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MASTER

COMMUNITY ENERGY SYSTEMS
AND THE LAW OF PUBLIC UTILITIES

Volume Twenty-Four

MICHIGAN

Final Report of
A Study of the Impacts of Regulations
Affecting the Acceptance of
Integrated Community Energy Systems

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UNITED STATES DEPARTMENT OF ENERGY

Division of Buildings and Community Systems
under Contract No. DE-AC02-78CS20289

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ABSTRACT

This report contains a detailed description of the laws and programs of the State of Michigan governing the regulation of public energy utilities, the siting of energy generating and transmission facilities, the municipal franchising of public energy utilities, and the prescription of rates to be charged by utilities including attendant problems of cost allocations, rate base and operating expense determinations and rate of return allowances. These laws and programs are analyzed to identify impediments which they may present to the implementation of Integrated Community Energy Systems (ICES). This report is one of fifty-one separate volumes which describe such regulatory programs at the federal level and in each state as background to the report entitled "Community Energy Systems and the Law of Public Utilities -- Volume One: An Overview." This report also contains a summary of a strategy described in Volume One -- An Overview for overcoming these impediments by working within the existing regulatory framework and by making changes in the regulatory programs to enhance the likelihood of ICES implementation.

PREFACE

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

The relevant "community" which will be appropriate for ICES development will typically consist of a combination of existing or potential energy "wasters" -- i.e., installations with large energy conversion facilities which, when operated in a conventional manner, exhaust usable amounts of waste heat or mechanical energy -- and existing and potential energy users -- i.e., industrial, commercial, institutional or residential structures which obtain electricity and gas from a traditional central utility and convert part of it on site to space heating and cooling purposes.

In most current applications, energy conversion facilities burn fuels such as coal, oil or natural gas to produce a

single energy stream such as process steam or electricity for various industrial processes or for sale to other parties. In the conversion process, substantial amounts of energy may be wasted. For example, it has been estimated that from 60 to 75 percent of the potential energy available in fuel burned to generate electricity is lost in the process of generating and delivering the electricity.

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

It is generally assumed by DOE that ICES will be designed to produce sufficient thermal energy to meet all the demands of their communities and that they will be interconnected with existing electric utility grids. Through such an interconnection, an ICES would be able to purchase electricity when its community's need for electricity exceeds the amount which could be produced from the level of operations needed to meet the community's thermal needs. In addition, when operations to meet thermal needs result in generation of more electricity than

necessary for the ICES community, the ICES would be able to sell excess electricity to the grid.

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

Ross, Hardies, O'Keefe, Babcock & Parsons has undertaken a contract with the Department of Energy to identify impediments to the implementation of the ICES concept found in existing institutional structures established to regulate the construction and operation of public utilities. These institutional structures have been developed in light of policy decisions which have determined that the most effective means of providing utility services to the public is by means of regulated monopolies serving areas large enough to permit exploitation of economies of scale while avoiding wasteful duplication of production and delivery facilities. These existing institutional structures have led to an

energy delivery system characterized by the construction and operation of large central power plants, in many cases some distance from the principal population centers being served.

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

The purpose of this report is to generally describe the existing scheme of public utility regulation as it is likely to relate to the development and operation of an ICES, the construction of ICES facilities and the determination of relevant cost of service, rate of return and rate structure for the sale and purchase of energy by an ICES. Attention is given to the problems of the entry of an ICES into an energy market which has traditionally been characterized by a form of regulated monopoly where only one utility has been authorized to provide a particular service in a given area.

This report is one of a series of reports covering the law of each of the 50 states and the federal government and should be read in conjunction with Volume One in this series entitled Community Energy Systems and the Law of Public Utilities: An Overview. That volume provides a national overview of the regulatory programs described in detail for the particular state covered by this report. It also provides an analysis of the impediments to effective implementation of the ICES concept and a series of recommendations for responding to those impediments. In many jurisdictions legal issues similar to those likely to arise in the implementation of the ICES concept have not previously been faced. Thus, this series of reports cannot give definitive guidance as to what all of the answers are with respect to all issues which may face ICES implementation. However, by having an understanding of the issues which may arise in the course of an effort to implement ICES, an ICES developer will be better equipped to seek solutions.

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

ACKNOWLEDGEMENTS

We wish to acknowledge the efforts of numerous individuals who have assisted in the preparation of the series of reports which make up the Study of the Impacts of Regulations Affecting the Acceptance of ICES. A number of lawyers and paralegal personnel of Ross, Hardies, have assisted in the research, writing, critiquing, rewriting, proofreading and other efforts including Drew Kaplan; Linda Arbetman; Cheryl K. Hachman; Barbara L. Ross; Joel F. Bonder; Sally H. Newton; Susan N. Stearns; Richard F. Babcock; Donald W. Glaves; Theda C. Snyder; Patricia J. Crowe; Susan E. Merritt; Eileen A. Muench; Elizabeth West; Catherine B. Lipscomb; Margaret R. Hessler; and Elizabeth Walter.

Preparation of reports covering regulatory programs in every state has taken considerable research effort and we are grateful to a group of law students who spent not only countless hours in libraries, but also a great deal of time on telephones contacting public officials around the country to secure information about utility regulatory programs. Among the students were Marchall Seeder; Carl Anderson; Locke E. Bowman, III; James G. Bullard; Bruce W. Dewald; Norman B. Julius; Bruce S. Klafter; Ruth B. Kleiman; Suzanne Metzel; Terrence J. Molinari; Alison Moss; Rose M. Urban; Garth D. Wilson; Linda Yi; Shell Bleiweiss and Neal Heriaud.

We would also like to acknowledge the contributions of subcontractors Hittman Associates, Inc. and Deloitte, Haskins & Sells, Inc. who have assisted us in an appreciation of some of the engineering and public utility accounting and ratemaking aspects of this project.

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CHAPTER 1

EXECUTIVE SUMMARY

I. REGULATION OF PUBLIC UTILITIES

The authority to regulate public utilities in Michigan is vested generally in the Michigan Public Service Commission (Commission), which is comprised of three members appointed by the Governor, with the advice and consent of the senate, to serve for terms of six years. Municipally-owned utilities are not subject to Commission regulation.

The Commission exercises regulatory powers over public utilities, which are defined by statute to include electric light and power companies, as well as gas, water and steam companies, furnishing services to or for the public for compensation. The Commission is empowered to regulate rates, issuances of securities, uniform systems of accounts, extensions of service and standards of service.

Certificates of public convenience and necessity must be obtained by electric and gas utilities prior to initiating service or extending service in an area already being provided with service. There are no provisions specifically requiring certification of other public utilities. The Commission may use its certificating powers to prevent competition between utilities which it determines is not beneficial to the public.

After an application for a certificate is filed, the Commission must hold a hearing. In deciding whether to grant a certificate, the Commission considers the service already being rendered to the territory, the investment in the utility providing that service and the potential benefit to the public.

The Commission apparently has the authority to review service area disputes, and may conduct an investigation and hold a public hearing if it deems it necessary. Orders of the Commission may be appealed to the Ingham County Circuit Court (in chancery). New evidence may be introduced, and the court may stay the appeal pending reconsideration by the Commission. Further appeals may be taken to the state supreme court.

II. SITING OF ENERGY FACILITIES

The State of Michigan has no comprehensive energy facility siting statute. Several state agencies, however, have permitted authority over different aspects of power plant siting.

The Water Resources Commission is organized under the Environmental Protection Branch of the Department of Natural Resources. This commission is authorized to establish pollution standards for the state's lakes, rivers and streams and to issue permits to assure compliance with both state and federal regulations. Permits are also required for any man-made change in the topography of the land that might result in soil erosion or sedimentation.

The Air Pollution Control Commission is within the Department of Public Health and is empowered to issue permits for construction and operation of air pollution control facilities and sources of potential air pollution. The Department of Public Health also requires a license prior to the establishment or operation of a disposal area to be used to dispose of solid waste.

Zoning authorities also exercise some dominion over energy facility siting. Finally, the Commission's authority to issue certificates of public convenience and necessity will affect siting of facilities.

III. FRANCHISING OF PUBLIC UTILITIES

The authority to grant franchises for the use of public streets and places in connection with providing utility service in Michigan has since 1908 been vested by the state constitution in local units of government. Those franchises granted by the state legislature prior to 1908 remained valid. Although the constitution now limits the duration of a franchise to thirty years, this limitation was not in effect prior to 1908.

The state statutes also provide that utilities may maintain power lines, wires, poles and conduits upon, over or across any public road or place upon obtaining the consent of the affected city or town. Home-rule cities in Michigan have extensive authority over their public streets and places. No specific procedure for the granting of franchises has been provided by statute or judicial decision. Local charters and ordinances must be examined to

determine the particular procedure in each case.

No specific criteria are used in evaluating franchise requests. However, local governments may only grant franchises to "public utilities", as that term is defined in the statutes. Exclusive franchises are neither specifically sanctioned nor prohibited by statute. The courts have held, however, that exclusive franchises may not be granted by cities unless expressly authorized by statute.

IV. UTILITY RATE REGULATION

The statutes of Michigan vest authority to regulate rates of public utilities in the Commission. Investor-owned and cooperative utilities are within the Commission's jurisdiction, while municipal utilities are expressly excluded. However, municipalities may fix or regulate rates by franchise or agreement, and the Commission has no power to alter rates so fixed. The Commission has adopted a system of uniform accounts that is substantially similar to the FERC system of uniform accounts. The Commission, however, does not require any particular depreciation methodology.

The statutes require that the Commission hold public hearings before any utility's rates can be changed. There is no automatic approval if the Commission fails to extend the effective date of any proposed rate change before a final decision is reached. If the Commission fails to reach a decision on the proposed rates within nine months, it submits a report to the governor and legislature explaining the status of the case.

In determining a utility's rate base, the Commission has traditionally used a purely historical test year with adjustments for certain changes occurring after the end of the test period. In recent years, the Commission has approved the use of partially projected test years. In determining rate base, the Commission uses net utility plant, valued at original cost, less depreciation.

Investments in non-jurisdictional facilities are excluded from rate-making determinations unless they are of direct and certain benefit to rate-payers. The Commission has recently allowed construction work in progress as a rate base adjustment for electric and gas companies, but has also required an off-setting allowance for funds used during construction added to actual operating income. The Commission also routinely includes an amount of working capital in rate base. The Commission has not generally prescribed any particular methods for allocating rate base among two energy services, dealing with each case individually.

Routine operating expenses are included for rate-making purposes if reasonable. However, charitable contributions, club dues, promotional advertising and lobbying expenses have been excluded. Expenses related to utility participation in energy conservation programs are generally included in rate base. Research and development expenses have also been approved. No particular method of allocating expenses is prescribed by the Commission. The Commission requires that transactions between

a utility and affiliated companies be reasonable and views with disfavor transactions that yield a greater return to the affiliate than is allowed for the utility.

Generally, the Commission has required utilities to flow-through current tax savings, although on occasion it has approved the normalization of tax benefits resulting from accelerated amortization, liberalized depreciation and the investment tax credit.

The Commission has not adopted any particular method of determining return on equity. It has considered evidence and testimony which were based on, among other things, comparable earnings, discounted cash-flow and earnings-net proceeds studies. Comparative risks are implicitly considered in determining return on equity. The Commission has established an incentive rate-of-return mechanism for two electric utilities designed to allow an additional increment in rate of return if certain levels of plant availability are achieved during a year. The Commission has used the "double leveraging" method of determining return when the utility in question was a subsidiary of another organization.

The Commission's approach to rate design is not strictly cost based. For example, time-of-day rates have been approved. The Commission has required optional life-line rates for electric power for low-income senior citizens.

No utility may issue securities payable at periods of more than twelve months without the prior approval of the Commission. The Commission may authorize the issuance of securities for the acquisition of property, construction or improvement of facilities, or the discharge of obligations.

CHAPTER 2

REGULATION OF PUBLIC UTILITIES IN MICHIGAN

I. PUBLIC AGENCIES WHICH REGULATE PUBLIC UTILITIES

The authority to regulate public utilities is vested generally in the Michigan Public Service Commission (Commission). The Commission is composed of three members appointed by the Governor with the advice and consent of the senate. Commission members are appointed for six-year terms. They must be free from pecuniary and employment interests incompatible with the duties of the Commission.^{1/}

The Commission is vested with "complete power and jurisdiction to regulate all public utilities in the state except any municipally-owned utility"^{2/} The Commission may not change any rates fixed in or regulated by a franchise granted by a municipality.^{3/} Upon submission to the Commission by the municipality and the public utility operating in the municipality, the Commission may investigate and fix rates and establish rules and conditions of service.^{4/}

II. JURISDICTION OF THE COMMISSION

The jurisdiction of the Commission extends to all "public utilities" except municipally-owned utilities.^{5/} There is, however, no statutory definition of "public utility" as it relates to the Commission's jurisdiction nor any court decision interpreting "public utility". The statutory grant of jurisdiction and powers to the Commission does,

however, indicate that the term "public utility" includes, among others, "electric light and power companies, whether private, corporate or cooperative," gas, and water companies.^{6/} The Commission's jurisdiction also includes utilities "producing, transmitting, delivering or furnishing steam for heating or power" ^{7/}

The Commission is empowered to regulate "all . . . matters pertaining to the formation, operation or direction of . . . public utilities." ^{8/} There is no specific statutory enumeration of the facilities or functions subject to Commission regulation, but this broad grant of regulatory authority is sufficient to allow the Commission to regulate all facilities and functions involved in furnishing the jurisdictional services.

With respect to the Commission's general regulatory powers, there is no specific requirement that there be a sale or receipt of compensation in order to bring a utility within the Commission's jurisdiction. ^{9/} However, the definition of "public utility" with respect to the necessity of obtaining a certificate of public convenience and necessity does require that services be furnished "to or for the public for compensation." ^{10/}

Similarly, the statute does not require specifically that the utility services be provided to the public. ^{11/} The Commission's jurisdiction extends, however, only to public utilities and this requirement would most likely be

implied. No judicial or agency decisions resolve this question. The statutory provision specifically extending the Commission's regulatory jurisdiction to steam utilities does require that the service be provided "for the public use."^{12/} In addition the Commission's certificating jurisdiction extends only to gas and electric utilities providing service "to or for the public."^{13/} With respect to the requirement that certain public utilities obtain certificates of public convenience and necessity, the term public utility has been defined as:

persons and corporations, other than municipal corporations, or their lessees, trustees and receivers now or hereafter owning or operating in this state equipment or facilities for producing, generating, transmitting, delivering or furnishing gas or electricity for the production of light, heat or power to or for the public for compensation. ^{14/}

III. POWERS OF THE COMMISSION

The Commission is given "power and jurisdiction to regulate all rates, fares, fees, charges, services, rules, conditions of service and all other matters pertaining to the formation, operation or direction of such public utilities."^{15/} In addition, the Commission is authorized to "pass upon all matters pertaining to or necessary or incident to such regulation of all public utilities..."^{16/} These provisions seem to provide the Commission with a broad statutory base from which to regulate most aspects of public utility operations. However, Michigan courts have strictly construed Commission powers.

The general jurisdictional provision has been held to convey no grant of specific powers to the Commission; rather, the Commission may exercise only those powers specifically granted in subsequent statutory sections. The Commission is an administrative body created by statute and has no inherent common law powers, therefore, its jurisdiction must affirmatively appear in the statute before it can be invoked or exercised.^{17/}

In addition to its general regulatory authority, the Commission has been granted numerous specific powers. For example, the Commission has the power to regulate rates.^{18/} The Commission may not, however, alter any rates fixed in a franchise or agreement by a municipality.^{19/} At the present time the power granted to municipalities to fix rates, other than rates of municipally owned utilities, through a franchise or agreement is seldom used. An attorney for the Commission indicated that only three Michigan municipalities presently exercise control over rates by reason of franchise provisions and these provisions only effect gas utilities.^{20/} The Commission's powers also include the power to approve the issuance of securities;^{21/} to prescribe a uniform system of accounts to be kept by electric utilities;^{22/} to require reasonable extension of service to new customers;^{23/} and to prescribe standards of service.^{24/} In addition, the Commission must approve the construction of facilities and commencement or extension of operations by gas or electric utilities.^{25/}

IV. AUTHORITY TO ASSIGN RIGHTS TO PROVIDE SERVICE IN A GIVEN AREA

A. Generally

No electric or gas utility may:

begin the construction or operation of any public utility plant or system . . . nor shall it render any service for the purpose of transacting or carrying on a local business either directly, or indirectly, by serving any other utility . . . in any municipality in this state where any other utility . . . is then engaged in . . . rendering the same sort of service . . . until such [gas or electric] utility shall first obtain from the commission a certificate that public convenience or necessity requires or will require such construction, operation, service or extension. 26/

Thus, a utility providing electric service must obtain Commission approval before extending or instituting service in an area already being provided with electrical service or constructing new facilities or extending old facilities. There are no provisions specifically requiring certification of other public utilities.

B. Competition

There is no statutory provision specifically allowing the Commission to grant exclusive certificates to public utilities subject to the certification requirement. In Panhandle Eastern Pipeline Co. v. Michigan P.S.C.,^{27/} the Michigan Supreme Court held, however, that the Commission may use its certificating powers to prevent competition between public utilities which it determines is not beneficial to the public.

The right to exclude such competition, where the general public convenience and necessities so

require, has been delegated by the legislature to the Michigan public service commission. 28/

C. Certificating Procedures

The applicant for a certificate must file a petition with the Commission stating the name of the municipality or municipalities it wishes to serve and the kind of services it proposes to render. The applicant must also show that it has obtained the necessary franchises from such municipalities authorizing it to transact a local business. 29/

Upon application, the Commission must set a date for the hearing. A copy of the application and notice of the time and place of the hearing must be served upon every other utility rendering a similar service in the municipality and upon the clerk of each municipality affected at least 10 days before the hearing. 30/

In granting a certificate, the Commission is to take into consideration "the service being rendered by the utility then serving the territory, the investment in such utility, the benefit, if any, to the public in the matter of rate and other matters as shall be proper and equitable in determining whether or not public convenience and necessity requires the applying utility to serve the territory." 31/

Judicial and Commission decisions do not help explain how these statutory criteria are applied in practice.

D. Service Area Disputes

No specific statutory procedure has been established to resolve service area disputes. However, the Commission

is authorized to resolve any complaints that any practice observed by a public utility is improper.^{32/} This provision may provide authority for the Commission to resolve service area disputes. Notice of the complaint must be given to all concerned parties. The Commission may conduct any necessary investigation and may hold a public hearing if deemed necessary. After investigation and hearing, the Commission may issue any appropriate order.^{33/}

V. APPEALS OF COMMISSION DECISIONS

All appeals of Commission orders are governed by the rules applicable to appeals from the Michigan Railroad Commission.^{34/} Any order of the Commission "fixing any rate or rates, fares, charges, classifications, joint rate or rates, or any order fixing any regulations, practices or services", may be appealed to the Ingham County Circuit Court (in chancery) within 30 days of the issuance of the order.^{35/} Any party to the suit may introduce original evidence in addition to the transcript of evidence offered to the Commission.^{36/} If the evidence introduced is different from or additional to that offered upon the hearing before the Commission, the court may stay the appeal and allow 15 days for the Commission to reconsider its order.^{37/} Judgments of the circuit court may be appealed to the Michigan Supreme Court within 60 days of the circuit court decision.^{38/}

FOOTNOTES

1. Mich. Comp. Laws §460.1 (1967).
2. Id. §460.6 (Supp. 1980).
3. Id., §460.54 (1967).
4. Ibid.
5. Id. §460.6 (Supp. 1980).
6. Id.
7. Id. §460.54 (1967).
8. Id. §460.6 (Supp. 1980)
9. Ibid.
10. Id. §460.501. (1967).
11. Id. §460.6 (Supp. 1980)
12. Id. §460.54 (1967).
13. Id. §460.501.
14. Id. §460.501.
15. Id. §460.6 (Supp. 1980).
16. Ibid.
17. Huron Portland Cement Co. v. Michigan Public Service Commission, 351 Mich. 255, 88 N.W.2d 492 (1958) (no power to force a public utility to extend service within a territory it has never undertaken to serve).
18. Mich. Comp. Laws §§460.6; 460.6a (Supp. 1980).
19. Id. §460.54 (1967).
20. Mr. J. Kalinsky, Attorney for the Commission, Telephone conversation, November 12, 1979.
21. Id. §460.301 (Supp. 1980).
22. Id. §460.556 (1967).
23. Ibid.
24. Id. §460.6 (Supp. 1980).
25. Id. §460.502 (1967).

26. Id. §460.502.
27. 328 Mich. 650, 44 N.W.2d 324 (1950).
28. Id. 44 N.W.2d at 330.
29. Mich. Comp. Laws §460.503 (1967).
30. Id. §460.504.
31. Id., §460.505.
32. Id. §460.58.
33. Ibid.
34. Id. §460.59.
35. Id. §462.26(a).
36. Ibid.
37. Id. §462.26(c).
38. Id. §462.26(d).

CHAPTER 3

SITING OF ENERGY FACILITIES IN MICHIGAN

The State of Michigan has no comprehensive energy facility siting statute. Various state agencies have permitting authority over different aspects of power plant siting. The major authority rests with the Department of Natural Resources. Various other agencies, planning and zoning boards, and local commissions may also have authority, depending upon the particular choice of location and type of project.^{1/}

I. DEPARTMENT OF NATURAL RESOURCES

A. Water Resources Commission

The Water Resources Commission is organized under the Environmental Protection Branch of the Department of Natural Resources.^{2/} The Commission is to "protect and conserve the water resources of the state and . . . [has] control of the pollution of surface or underground waters of the state and the Great Lakes, which are or may be affected by waste disposal of municipalities, industries, public or private corporations, individuals, partnership associations or any other entity."^{3/}

The Commission is to establish pollution standards for lakes, rivers, streams and other waters of the state. It is to issue permits to assure compliance with state standards and applicable federal water pollution control laws and regulations.^{4/} The Water Quality Control Division issues National

Pollutant Discharge Elimination System (NPDES) permits required by Federal law for all wastewater discharged to surface waters of the state, and State Wastewater Discharge Permits for all wastewater discharges to the groundwaters of the state and those waters not covered by NPDES permits.^{5/} The Water Resources Commission is also given permitting authority with respect to developments affecting flood plains, stream beds, and channels of all streams.^{6/}

Any "earth change," defined as a man-made change in the natural cover or topography of land, including cut and fill activities, which may result in or contribute to soil erosion or sedimentation,^{7/} requires a permit.^{8/} The permit is to be obtained from the county government or a city, village, or charter township that has an ordinance requiring such a permit,^{9/} unless local agency jurisdiction has not been approved or is nonexistent, in which case the Water Resources Commission has control over the permit.^{10/}

Permits regulating the uses and development of high risk areas, flood risk areas and environmental areas along the Great Lakes shorelands are granted by the Water Resources Commission.^{11/} All zoning ordinances for such areas must be approved by the Water Resources Commission before they have any force.^{12/}

B. Air Pollution Control Commission

The Air Pollution Control Commission (APCC) is within the Department of Public Health, but the Director of Natural Resources is a member of the APCC and the Department

of Natural Resources handles much of the administration of its air pollution programs.^{13/} The APCC is empowered to issue permits for construction and operation of air pollution control facilities and sources of potential air pollution.^{14/}

II. DEPARTMENT OF PUBLIC HEALTH

A utility is not able to establish, conduct, manage, maintain or operate a disposal area without a licence.^{15/}

A "disposal area" is defined as "a solid waste transfer facility, incinerator, sanitary landfill, processing plant or other solid waste handling or disposal facility utilized in the disposal of solid waste."^{16/} An energy facility will require such a permit should it need to dispose of any fly ash.^{17/}

III. ZONING AUTHORITIES

Cities and villages have general zoning powers.^{18/} No provisions deal specifically with public utilities or energy facilities, except that all public utilities operating within the area affected by a proposed zoning regulation are entitled to receive notice by mail and are entitled to request a hearing.^{19/}

Counties^{20/} and townships^{21/} have similar zoning powers with respect to unincorporated areas. Again, no provision deals specifically with public utilities, other than to require that public utilities receive notice and an opportunity for a hearing with respect to zoning proposals that affect the utilities.

IV. PUBLIC SERVICE COMMISSION

No gas or electric utility may begin the construction or operation of any public utility plant or system in an area already being served by a public utility without first obtaining a certificate of public convenience and necessity from the Public Service Commission.^{22/} The certificate does not specifically deal with the siting of the facility.^{23/} See Chapter 2 for a further discussion of the Commission's jurisdiction and powers.

FOOTNOTES

1. Mr. Lon Inman, Ass't. Director of the Office of Permit Coordination of the Environmental Enforcement Division of the Department of Natural Resources (hereinafter Department of Natural Resources) Telephone conversation, 7/27/78.
2. Mich. Comp. Laws Ann. §323.1 (1975).
3. Id. §323.2 (Supp. 1980).
4. Id. §323.5.
5. Licenses, Approvals, Certifications and Other Actions of the Environmental Protection Branch, Michigan Department of Natural Resources (hereinafter, Licenses), I (1-2).
6. Mich. Comp. Laws Ann. §323.5a (1975); Licenses, supra N.5, I, (27).
7. Mich. Comp. Laws Ann. §282.102 (1979).
8. Id. §282.105.
9. Id. §282.106.
10. Id. §282.111; Licenses supra N.5, I (29).
11. Mich. Comp. Laws Ann. §281.641 (1979).
12. Id. §281.640.
13. Id. §336.13 (1980); Mr. Don Inman, Ass't. Director, Department of Natural Resources, Telephone conversation, 7/27/78.
14. Mich. Comp. Laws Ann. §336.15(b) (1980).
15. Id. §299.413 (Supp. 1980).
16. Id. §299.404(3).
17. Licenses, supra N.5, III (61); Mr. Don Inman, Ass't. Director, Department of Natural Resources, Telephone conversation, 7/27/78.
18. Mich. Comp. Laws §§125.581 to 125.592 (Supp. 1980), §§125.586, 125.588 to 125.591 (1976).
19. Id. §125.584 (Supp. 1980).
20. Id. §§125.201 to 125.232 (1976; Supp. 1980).

FOOTNOTES

21. Id. §§125.271 to 125.301
22. Id. §460.502 (1967).
23. Id. §460.505.

CHAPTER 4

FRANCHISING OF PUBLIC UTILITIES IN MICHIGAN

I. AUTHORITY TO GRANT FRANCHISES

The Michigan Constitution expressly authorizes local units of government to grant franchises for the use of their highways, streets, alleys or other public places for the construction of utility facilities:

No person, partnership, association or corporation, public or private, operating a public utility shall have the right to the use of the highways, streets, alleys or other public places of any county, township, city or village for wires, poles, pipes, tracks, conduits or other utility facilities, without the consent of the duly constituted authority of the county, township, city or village; or to transact local business therein without first obtaining a franchise from the township, city or village. Except as otherwise provided in this constitution the right of all counties, townships, cities and villages to the reasonable control of their highways, streets, alleys and public places is hereby reserved to such local units of government. 1/

Prior to the adoption of this 1908 Constitutional Amendment, the Michigan legislature exercised authority to grant franchises for the provision of utility service. In Village of Constantine v. Michigan Gas & Electric Co., 2/ the court found that a state granted franchise, prior to the constitutional grant of such authority exclusively to local governments, remained valid and was not terminated.

The Constitution of 1909 did not revoke and terminate existing uses of the streets The

Constitution did abrogate the law of 1905 [under which franchises were granted by the state], but it did not and could not revoke existing contracts under that act arising out of beneficial uses of the streets for public utility purposes. 3/

Thus, there may be utilities in Michigan still operating under franchises granted by the legislature prior to the 1908 constitutional amendment. Although the constitution ^{4/} now limits the duration of a franchise to a period no longer than thirty years, this limitation was not in effect prior to 1908.

In addition to the above constitutional provision relating to local franchising authority, the Michigan statutes provide that "telephone, telegraph, power and other public utility companies and municipalities" can construct and maintain power lines, wires, cables, poles, conduits and other facilities "upon, over, across or under any public road, bridge, street or public place, . . . with all necessary erections and fixtures therefore." However, before commencing construction and erection of these facilities, the utility must "obtain the consent of the duly constituted authorities of the city, village or township through or along which said lines and poles are to be constructed and erected." ^{5/}

Cities have also been granted broad home rule powers. ^{6/} A home rule city may, in its charter, provide: "For the use, regulation, improvement and control of the surface of its streets, alleys, and public ways, and of

the space above and beneath them."^{7/} The charter may also provide: "For the use, by others than the owner, of property located in the streets, alleys and public places, in the operation of a public utility, upon the payment of a reasonable compensation to the owners thereof."^{8/} In Michigan, owners of land abutting on a street have fee title to the property to the center of the street. The local government has only an easement in the street. The property owner may make any use of the abutting property so long as such use does not interfere with the public use of the street.^{9/} No reported judicial decisions have indicated that the fact a municipality has only an easement in public ways affects, in any way, its power to grant franchises. The fact that cities are specifically authorized by statute to grant franchises to public utilities would indicate that their status as easement owners does not limit their franchising powers.

All of these provisions authorize local governments to franchise only public utilities. These provisions do not, however, limit the type of services or entities which can be franchised so long as the franchisee is operating as a public utility.

II. PROCEDURES FOR GRANTING FRANCHISES

No specific procedure pursuant to which local governments must grant franchises has been provided by statute or reported judicial decision. Judicial decisions in which

franchises have been discussed indicate that a franchise is generally granted by ordinance, although this is not a requirement. Cities are required to provide in their home rule charters "For adopting, continuing, amending and repealing the city ordinances and for the publication of all ordinances before they become operative."^{10/} Thus, one must analyze local charters and ordinances to determine the specific procedures which will be followed by local governments in granting franchises.

The statutes do provide, with respect to home rule cities, for the payment of compensation to the owners of any land used by the utility.^{11/} No reported judicial decisions have discussed the issue of how or by whom the amount of such compensation is determined.

There is no requirement that a franchisee obtain a certificate of convenience and necessity before obtaining its franchise. However, no utility can construct facilities without first obtaining such a certificate.

III. CRITERIA TO BE USED IN EVALUATING A FRANCHISE REQUEST

Local governments can grant franchises only to public utilities. No reported judicial decisions have discussed the definition of "public utility" in the context of local franchises. See Chapter 2 for a discussion of the meaning of the term "public utility" in a general regulatory context. No other criteria to be used in evaluating franchise requests have been established by statute or

reported judicial decision.

IV. CHARACTERISTICS OF A FRANCHISE

A. Duration and Termination

Franchises granted by a township, city or village may not be for terms in excess of 30 years.^{12/} This 30 year limit does not apply to counties.^{13/} The constitution also provides that "no city or village shall . . . grant any public utility franchise which is not subject to revocation at the will of the city or village, unless the proposition shall first have been approved by three-fifth of the electors voting thereon."^{14/}

Franchises granted by the legislature, which do not specify a term, are considered to run for the corporate life-time of the grantee.^{15/}

After the expiration of the franchise, the city may maintain a suit in equity to compel a railway company to remove its tracks.^{16/} However, no cases have considered the issue of whether a public utility can be compelled to remove its facilities upon termination of its franchise.

B. Exclusivity

Exclusive franchises are neither specifically sanctioned nor prohibited by statute. However, the courts have held that exclusive franchises may not be granted by cities unless expressly authorized by statute. That power will not be inferred from general grants of franchising authority.^{17/}

C. Other Characteristics

As noted above, franchises can be granted only to public utilities.^{18/} No mandatory franchise tax is required, but compensation is to be given to the owners of the land used by the franchisee.^{19/} Neither statute nor reported judicial decision specify the procedure to be used in determining the amount of compensation to be paid to the property owner. There are no statutory provisions requiring franchisees to pay a franchise tax or fee to the local government as owner of the easement on which the facilities are constructed.

The abandonment of the franchise is not provided for by the statutes, but the courts have held that the franchisee has a duty to serve the public in a reasonable way.^{20/} The courts have construed a franchise as a contract which is binding on both parties.^{21/}

FOOTNOTES

1. Mich. Const. art. 7, §29.
2. 296 Mich. 179, 296 N.W. 847 (S. Ct. Mich. 1941).
3. Id. 296 N.W. at 851.
4. Mich. Const. art. 7, §30..
5. Mich. Comp. Laws Ann. §247.183 (Supp. 1980).
6. Id. §§117.1 - 117.38 (1967 & Supp. 1980).
7. Id. §117.4h(1) (1967).
8. Id. §117.4h(2).
9. Grand Trunk W. R. Co. v. City of Flint, 55 F.2d 384 (E.D. Mich. 1932).
10. Mich. Comp. Laws Ann. §117.3k (Supp. 1980).
11. Id. §117.4h(2) (1967).
12. Mich. Const. art. 7, §30; Mich. Comp. Laws Ann. §91.5 (1967).
13. O'Brien v. Gross Ile Bridge Co., 318 Mich. 266, 28 N.W. 2d 123 (1947).
14. Mich. Const. art. 7, §25.
15. Wyandotte Elec. Light Co. v. Wyandotte, 124 Mich. 43, 82 N.W. 821 (1900).
16. City of Detroit v. Detroit United Ry., 172 Mich. 136, 137 N.W. 645, aff'd 229 U.S. 39, 33 S.Ct. 697, 57 L.Ed. 10 6 (1912); Detroit United Ry. Co. v. City of Detroit, 248 U.S. 429, 39 S.Ct. 151, 63 L.Ed. 341 (1919).
17. Saginaw Gas Light Co. v. Saginaw, 28 F. 529 (1886); Grand Rapids Elec. Light & Power Co. v. Grand Rapids; Edison Elec. Light & Fuel Gas Co., 33 F. 659 (1888); Detroit Citizens' St. Ry. Co. v. Detroit, 110 Mich. 384, 68 N.W. 304, aff'd 171 U.S. 48, 185 S.Ct. 732, 43 L.Ed. 67 (1898).
18. Mich. Comp. Laws Ann. §117.4h(2) (1967).
19. Ibid.

20. Traverse City v. Consumers Power Co., 340 Mich. 85,
64 N.W.2d 894 (1954).
21. Village of Otsego v. Allegan County Gas Co., 203 Mich.
283, 168 N.W. 968 (1918); Hillsdale Gaslight Co. v.
City of Hillsdale, 258 F. 485 (1919).

CHAPTER 5

RATE REGULATION IN MICHIGAN

I. RATEMAKING AUTHORITY

A. General

In a general statutory grant of powers, the Michigan Public Service Commission (Commission) is given "jurisdiction to regulate all rates, fares, fees, charges, services, rules, conditions of service and all other matters pertaining to the formation, operation or direction of . . . public utilities."^{1/} The Commission is also expressly given the power to fix the "rates and charges, of all public utilities within this state, producing, transmitting, delivering or furnishing steam for heating or power . . . for the public use."^{2/}

Municipalities may fix or regulate rates by franchise or agreement. The Commission has no power to alter rates so fixed. However, where the utility and municipality jointly submit to the Commission any question involving the fixing or determination of rates or services, the Commission then has jurisdiction to set the rates to be charged by the utility.^{3/}

Investor owned and cooperative utilities are within the Commission's jurisdiction, while municipal utilities are expressly excluded.^{4/}

The Commission has the power to "prescribe uniform

methods of keeping accounts to be observed by all persons, firms or corporations engaged in such business of transmitting and supplying electricity."^{5/} Authority to prescribe uniform systems of accounts for other utilities is contained in a general grant of powers to the Commission.^{6/} The Commission has adopted a system of uniform accounts that is substantially similar to the FERC system of uniform accounts.^{7/}

Although depreciation is one factor the statutes prescribe as being one of the elements in establishing fair rates, no particular depreciation methodology is required.^{8/}

B. Ratemaking Procedures

A utility seeking to change its rates is required to submit revised rate schedules to the Commission for approval.^{9/} The Commission may grant relief only after giving public notice, and, when the utility has presented evidence in support of its request for rate relief, after adequate opportunity for a full and complete public hearing. No order may be entered until the Commission technical staff has made an investigation and report. Any alteration in the rate schedule which will not result in an increase in the cost of service to the utility's customers may be granted without hearing or notice.^{10/}

There is no automatic approval if the Commission fails to extend the effective date of the proposed rate change before a final decision is reached. The Commission is to seek to approve or disapprove the change within 9

months from the filing of the new schedule. If no final decision is reached in 9 months, the case is given priority over other items, and a report is to be submitted to the governor, the state senate, and the house of representatives explaining the status of the case. ^{11/}

When determining proper electric rates, the statute requires the Commission to consider:

all lawful elements properly to be considered to enable it to determine the just and reasonable price to be fixed for supplying electricity, including cost, reasonable return on the fair value of all property used in the service, depreciation, obsolescence, risks of business, value of service to the consumer, the connected load, the hours of the day when used, and the quantity used each month. ^{12/}

II. RATE BASE DETERMINATION

A. Test Period

The Commission seeks, on a case by case basis, to apply a test year that will most accurately reflect the utility's actual experience. Traditionally in the past, the Commission has used a purely historical test year. ^{13/}

However, adjustments may be made for known or substantially certain changes occurring after the end of the test period. In recent years, the Commission has approved the use of projected or partially projected test years, typically for larger companies.

The Commission explained its acceptance of a projected test year in one case as follows:

The use of a test year in a rate proceeding provides a basis to estimate as accurately as

possible applicant's rate base, revenues, and expenses for the future period during which any modified rates will be in effect. Such an estimation assists the commission in establishing the lowest reasonable rates consistent with providing applicant a reasonable opportunity to earn a fair return on its investment.

In the past, the commission has utilized a purely historical test period with adjustments to individual items as a basis for setting future rates. However, as the commission pointed out in its opinion and order in applicant's last general rate case . . . the "adjusted" historical test year has proved to be unsatisfactory in this era of rapidly changing conditions. Consequently, . . . the commission adopted a partially projected test year; that is, a test year which, at the time applicant concluded the presentation of its case was partially historical and partially forecasted.

In this proceeding, applicant, the attorney general, and the staff have proposed the use of a "projected" test year instead of an "historical" test year, but there were differences as to whether the commission should adopt a 1976 or 1977 projected test year. ^{14/}

In practice, the Commission generally uses the test year agreed upon by the Staff and the utility. ^{15/}
According to a Commission Staff member, ^{16/} where a historical year is used, the Commission often accepts year-end net utility plant figures. ^{17/} Where a projected test year is used, the Commission favors an average of beginning and end of year figures. ^{18/} Working cash, as a component of rate base is often determined by averaging figures for 13 months.

B. Rate Base Valuation

In determining rate base, the Commission uses net

utility plant, valued at original cost less depreciation.^{19/}

C. Rate Base Components and Adjustments

1. Non-Jurisdictional Facilities

Investments in non-jurisdictional facilities and activities are excluded from rate-making determinations unless they are of direct and certain benefit to rate-payers. For example, the Commission excluded one electric company's investment in a wholly-owned subsidiary's uranium exploration and purchase activities. The Commission held that such activities were speculative and should be undertaken at the risk of the investors.^{20/} However, in another case, the Commission included an investment by an electric company in coal operations.^{21/}

2. Construction Work In Progress

Funds used for construction work in progress (CWIP) have been allowed recently for electric and gas companies as a rate base adjustment. Construction work on a nuclear generating facility was included in the rate base of one utility because the Commission found the facility necessary based on testimony regarding the projected load factor and projected demand. The Commission rejected arguments by a public interest group that construction work on the nuclear facility should be disallowed in order to encourage conservation and cogeneration. The Commission did note that those goals were generally worthy, but declined to accept overly harsh measures, such as an intentional,

substantial energy shortage, as a means of implementation. ^{22/}

Where the Commission allows CWIP in rate base, it requires an offsetting allowance for funds used during construction (AFUDC) added to actual operating income. ^{23/}

3. Working Capital

The Commission routinely includes an amount of working capital generally determined by a "formulistic" method which it has described as follows:

under the traditional, formulistic approach to calculating working capital, the commission has used one-eighth times total annual operations and maintenance (O&M) expense less purchased and interchanged (P&I) power expense as the beginning point for any analysis of working capital requirements. This is in conformity with the generally accepted principle that investors must provide working capital for forty-five days (one-eighth year) of daily operations by a utility. Under the formulistic method, one begins with one-eighth of O&M expense less P&I power expense, adds average cash and bank balances, average amounts of materials and supplies, average payments, average fuel inventory, and deducts accrued taxes and other accrued costs. ^{24/}

D. Allocation of Rate Base

While there are utilities producing steam and electricity at a single facility for sale to the public, the Commission has not generally prescribed any particular methods for allocating rate base among the two energy services. ^{25/}

The Commission has approved an allocation of rate base between wholesale (nonjurisdictional) and retail (jurisdictional) services which utilized the average of 12 monthly coincident peaks and allocated 25% of the investment costs

in generation and transmission facilities to energy and 75% to demand. The ratios were based on a 1975 cost of service study filed by the utility in an earlier case but the Commission said that allocations between jurisdictional and non-jurisdictional customers tend to remain constant in the short run and such a study was satisfactory.^{26/} Some industrial customers argued that the single annual system peak should be used for allocation purposes and that that peak, which occurred in summer, was what dictated the generation capacity to be installed. Rejecting this contention, the Commission said:

In general, fixed costs should be equitably allocated among classes of customers. Because customers' contributions to a single peak demand are unlikely to be representative of contributions either to several near-peak points or to the annual period considered as a whole, the commission concludes that the staff's method of utilizing the average 12 monthly coincident peak demands will result in a more equitable allocation of production and major transmission investment and fixed costs among customer classes than utilization of a single peak demand. ^{27/}

The same customers also objected to allocating fixed rate base costs on the basis of consumption (energy) arguing that the 75%-25% allocation methodology allocates more cost to jurisdictional industrial and streetlighting classes and less to commercial classes. The Commission

rejected this argument saying it believed that all customers should contribute to the fixed costs of energy production facilities and that the methodology approved results in a more equitable distribution of costs than would an allocation of fixed costs exclusively on a demand basis.

In determining the rate base attributable to an industrial electric and steam customer having an on-site generation plant, the Commission found it necessary to allocate an amount of electric system plant to the customer's service and to give proper credit to the customer for the on-site generation facilities. The customer claimed that since four boilers having a net total generating capability of 22 Mw were available, it should receive credit for 22 Mw of generating capacity, thus reducing the amount of plant allocable to it. However, the utility claimed that in fact only two boilers with a net capability of 14 Mw were normally operated and that the other two boilers were old and not considered peaking equipment, and were used as back-up facilities to provide steam. The Commission agreed with the utility and held that the 14 Mw level of capacity was the appropriate factor in light of the evidence concerning normal operations.^{28/}

III. COST OF SERVICE

A. Allowable Expenses

Routine operating expenses are included for rate-making purposes if reasonable. The Commission has said

that it should not substitute its judgment for management's unless there is a clear abuse of discretion.^{29/} However, some categories of expenses are excluded for ratemaking purposes by the Commission. For electric and gas companies, charitable contributions, club dues, promotional advertising and lobbying expenses have been excluded.^{30/} With respect to advertising, the Commission has adopted a 4-point test pursuant to which advertising is allowed where it:

1. Advises the ratepayer of matters of public health and safety.
2. Promotes conservation of energy resources.
3. Explains billing practices, utility services, and rates to its ratepayers.
4. Provides factual and objective data programs in education institutions.^{31/}

Consistent with this test, the Commission has excluded expenses for advertising which promoted the use of a "scarce natural resource," natural gas.^{32/}

The Michigan legislature has authorized the Commission to approve utility participation in energy conservation programs which could include residential energy audits and providing information and assistance to customers regarding conservation devices, services and materials applicable to a customer's residence.^{33/} In two rate cases, the Commission included additional amounts as expense for the creation of customer information programs concerning energy conservation.^{34/} The Commission has allowed in rate case expense undifferentiated educational, public relations

and industrial organization expenses although admonishing utilities to "scrupulously follow the Uniform System of Accounts in recording political and similar expenses."^{35/} Research and development expenses have also been approved.^{36/}

Fuel adjustment clauses have been authorized by statute.^{37/} Recently, the Commission imposed a requirement of bi-monthly hearings to audit one company's fuel clause adjustments.^{38/} The Commission has also introduced incentive provisions into fuel clauses allowing one utility to recover from customers only 90% of additional fuel and purchased power costs, but requiring the utility to return only 90% of any cost reductions to customers.^{39/}

The Commission has also authorized two utilities to implement an indexing system for adjusting rates to reflect increases in operating and maintenance expenses other than fuel, purchased power and production maintenance costs. A base level of these expenses was first determined. On an annual basis, the base expenses are adjusted in accordance with the changes in the national consumer price index irrespective of the utility's actual expenses and the change in the base expenses is reflected in rates to customers. Thus, to the extent the utility can keep expense increases below the level of increase in the consumer price index, the shareholders benefit.^{40/}

B. Allocation of Expenses

Reported Commission decisions do not discuss the

allocation of expenses between electric and steam operations of a utility. Cost of service studies are prepared to support steam rate cases by utilities, and where no serious dispute arises with customers, may be acceptable to the Commission.^{41/}

In one case involving a plant producing steam and electricity, the plant involved was primarily a steam generator with a topping turbine installed to generate electricity as a by-product. The electricity was sold to the electric department of the utility and in a steam rate case, the issue was what should be deemed to be the appropriate price paid for the electricity. The utility used a three-part formula including an energy charge, a demand charge and a "readiness-to-serve" charge using the utility's average system wide cost of fuel. Intervenors suggested that the rate should be based on the utility's wholesale rates for sales to another utility or on the average fuel cost for the utility's peaking units. The Commission adopted the utility's approach. Since the electricity was produced when steam was produced, irrespective of the utility's need for electricity, it was inappropriate to compare the electric generation with peaking generation. It was also found inappropriate to compare the operations with wholesale sales which were made on the demand of the customer since the electricity was not produced on demand. The Commission said the proposal by the utility was fairer to the

electric and steam customers than the other methods proposed.^{42/}

The Commission has also considered allocation problems in the context of separating jurisdictional (retail) from nonjurisdictional (wholesale) sales. In one case, the utility proposed to allocate all demand related costs based on the coincident peak demands created by all classes of customers. The Commission Staff proposed that 25% of the demand related costs be allocated on the basis of energy and 75% on the basis of coincident peak demand since the design of transmission and generating facilities is not solely determined by coincident peak demands. In adopting the Staff position, the Commission noted

. . . that "cost of service" is an amorphous concept and the definition and application of the concept in particular cases requires many assumptions, judgments, and estimates. "Cost" may refer to embedded costs, but also may refer, for example, to short-run or long-run marginal or incremental costs. There is no universally accepted method of allocating common costs. ^{43/}

C. Transactions with Affiliates

The Commission requires that transactions between a utility and affiliated companies be "reasonable," and views with disfavor transactions that yield a greater return to the affiliated company than is allowed for the utility.^{44/} In one case, the Michigan Court of Appeals reversed the Commission's determination that purchases from affiliates were unreasonable. The Commission had objected to a rate of return to the affiliates greater than that authorized for

the applicant company. The court, however, held that a number of other relevant factors should have been considered by the Commission including testimony that the sales were made at less than competitive prices, the affiliates were higher risk companies and therefore reasonably may need a greater return, the sales prices were determined by factors other than the affiliates' profit needs, and the affiliate made substantial sales to nonaffiliates.^{45/}

D. Cost Allocation - Power Pools

No recent Commission decisions discuss cost allocation to power pool operations or interchange transactions.

IV. FEDERAL INCOME TAX ISSUES

Generally the Commission has leaned toward requiring Michigan utilities to "flow-through" current tax savings resulting from differences between book and tax treatment of various items. However, the Commission has established exceptions, and has allowed normalization of tax timing differences due to accelerated amortization, liberalized depreciation, investment tax credit, and upon request, for other specific circumstances. The Commission noted in one case:

[T]he income tax liability assessed on a utility's revenues should be reflected, for ratemaking purposes, in the cost of service in the same year when such tax liability is imposed by the Internal Revenue Service (IRS) unless specifically permitted otherwise by a commission authorization. Thus, generally, in Michigan all tax timing differences between booked income taxes (book expenses) and income taxes actually paid (actual

expenses) are "flowed through" the cost of service for rate-making purposes instead of being "normalized" on the books. This commission has made specific exceptions to this normalization prohibition. Thus, applicant and all other utilities in Michigan have received permission from this commission to normalize the tax timing difference due to accelerated amortization, liberalized depreciation, and investment tax credit. This commission in other words gave authorization to applicant to "normalize" tax timing differences upon request for specific situations 46/

In approving normalization accounting for the use of liberalized depreciation, the Commission has expressed its intention to go no further than required by the Internal Revenue Code for a utility to remain eligible for the tax benefits conferred by Section 167 of the Code. Thus, the Commission in one case permitted normalization with respect to differences between class guideline lives and asset depreciation range lives as required by Section 167 but said that the difference between book depreciation lives and class guideline lives could not be normalized absent specific Commission approval. 47/

The Commission may grant permission to normalize other tax-timing differences, such as cost of removal, but such approval must be given on a case by case basis. 48/

V. RATE OF RETURN

A. Return on Equity

In determining an appropriate rate of return for utilities, the Commission has stated that it

. . . is legally required to set a rate of return for applicant which will be commensurate with the returns on investments in other enterprises having corresponding risks, which will permit the attraction of additional capital on fair and reasonable terms, and which will maintain applicant's credit and financial integrity. Although these diverse considerations are perhaps theoretically consistent on a high level of generality, their focus may be different in individual cases. Under the particular circumstances of an individual case, the rate of return necessary to raise large amounts of additional capital may be higher than the average rate of return for the industry as a whole. In every case, the emphasis, and the final decision, is dependent upon circumstance and judgment. 49/

The Commission has not adopted any particular method of determining return on equity. It has considered evidence and testimony which were based on, among other things, comparable earnings, discounted-cash-flow and earnings-net proceeds studies. 50/ The Staff of the Commission has tended to introduce testimony basing a recommendation on a number of different types of studies rather than using any single approach and many of the Commission's decisions has followed the Staff recommendations.

The table in Appendix A lists representative overall rates of return and returns on equity that the Commission has allowed in recent cases.

B. Other Return Factors

The Commission has considered the comparability of a utility's earnings to those of other utilities and the fact that utilities must compete for capital in the money markets with other industrial firms. 51/ Thus, there is some implicit consideration of comparative risks in determining

return on equity. The financial health of a utility has led the Commission to increase authorized rates of return where the utility has had difficulty obtaining capital.^{52/} However, the Commission has not discussed other specific risk factors (such as size of operations, competition, etc.) which would justify the grant of higher or lower returns.

C. Incentive or Penalty Provisions

The Commission has established an incentive rate-of-return mechanism for two electric utilities designed to allow an additional increment in rate of return on equity of the generating units in the utility's system which achieved certain levels of availability during a year. The higher the level of generating unit availability, the higher the additional increment of return on equity. For the Detroit Edison Company, the incentive provision adds a portion of one per cent to rate of return on equity,^{53/} as follows:

System Availability	Equity Return Incentive
Less than 75%	0.
75% to 80%	+ .25%
80% to 85%	+ .50%
Greater than 85%	+ .75%

For the Consumers Power Company, the incentive provisions included a penalty provision reducing the allowable return on equity if system availability was too low. The particular provisions are as follows:

System Availability	Equity Return Incentive
0 - 70%	- .25%
70.1 - 80%	0%
80.1 - 85%	+ .25%
85.1 - 100%	+ .50%
<u>54/</u>	

D. Double Leverage

The Commission has also considered the effects of leverage which it is convinced does in fact exist when a utility is a subsidiary. In a rate case involving a General Telephone & Electronics Corporation subsidiary, the Commission was requested to find the subsidiary's cost of equity to be equal to the parent's overall cost of capital. In light of the fact the subsidiary's prior rate cases had found an appropriate cost of equity at 12.75% without considering the effect of leverage, the Commission was reluctant to move to the fully leveraged position suggested. Rather, the Commission authorized a return based on a 12% cost of equity which it said would enable the parent to earn a return on its common stock consistent with the earnings authorized ^{55/} for other Michigan utilities.

In other cases involving a subsidiary, the Commission approved a rate of return based on the parent's cost of equity without discussing the effect of leveraging. ^{56/}

The Commission has also indicated that in appropriate circumstances it would not hesitate to penalize a utility providing a poor quality of service. ^{57/}

VI. RATE DESIGN CRITERIA

A. General

In approving particular rates, the Michigan statutes direct the Commission to

consider and give due weight to all lawful elements properly to be considered to enable it to determine the just and reasonable price to be fixed for supplying electricity, including cost, reasonable return on the fair value of all property used in the service, depreciation, obsolescence, risks of business, value of service to the consumer, the connected load, the hours of the day when used and the quantity used each month 58/

The Commission has interpreted this statute as giving it broad authority to establish rate classifications and has gone on to say that it "concludes that the promotion of conservation, of individual responsibility, and fairness among customers are . . . lawful considerations and legitimate purposes in electric rate design". 59/

Thus, the Commission's approach to rate design is not strictly cost based. It has approved the use of inverted rate structures by electric utilities (for other than electric space and water heating use) which provide for high rather than low rates per kwh as consumption increases. 60/
Experimental and optional time-of-day rates designed to encourage off-peak use have been approved. 61/

The Commission has required optional life-line rates for electric power for low-income senior citizens despite arguments that such rates are discriminatory. 62/

The rates would save customers approximately 28% for 300

KW-hrs. of monthly use, and 5% for up to 500 KW-hrs. of monthly use. At 550 KW-hrs., the customer would pay approximately the same as other residential customers. Over 550 KW-hrs., the charge would be greater than under the regular residential rate.

No recent Commission decisions deal with pricing of excess power, or by-product services.

B. Residential Auxiliary Power Provisions

Tariffs have been approved by the Commission pursuant to which residential customers having their own source of solar or wind generated electric power can connect to the utility's system as a source of standby power and can sell the utility any surplus power generated by the customer. In one case, the Commission established the price at which the utility buys power from the customer at approximately the utility's estimated average test-year fuel costs.^{63/} In another case, a 1.2 cents per kwh rate was designated.^{64/} A monthly service charge of \$6.50 (compared to \$2.65 for regular customers) is paid by such customers who also must bear the direct costs of metering, controlling and protective equipment.^{65/}

VII. SECURITIES REGULATION

A. Issuance of Securities

No stocks, bonds, notes or other evidences of indebtedness of a public utility payable at periods of more than twelve months may be issued until approved by the Com-

mission.^{66/} A utility may issue securities:

. . . for the acquisition of property, the construction, completion, extension or improvement of facilities or for the improvement or maintenance of service or for the discharge or lawful refunding of obligations and may issue stock to represent accumulated earnings invested in capital assets and not previously capitalized^{67/}

The power to control the issuance of securities has been held to be "ancillary to the Commission's general power to control rates, services, and facilities."^{68/} The Commission has been held to have no authority to regulate the issuance of securities by a gas storage company which sold gas only at wholesale to utilities and was regulated with respect to its rates, services and facilities to the Federal Power Commission (predecessor to the Federal Energy Regulatory Commission).^{69/} A company formed to construct and operate a nuclear generating plant and sell all of its output to its parent was also held to be beyond the Commission's since the company operations were subject to the exclusive jurisdiction of the Federal Power Commission.^{70/}

B. Regulation of Capital Structure

The Commission has said "it is appropriate for the commission to adopt a capital structure which will be most representative of the future period for which rates are established"^{71/} In determining the appropriate capital structure for utilities, the Commission has generally looked at a "13-month historical average capital structure as a means of relating, however tenuously, the capital

structure to the actual financing of the plant in service."^{72/}
However, the Commission has permitted the use of an end-of-period rather than a 13-month historical average capital structure recognizing that

. . . modern technology, governmental innovations, the long lead time for planning and constructing plants, continuing inflation and a general energy crisis, as well as the reaction of the private capital market to these unprecedented conditions, forces a reconsideration of traditional concepts in this area. ^{73/}

Capital structures adopted by the Commission in recent electric utility cases include one case with a 37.67% long-term debt, 48.30% common equity and 14.03% cost free capital (deferred taxes, investment tax credit, Job Development Credit) structure;^{74/} another with 50.30% debt, 41.98% preferred and common equity and 7.72% cost free capital;^{75/} and another with 49.64% debt, 42.38% preferred and common equity, and 7.98% cost free capital.^{76/} The unamortized portions of post-1971 investment tax credits are not included in the equity portion of the capital structure, but rather, are included at a cost rate equal to the overall rate of return.^{77/}

APPENDIX A

<u>CASE</u>	<u>ALLOWED % RATE OF RETURN</u>	
	<u>OVERALL</u>	<u>ON COMMON EQUITY</u>
<u>Re Detroit Edison Co.,</u> <u>CCH State Util. Law. Rep.</u> <u>(1978)</u>	8.75	13.5
<u>Re Michigan Power Co.,</u> <u>27 P.U.R.4th 323 (1978)</u>	9.5	13.0
<u>Re Consumers Power Co.,</u> <u>25 P.U.R.4th 167 (1978)</u>	8.90	13.5
<u>Re Detroit Edison Co.,</u> <u>20 P.U.R.4th 1 (1977)</u>	8.97	13.5
<u>Re Michigan Power Co.,</u> <u>18 P.U.R.4th 418 (1977)</u>	9.39	13.0
<u>Re Detroit Edison Co.,</u> <u>14 P.U.R.4th 223 (1976)</u>	8.60	12.75
<u>Re Consumers Power Co.,</u> <u>14 P.U.R.4th 1 (1976)</u>	7.97	12.12
<u>Re Consumers Power Co.,</u> <u>14 P.U.R.4th 370 (1976)</u>	8.38	12.75
<u>Re Michigan Gas Utilities Co.,</u> <u>7 P.U.R.4th 356 (1974)</u>	8.90	12.5

FOOTNOTES

1. Mich. Com. Laws Ann. §460.6 (Supp. 1980).
2. Id. §460.54 (1967).
3. Ibid.
4. Id. §460.6 (Supp. 1980).
5. Id. §460.556 (1967).
6. Id. §460.6 (Supp. 1980).
7. Mr. William Pelegrin, Accounting Department, Mich. Commission, telephone conversation, July 27, 1978.
8. Mich. Com. Laws Ann. §460.557 (1967).
9. Id. §460.552.
10. Id. §460.6a(1) (Supp. 1980).
11. Id. §460.6a(2), (3).
12. Id. §460.557 (1967).
13. E.g., Re Detroit Edison Co., Case No. U-5315 (Feb. 13, 1978) (1975 test year). See, Re Consumers Power Co., 25 P.U.R.4th 167 (1978).
14. Re Detroit Edison Co., 20 P.U.R.4th 1, 5 (1977); See also, Re Consumers Power Co., 25 P.U.R.4th 167 (1978).
15. See, e.g., Re Michigan Power Co., 27 P.U.R.4th 323 (1978); Re Michigan Power Co., 18 P.U.R.4th 418 (1977).
16. Mr. Charles Guyer, Auditing Section, Electric Division, Mich. Commission, telephone conversation, December 5, 1979.
17. But see, Re General Tel. Co. of Mich., 18 P.U.R.4th 509 (1977) (average test year used).
18. E.g., Re Detroit Edison Co., 14 P.U.R.4th 223 (1976).
19. Re Detroit Edison Co., 20 P.U.R.4th 1, 6 (1977). See, Re Michigan Power Co., 27 P.U.R.4th 323 (1978); Argus Utility Scope Regulatory Service (Michigan), April 1979 at 11.
20. Re Detroit Edison Co., 14 P.U.R.4th 223 (1976).
21. Re Consumer's Power Co., 25 P.U.R.4th 167 (1978).

22. Re Consumer's Power Co., 25 P.U.R.4th 167 (1978).
23. See, Re Consumer's Power Co., 25 P.U.R.4th 167 (1978); Re Detroit Edison Co., 20 P.U.R.4th 1 (1977).
24. Re Consumers Power Co., 25 P.U.R.4th 167, 183 (1978).
25. Mr. William Guyer, Auditing Section, Tax Division, Mich. Commission, telephone conversation, December 5, 1979. See, e.g., Re Detroit Edison Co., Case No. U-5315, CCM Util. L. Rep.-State §22,558 (Feb. 13, 1978). A rate base was presented without explanation in the report as to how joint facilities were allocated.
26. Re Detroit Edison Co., 20 P.U.R.4th 1 (1977).
27. Id. at 8.
28. Re Detroit Edison Co., 24 P.U.R.4th 362 (1978).
29. Re Michigan Bell Tel. Co., Case No. U-5125 (April 4, 1977) at 33.
30. Re Detroit Edison Co., 20 P.U.R.4th 1 (1977); Re Detroit Edison Co., 14 P.U.R.4th 223 (1976); Re Michigan Gas Utilities Co., 7 P.U.R.4th 356 (1974).
31. Re Consumers Power Co., 14 P.U.R.4th 1, 29-30 (1976).
32. Re Michigan Power Co., 18 P.U.R.4th 418 (1977).
33. Mich. Comp. Laws Ann. §460.6c (Supp. 1980).
34. Re Detroit Edison Co., 20 P.U.R.4th 1 (1977); Re Consumers Power Co., 25 P.U.R. 4th 167 (1978).
35. Re Detroit Edison Co., 20 P.U.R.4th 1 (1977).
36. Ibid.
37. Mich. Comp. Laws Ann. §460.6a(2) (Supp. 1980). Re Detroit Edison Co., 14 P.U.R.4th 223 (1976); Re Consumers Power Co., 14 P.U.R.4th 370 (1976).
38. Re Michigan Power Co., 28 P.U.R.4th 586 (1979).
39. Re Detroit Edison Co., 20 P.U.R.4th 1 (1977).
40. Re Consumers Power Co., 25 P.U.R.4th 167 (1977); Re Detroit Edison Co., Case No. U-5502 (Sept. 28, 1978).
41. See, e.g., Re Detroit Edison Co., 20 P.U.R.4th 1, 39-40 (1977).

42. Re Detroit Edison Co., Case No. U-5315 (Feb. 13, 1978).
43. Re Consumers Power Co., 25 P.U.R.4th 167, 209 (1978).
44. Re General Tel. Co. of Mich., 18 P.U.R.4th 509 (1977).
45. General Tel. Co. of Mich. v. Michigan Pub. Serv. Comm'n., 78 Mich. App. 528, 260 N.W.2d 874 (1977).
46. Re Consumers Power Co., 25 P.U.R.4th 167, 203 (1978).
47. Id. at 205.
48. Id. at 202-204.
49. Re Consumers Power Co., 25 P.U.R.4th 167, 193 (1978).
50. See, e.g., Id. at 188-195; Re Detroit Edison Co., 20 P.U.R.4th 1, 17-21 (1977); Re Michigan Power Co., 27 P.U.R. 323, 328 (1978).
51. E.g., Re Consumers Power Co., 25 P.U.R.4th 167, 194 (1978).
52. E.g., Re Detroit Edison Co., 20 P.U.R.4th 1, 20 (1977).
53. Re Detroit Edison Co., 20 P.U.R.4th 1 (1977). See, Re Detroit Edison Co., No. U-5502, June 5, 1979, reported in Argus Utility Scope Regulatory Service (Michigan), June 6, 1979.
54. Re Consumers Power Co., 25 P.U.R.4th 167 (1978).
55. Re General Tel. Co. of Mich., 18 P.U.R.4th 509 (1977).
56. Re Michigan Power Co., 28 P.U.R.4th 586 (1979); Re Michigan Power Co., 27 P.U.R.4th 323 (1978).
57. Re General Tel. Co. of Mich., 18 P.U.R.4th 509 (1977).
58. Mich. Comp. Laws Ann. §460.557 (1967).
59. Re Consumers Power Co., 25 P.U.R.4th 167, 220 (1978).
60. E.g., Re Detroit Edison Co., 20 P.U.R.4th 1, 40-41 (1977).
61. Re Michigan Power Co., 28 P.U.R.4th 586 (1979); Re Consumers Power Co., 25 P.U.R.4th 167 (1978); Re Detroit Edison Co., 20 P.U.R.4th 1 (1977).
62. Re Consumers Power Co., 25 P.U.R.4th 167, 231-38 (1978).

63. Re Detroit Edison Co., 20 P.U.R.4th 1, 41 (1977).
64. Re Consumers Power Co., 25 P.U.R.4th 167 (1968).
65. Id. at 225-226.
66. Mich. Comp. Laws Ann. §460.301 (Supp. 1980).
67. Ibid.
68. Great Lakes Transmission Co. v. Michigan Pub. Serv. Comm'n., 180 N.W.2d 59 (Mich. 1970); Michigan Gas Storage Co. v. Michigan Pub. Serv. Comm'n., 249 N.W.2d 422 (Mich. 1976).
69. Michigan Gas Storage Co. v. Michigan Pub. Serv. Comm'n., 249 N.W.2d 422 (Mich. 1976).
70. Indiana & Michigan Power Co. v. State, 249 N.W.2d 429 (Mich. 1976).
71. Re Consumers Power Co., 14 P.U.R.4th 370, 382 (1976).
72. Re Consumers Power Co., 25 P.U.R.4th 167, 186 (1978).
See, Re Michigan Power Co., 27 P.U.R.4th 323 (1978).
73. Ibid.
74. Re Michigan Power Co., 28 P.U.R.4th 586 (1979).
75. Re Detroit Edison Co., 20 P.U.R.4th 1 (1977).
76. Re Consumers Power Co., 25 P.U.R.4th 167 (1978).
77. Re Consumers Power Co., 31 P.U.R.4th 121, 133 (1979).

CHAPTER 6

SUMMARY OF IMPEDIMENTS TO IMPLEMENTATION OF ICES

I. Types of Impediments

In order to analyze the extent to which the traditional public utility regulatory system may impede the implementation of ICES, one must first identify what is meant by the word "impediment." For the purposes of this analysis, four broad types of impediments can be identified. The first major category of impediment is the "no-subsidy impediment." This impediment consists of the failure of the government or the regulatory system to provide some desired degree of monetary or other encouragement of ICES. Such subsidies could take the form of grants or tax incentives. On the other hand, a subsidy could result from state public utility regulatory commission (PUC) departure from strictly cost-based rates for purchases and sales of electricity between an ICES and conventional electric utilities, thereby compelling the customers of the electric utility grid to subsidize ICES.

The second major category of impediment is the "uncertainty impediment." The absence of certainty with respect to the manner in which an ICES will be regulated will impose costs that must be borne by the ICES operator. Uncertainty impediments will appear in many forms. ICES will be faced with uncertainty because it represents a new concept which can be

expected to raise issues with which utility regulators are unfamiliar. Such uncertainties will be aggravated as a result of the fact that regulatory jurisdiction in the United States is decentralized. Thus, these uncertainties will have to be resolved largely on a jurisdiction-by-jurisdiction basis. In addition, ICES will necessarily be involved in the sale of excess electrical power to and the purchase of back-up electrical power from conventional electric utilities. These arrangements, however, can be altered by a PUC even though the ICES and utility initially agreed upon the terms. Therefore, ICES will face transactional uncertainties not normally encountered in doing business outside the utility field.

Another major category of impediment is the "discriminatory impediment." This type of impediment takes the form of rules or regulations which, for whatever reasons, affect ICES more harshly than competing energy technologies. These differences in impact may be the result of any number of factors including, but not limited to, ICES size, the type of customers it can be expected to serve and the manner in which it will do business.

The final general category of impediment is the "prohibition impediment." These impediments could be either regulations which impose so substantial a cost on the ICES that it cannot operate economically or regulations which would actually preclude operation of an ICES.

II. Regulatory Impediments to ICES Implementation

The degree and manner in which the existing regulatory system will impede the development of ICES will vary depending on the form of ownership, class of customer and method of doing business chosen by an ICES developer. The ICES type which can be expected to encounter the most serious impediments is the investor-owned ICES seeking to construct a new facility to serve customers in a community already being served by a conventional utility. Such an ICES will face impediments in the form of general PUC regulation, regulations relating to the siting of facilities and the granting of local franchise and regulations concerning rates charged for energy service.

A. General Regulatory Impediments

Public utility regulation probably is more pervasive and complex than any other form of government regulation of business. A businessman not engaged in the utility business may be reluctant to become involved in a business which will subject him to such pervasive governmental regulation. Some examples of areas of regulation which might discourage investors from becoming involved in ICES implementation are the requirement that a regulated utility maintain its books in conformity with a system of accounts prescribed by the PUC and PUC regulation and scrutiny of the financial affairs of the utility. When the ICES is operated in conjunction with a non-utility business, such regulation necessarily will extend beyond the operator's utility operations and involve PUC examination of

its non-utility business. Attempts at minimizing the effects of these types of impediments by setting up a subsidiary corporation to own and operate the ICES could subject the parent company to extensive Securities and Exchange Commission regulation pursuant to the Public Utility Holding Company Act of 1933.

Even if an ICES developer is willing to face the possibility of extensive PUC regulation, it will face a significant uncertainty in determining whether it will be deemed a public utility and therefore subject to PUC regulation. All states require that a utility provide service "to or for the public" before it becomes subject to the jurisdiction of the PUC. Few states, however, have provided any real guidance with respect to the meaning of the phrase "to or for the public." Thus, an ICES operator can expect very little guidance in determining whether its operations will be sufficient to bring it within the classification of "public utility."

Similarly, many states require that a utility "sell" utility service before it will be classified as a public utility. Again, statutes, administrative rules and caselaw provide very little guidance with respect to when a transaction will be classified as a "sale." Thus, the ICES operator must face another significant area of uncertainty with respect to PUC regulation of its operations.

Assuming that some aspects of the ICES operations will bring it within the classification of public utility, a

serious question remains with respect to whether sales of both of the ICES energy streams will be subject to PUC regulation and, if not, whether and by whom the non-PUC regulated energy stream will be regulated. This uncertainty arises because many state statutory schemes provide for the regulation of only certain enumerated utility services such as heat, electricity and gas. In such states, the provisions of refrigeration or motive power may not be within PUC jurisdiction. Regardless of whether these energy streams will be regulated by local governments, or left unregulated, such split regulation may raise significant problems with respect to the marketing of both energy streams at competitive rates.

State territorial assignment programs could present an impediment capable of precluding operation by ICES. Several states have enacted legislation which specifically provides that the PUC is to divide the state into a finite number of service areas and assign each of these service areas exclusively to a particular utility. Where such programs exist, service area assignments have been made and, generally, these programs make no provision for the assignment of service areas to new utilities unless there is some indication that customers are not being adequately served. Even where no specific statutory allocation scheme exists, PUCs generally have sought in granting certificates of public convenience and necessity to avoid what they viewed as wasteful duplication of facilities by granting the first utility serving a given area in effect an exclusive

right to serve that area so long as the utility provides adequate service. Thus, in many cases, an ICES may find that it is precluded from initiating operations as a result of these territorial assignment programs.

B. Siting Impediments

The siting of energy production facilities is regulated in some manner in all states. The types and degree of impediments presented will vary depending on the type of siting program in effect in a particular jurisdiction and the type of facility proposed to be constructed. In those states which have not adopted comprehensive one-stop siting programs, a utility desiring to construct an energy production facility generally must seek approval from a variety of state and local agencies. Because an ICES developer in such a state will be forced to obtain numerous approvals, the procedural requirements related to obtaining such multiple approvals could present significant impediments to the implementation of ICES. In those states which have attempted to minimize the procedural difficulties presented by the need to obtain multiple approvals by implementing one-stop comprehensive siting programs, an ICES operator may face significant impediments in the form of substantive requirements in obtaining the required approval.

C. Local Franchising Impediments

In addition to obtaining certificates of convenience and necessity from PUCs and siting approvals from one or more state agencies, ICES operators generally will be required to

obtain franchises from local governments to use public rights-of-way for transmission and distribution facilities. Because of the total lack of uniformity in the law and procedures governing local franchising, ICES operators will face many uncertainties in this area. One major uncertainty related to whether a franchise is needed or available and, if a franchise is not available, whether this will preclude the use of public rights-of-way in conjunction with the operation of the ICES. Many franchise enabling statutes list specific services which local governments are authorized to franchise. In addition, most statutes require that the franchisee be serving a public purpose in order to be eligible for a franchise. These types of restrictions raise the question of whether, if an ICES is providing a service which is not deemed to be serving a public purpose, a franchise may be granted. If a franchise cannot be granted, significant uncertainty exists with respect to whether the ICES may operate along public rights-of-way without a franchise. If not, it may be precluded from operating unless all facilities are maintained on private property with the permission of the property owners.

Assuming a franchise is available to an ICES, additional uncertainty exists with respect to the procedure pursuant to which the franchise will be granted and the standards which will be applied in determining whether the franchise should be granted. These procedures and standards vary substantially from state to state and from municipality to municipality within each state.

Finally, an ICES which might otherwise be eligible for a franchise may be unable to obtain the necessary franchise as a result of a prior grant of an exclusive franchise to another utility serving the area. Nearly one-half of the states have not resolved the issue of whether exclusive franchises are permissible.

D. Rate Regulation Impediments

Assuming that an ICES operator can overcome or operate in spite of the impediments described above and begin its operations, it must be able to market both energy streams at competitive rates in order to stay in business. Several areas of PUC rate regulation may impede the ICES' ability to operate profitably. For example, an ICES may find that the rates for one energy stream are regulated on a statewide basis by the PUC while the remaining stream is regulated by one or more local governments. With such split jurisdiction, there can be little assurance that rates will be regulated consistently and in such a way as to enable competitive marketing of both energy streams.

Even if both energy streams are regulated by the PUC, resolution of various cost and rate-base allocation issues could present serious issues unique to ICES. Depending on the method chosen to allocate costs and rate base between the two services being marketed, the ICES operator may find that it will be compelled to sell one energy stream at a rate too low for the whole ICES to be profitable while the second energy stream must be sold at a rate too high to be competitive.

In addition, PUCs traditionally have exercised rate-making authority only with respect to sales by conventional utilities operating in a monopoly market. Investment in these conventional utilities traditionally has been considered a low-risk investment and, therefore, the rates of return on equity permitted by PUCs have been commensurately low. Because ICES, as a new industry and as a utility operating in competition with other utilities, will be viewed as a more risky investment, PUC decisions with respect to allowable rates of return will have a significant impact on the ability of ICES to attract investors. Rates of return satisfactory to investors in conventional utilities are unlikely to attract investors to the more risky ICES operations.

Finally, ICES must be able to obtain reasonable rates for sales of excess electrical power to and purchases of back-up electrical power from conventional electric utilities. These rates also will be regulated by PUCs and the PUC determinations will substantially affect the ability of the ICES to operate profitably. The uncertainty surrounding the factors that will be considered by PUCs in establishing these rates is very likely to be perceived as an impediment by prospective ICES operators and investors.

CHAPTER 7

OVERCOMING IMPEDIMENTS TO ICES -- SUMMARY

The Chapter 6 analysis demonstrates that the traditional public utility regulatory system presents numerous impediments to the implementation of ICES. These impediments do not appear in the form of a list of individual statutory or rule provisions which can be easily modified to accommodate ICES. Rather, the impediments take the form of the existing regulatory system itself -- a system which is based largely on a set of assumptions and practices foreign to the ICES concept.

Because the existing regulatory system is, in effect, the major impediment to the implementation of ICES, there are only two available alternatives for dealing with this impediment. Advocates of ICES can attempt to change the system, or they can work within the system in order to demonstrate the value of the ICES concept. Because many of the regulatory provisions which appear to be impediments to the implementation of ICES are integral parts of the existing regulatory system, however, any effort to change the system sufficiently to encourage the widespread implementation of ICES will require changes so fundamental that traditional forces operating within the system would have little trouble blocking such changes. Thus, a widespread effort by the advocates of ICES to change the system may result in a substantial expenditure of resources while bringing about very little change.

There is no single configuration or form of ICES. While differences can result from employing different technologies to produce different energy streams, the most useful classifications for purposes of analyzing potential institutional impediments to the implementation of ICES are those based on type of owner/developer and the nature of the customer group served. The classification scheme used in the following analyses includes ICES-Utility -- an ICES owned and operated by a conventional electric utility, ICES-Complex -- an ICES designed to serve existing institutional complexes such as government, commercial, industrial, residential or medical centers, ICES-Heat Plant -- an ICES providing thermal service for its own use or the use of a limited class of customers and selling all electrical output to a conventional utility, ICES-Co-Op -- an ICES owned by its customers and serving only these member/customers and ICES-Entrepreneur -- an ICES owned and operated by any entity intending to sell or provide utility service at retail to all users within a particular service area. Obviously, additional types, of ICES can be developed by combining these various modes of ownership with the various available customer classes.

ICES may be established gradually in forms that will not encounter, or not be significantly affected by, many of the impediments discussed above. When the various types of ICES are compared against the existing regulatory framework, it is apparent that there is a wide range in the degree of compatibility

between that framework and the various ICES types. The degree to which the implementation of ICES will be impeded by the existing regulatory system varies greatly depending on the form of ownership of the ICES, the number and type of customers which it intends to serve and the manner in which it will conduct its utility operations. Therefore, if advocates of ICES seek implementation along the paths of least resistance, this gradual implementation will provide ICES technology with an opportunity to establish its viability and adapt to the existing regulatory system while permitting the existing system to become familiar with and adapt to the peculiar problems and benefits of ICES. The following may be the most appropriate sequence of implementation of ICES.

I. ICES-Utility

ICES-Utility would include any ICES owned by an existing electric utility and operated as a part of its existing utility business. The utility could either operate its own cogeneration equipment or operate equipment owned by another entity on behalf of the owner. The utility would carry on its electrical operations in the same manner as it had before becoming involved with the ICES, but the particular arrangements for the sale of thermal energy could vary. Thermal energy might be distributed by the ICES-Utility to individual customers or it could be sold in bulk to a single customer for use by that customer or for further distribution by it.

ICES-Utility, because it would be operated by an existing utility, would be least affected by the regulatory impediments discussed in Chapter 6. As an existing utility, the ICES operator would already be subject to PUC regulatory jurisdiction and would have the experience necessary to function within that system with a minimum of inconvenience. In addition, the ICES-Utility might be able to install and maintain its ICES equipment pursuant to existing franchises, certificates or other approvals or obtain minor modifications in these prior approvals so as to permit the ICES operations.

II. ICES-Complex, ICES-Heat Plant

A second approach would be to structure ICES so as to take advantage of traditional exemptions built into the existing regulatory scheme in most states. In all states, a utility must be providing service "to or for the public" before it will be subject to PUC regulatory jurisdiction. In about half of the states, a utility will be subject to PUC jurisdiction only if it is deemed to be making "sales" of energy service. If the ICES is structured so as to either not be deemed to be providing service "to or for the public" or not to be making "sales" of energy services, that ICES would not be subject to PUC regulatory jurisdiction. ICES-Complex and ICES-Heat Plant would be structured so that energy services would be provided only to a limited and clearly defined class of customers. In addition, in many cases, such ICES may be able to provide energy service

as a part of an over-all rental package rather than on an individual metered basis. Such ICES could, in many cases, avoid classification as public utilities. Examples of such ICES would be an ICES established to serve a residential, industrial, commercial, governmental or university complex.

A great deal of uncertainty exists with respect to what types of service can be provided and to how many customers before a utility will be deemed to be subject to PUC jurisdiction. These uncertainties, however, could be remedied by means of fairly simple legislative or administrative action.

By operating so as to avoid PUC regulatory jurisdiction, these ICES will also give up the protections afforded by the regulatory system. Thus, such ICES may be able to operate in competition with conventional utilities without having to obtain PUC approval, but they also must be capable of waging a competitive battle with the existing utilities in the area to be served because they would not enjoy the luxury of the traditional monopoly status of a public utility. Similarly, such ICES would not be subject to PUC rate regulation but would also possibly not receive adequate regulatory protection in their attempts to negotiate contracts to purchase back-up power from or sell surplus power to conventional utilities.

III. ICES-Co-Op

ICES-Co-Op, unlike the ICES discussed above, could lend itself to broad implementation of ICES. By operating as a

cooperative -- a utility which is owned by its customers and provides service only to these owner/customers -- the ICES-Co-Op could avoid many of the more troublesome aspects of the traditional regulatory system while still enjoying many of its benefits. For example, utility cooperatives are exempted from PUC rate regulation and regulation of financial affairs in many states. On the other hand, utility cooperatives often are subject to service area restrictions and, therefore, are afforded the protections of the various methods of territorial allocations utilized by PUCs.

This traditional utility concept could be utilized by, and modified to better serve, ICES projects intended to serve large numbers of customers. One area of possible modification would be to permit qualifying ICES-Co-Ops to commence operations in service areas of conventional utilities under certain circumstances. Qualifying ICES-Co-Ops could be allowed to serve only large concentrations of new customers or they could be allowed to serve existing concentrations of customers. The prejudicial effect of such an extension of the cooperative concept could be minimized by requiring ICES-Co-Ops to purchase those facilities of the conventional utility within the ICES service area which are necessary for serving the ICES customers and which would be rendered unnecessary to the utility.

IV. Exempt-ICES

By utilizing the ICES types discussed above, advocates of ICES can implement ICES in forms which will be least affected by regulatory impediments in order to establish showcase ICES designed to demonstrate the viability and special benefits of the ICES concept. After these showcase ICES have existed in peaceful coexistence with conventional utilities for a time, conventional utilities, utility regulators and legislators may be more amenable to the type of system modifications necessary to encourage widespread implementation of ICES in many forms. At this point, the advocates of an ICES might effectively petition PUCs and state legislatures to define certain categories of ICES which will be exempt from certain troublesome aspects of the traditional regulatory system while enjoying some of its benefits.

In order to qualify as an Exempt-ICES, the ICES must, of course, be required to establish that it would be a reliable, responsible supplier of energy. Once utility regulators are convinced that the ICES has the financial and technological ability to adequately serve its proposed customers, the ICES could be exempted from many traditional areas of regulation without jeopardizing the best interest of the customers.

The Exempt-ICES should be permitted to commence operations to appropriate groups of customers in the service areas of conventional utilities. However, like the ICES-Co-Op, it should be required to purchase any equipment owned by the conventional utility which is rendered useless as a result of

the ICES being permitted to serve customers within the conventional utility's service area. Once it has established its service area, the Exempt-ICES should receive the type of territorial protection traditionally afforded public utilities.

The Exempt-ICES could also be freed from traditional PUC rate regulation. Rather than establishing traditional cost-based rates, the Exempt-ICES could be permitted to market its energy package at any rate which does not exceed the rates for comparable service from conventional utilities. If the Exempt-ICES believed that it was, for some reason, entitled to higher rates, it should be compelled to submit to traditional rate-making procedures. This should assure that, if the ICES concept is in fact economically viable, investors will be able to achieve sufficient returns on their investment while ICES customers are guaranteed reliable energy service at reasonable rates.