S.A. 2304.
57/ Utilities - Dept. of Public Utilities.
58/ Roads Dept.; Univ. of Nebraska; Legislature.
59/ Certain public utilities have the right to obtain a judgment of condemnation in the courts.
60/ Board of Public Utility Commissioners.
61/ Court of Common Pleas - after a certificate of necessity has been issued by the regulatory commission, initial condemnation action is taken by the individual utilities. If any disputes arise between the parties, the action is then taken before the Court of Common Pleas.
62/ Public Service Board.
63/ Legislature and courts.
64/ Direct grant by Statute (Sec. 32.02 Wisconsin Stats.) PSCW in case of oil pipelines Sec. 32.02 (13).
65/ County Commissioners.
66/ Legislative and Courts.
67/ Condemnation Commissioners subject to appeal in court.
68/ State Department of Environmental Control and Ecology and State Health Department for Water Certification cases.
69/ Environmental agencies have concurrent jurisdiction with Public Utilities Commission.
70/ Certificates are not required, but evidence of compliance is sought in certificate proceedings.
71/ Not by law other than public interest.
72/ Such standards probably would be considered if brought to attention and certificate would most likely impose conditions.
73/ In certain cases.
74/ Air and Water Pollution Control Commission.
75/ State Commission of Environmental Protection.
76/ Site Evaluation Committee (electric only).
77/ Evidence required in commission proceedings on these matters (not necessarily a certificate of compliance.)
78/ Not at present does it require by statute or policy the presentation of such a certificate.
79/ Water and air pollution standards only for plants of 300 megawatts and over.
80/ 1967 data - no reply to 1972 survey.
81/ Certificates, Permits and Licenses - None in Montana.
82/ Certification not required but practice has become accepted for period of 5 years.
83/ Totals do not include FPC or FCC.

STATE	AGENCY	Sets legal standards or criteria for certification to include guidelines or standards for evaluating the effects of planned rights of way, sites and facilities on environmental values affecting --
ARIZONA	Attorney General as Chairman of Siting Committee	Air pollution controls, water pollution controls, water rights and usage, use of land, radiological controls, relative environmental impacts of alternative sites, and the projected needs of the utilities. In addition, the authority includes the setting of standards or criteria for procedures for the formation of regional certifying bodies and for consideration of multi-State impacts in certification proceedings.
ARKANSAS	State Department of Environmental Control and Ecology	Air pollution controls, water pollution controls and radiological controls.
CALIFORNIA	Air Pollution Control Districts State Water Resources Control Board State Department of Water Resources	Air pollution controls. Water pollution controls. Water rights and usage.
COLORADO	Eleven other State agencies involved in same problem.	Under certain conditions a certificate is required prior to construction.
DISTRICT OF COLUMBIA	Congress of the United States or the D. C Council or Commissioner	Air pollution controls, water pollution controls, water rights and usage, use of land, radiological controls, relative environmental impacts of alternative sites, and the projected needs of the utilities.
FLORIDA	State Department of Pollution Control	Air pollution controls, water pollution controls, water rights and usage, use of land, radiological controls and the relative environmental impacts of alternative sites.
GEORGIA	Air Quality Control Division, Natural Resources Department Water Quality Control Board, Natural Resources Department	Air pollution controls. Water pollution controls.
IOWA	Natural Resources Council	This agency has authority to require authorizations of hydroelectric developments and the diversion or use of water
KANSAS	State Board of Health and/or Division of Water Resources	Air pollution controls, water pollution controls, water rights and usage, use of land, radiological controls, relative environmental impacts of alternative sites and the projected needs of the utilities.
MAINE	Environmental Improvement Commission	Air pollution controls, water pollution controls, water rights and usage, use of land, radiological controls and relative environmental impacts of alternative sites. In additon, a favorable recommendation is required from this agency.
MASSACHUSETTS	State Department of Public Health Water Resources Board and Department of Natural Resources	Air pollution controls, water pollution controls and radiological control. Water pollution controls and water rights and usage.
MICHIGAN	Six other agencies	Air pollution controls, water pollution controls, water rights and usage, use of land, radiological controls and relative environmental impacts of alternative sites.
MISSISSIPPI	Air and Water Pollution Control Commission	Air and water pollution controls, water rights of way, use of land and radiological controls.
MISSOURI	Air Conservation Commission and Clean Water Commission	Air pollution controls, water pollution controls, water rights and usage, use of land, radiological controls, relative environmental impacts of alternative sites and the projected needs of the utilities.
NEW JERSEY	Department of Environmental Protection	Use of land and environmental impact of planned rights of way, sites and facilities.
NEW MEXICO	State Engineer	This agency has the authority to require authorizations of hydroelectric development and the diversion or use of water.
NEW YORK	Department of Environmental Conservation	Air pollution controls, water pollution controls and water rights and usage. (Construction and operating permits required)
NORTH CAROLINA	Office of Water and Air Resources	Air pollution controls, water pollution controls and water rights and usage. In addition, a favorable recommendation is required from this agency.

STATE	AGENCY	Sets legal standards or criteria for certification to include guidelines or standards for evaluating the effects of planned rights of way, sites and facilities on environmental values affecting —
NORTH DAKOTA	State Health Department State Water Commission	Air and water pollution controls, and water rights and usage. Air pollution controls, water pollution controls and water rights and usage. In addition this agency has authority to require authorizations of hydroelectric developments and the diversion of water or use of water.
OHIO	Environmental Protection Agency Natural Resources Power Siting Commission	Air, water, esthetic controls. Land use. Power generating stations, power and gas transmission line location.
OREGON	Nuclear and Thermal Energy Council	As relating to generating plants.
PENNSYLVANIA	Environmental Resources	Air and water pollution controls, water rights and usage, use of land and radiological controls.
PUERTO RICO	Environmental Quality Board Department of Public Works	Air and water pollution controls. In addition, a favorable recommendation is required from this agency. Use of land.
UTAH	State Department of Health State Water Pollution Control Board	Air pollution controls, Water pollution controls.
WEST VIRGINIA	Air Pollution Control Commission	Air pollution controls.
WISCONSIN	Department of Natural Resources	Air and water pollution controls, water rights and usage, use of land, radiological controls, and relative environmental impacts of alternative sites.
WYOMING	Air Quality Control	Air pollution controls.