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COMMUNITY ENERGY SYSTEMS
AND THE LAW OF PUBLIC UTILITIES**MASTER**
DISCLAIMER

Volume Forty-Eight

VIRGINIA

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

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TABLE OF CONTENTS

	<u>Page</u>
ABSTRACT	
PREFACE	i
ACKNOWLEDGEMENTS	vi
CHAPTER 1: EXECUTIVE SUMMARY	1
CHAPTER 2: REGULATION OF PUBLIC UTILITIES	7
Footnotes	15
CHAPTER 3: SITING OF ENERGY FACILITIES	17
Footnotes	26
CHAPTER 4: FRANCHISING OF PUBLIC UTILITIES	28
Footnotes	32
CHAPTER 5: REGULATION OF PUBLIC UTILITY RATES.	33
Footnotes	55
CHAPTER 6: SUMMARY OF IMPEDIMENTS TO IMPLEMENTATION OF ICES	59
CHAPTER 7: OVERCOMING IMPEDIMENTS TO ICES -- A SUMMARY	68

ABSTRACT

This report contains a detailed description of the laws and programs of the State of Virginia 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.

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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. Graves; 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.

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-viii-

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CHAPTER 1

EXECUTIVE SUMMARY

I. REGULATION OF PUBLIC UTILITIES

The authority to regulate utilities in Virginia is vested in the State Corporation Commission (Commission), which is comprised of three members elected by a joint vote of the two houses of the General Assembly to serve for terms of six years. Municipalities are given a limited role in the regulation of public utilities. In general, municipally-owned utilities are not within the jurisdiction of the Commission to the extent they operate within corporate limits and local governments retain the power to grant franchises and otherwise regulate the use of streets and other public property.

The Commission exercises regulatory authority over both public service corporations, which are defined as companies supplying gas, pipeline, electric light, heat, power and water services, and public utilities, which are defined as any corporation, individual or cooperative managing or controlling plant for the production and furnishing of heat, chilled air, chilled water, light, power, or water either directly or indirectly to the general public. Municipalities are specifically excluded from these definitions. The Commission's jurisdiction is not dependent upon a sale of service for compensation. Where energy is produced solely for use by the producer, or for the use of tenants, and fewer than 100 customers are served, such production is not regulated by the Commission.

In addition to its general supervisory powers, the Commission is specifically empowered by statute to approve the issuance of securities by public service corporations, approve certain agreements and affiliate transactions, regulate rates, prescribe a system of accounts and standards of service, and approve construction and extension of facilities.

Certificates of public convenience and necessity must be obtained by all public utilities prior to acquiring or constructing a facility, or initiating or extending service, except that no certificate is necessary to extend service in a previously authorized territory.

The Virginia statutes demonstrate a clear policy against competition among utilities, and therefore, a competing certificate will not be issued unless the Commission determines that the existing holder is not adequately serving the public.

A public utility seeking a certificate must file an application with the Commission. The Commission will decide whether to issue a certificate after a formal or informal hearing and after due notice to all interested parties. No specific criteria have been established for considering certificate applications. In the event of service area disputes, the Commission holds a public hearing and may enter any order necessary to resolve the dispute.

Any party aggrieved by a decision of the Commission may appeal directly to the state supreme court. Review of the Commission's decision is on the record.

II. SITING OF ENERGY FACILITIES

Standards for siting of new energy facilities in Virginia are set forth in a siting section added to the public service company statutes administered by the Commission. The responsibility for reviewing applications for siting is vested in the Commission. However, state agencies are not preempted from requiring separate approval. Thus, the Council on the Environment, State Water Control Board, Air Pollution Control Board, Marine Resources Commission, Commission of Game and Inland Fisheries, Commission of Outdoor Recreation, Local Wetlands Boards, Local Zoning Boards, Local Planning Commission, and Division of State Planning and Community Affairs may act either in an advisory capacity or as issuers of particular certificates.

The Commission regulates the construction of electric utility facilities within a utility's service area for transmission lines of 200 kilovolts or more and for generating units of 10,000 kilowatts or more. The Commission also regulates construction of facilities outside the utility's service area.

Any interested party may request a public hearing on the proposed application. Certification of transmission lines and generating stations must be preceded by notice by publication. Although the Commission need not solicit the views of the state agencies, it must give due consideration to any information offered.

In passing on a siting application, the Commission considers the probable environmental impact of the proposed facility. The various state agencies assist in the consideration of environ-

mental factors. With respect to transmission lines, Commission approvals shall be deemed to satisfy the requirements of local plans and zoning ordinances.

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 Virginia is vested by the state constitution and statutes in the cities and towns. In addition, counties are authorized to grant franchises for the use of county roads and grounds.

The municipality will adopt a franchising ordinance and then award the franchise to the highest bidder. The franchisee bears the expense of advertising the franchise ordinance. Franchises need not obtain certificates of public convenience and necessity prior to obtaining a franchise.

Franchises may not be granted for terms in excess of 40 years. There are no conditions which will result in an automatic termination of a franchise, although it might be forfeited if the service is inefficient or offered at unreasonable rates.

Neither the statutes nor reported decisions have expressly prohibited or permitted exclusive franchises. Abandonment of a franchise is not provided for by statute.

A municipality cannot force the removal of facilities of a certified utility after annexing the area which the utility is serving regardless of the absence of a franchise.

IV. UTILITY RATE REGULATION

The Virginia Constitution vests authority to regulate rates of public utilities in the Commission. The Virginia statutes vest authority to regulate rates of services performed by public utilities under a municipal or county franchise in the municipality or county. Utilities owned by municipal corporation are exempt from Commission regulation. The Commission regulates the rates of all investor-owned utilities and cooperatives and prescribes the use of the FERC uniform system of accounts.

The statutes require that the Commission hold a public hearing before any utility's rates can be changed. The utility must also satisfy two notice requirements unless the Commission declares otherwise. The Commission may suspend the enforcement of any or all proposed rates for a period not to exceed 60 days or extensions not to exceed, in the aggregate, ten months.

In determining a utility's rate base, the Commission uses a year-end test period and an original cost less depreciation method of valuation. The Commission ordinarily allows construction work in progress into a utility's rate base but offsets it by the amount of money comprising an allowance of funds used during construction. The Commission will also adjust rate base by excluding a company's investment in non-jurisdictional facilities. The Commission has not dealt with research and development costs, although it has considered the treatment of property held for future use.

In the only reported decision dealing with rate base allocation, the Commission employed the peak responsibility method. Ordinarily, the Commission will accept the company-

proposed method of allocation.

The Commission will allow a utility to claim operating expenses so long as they are just and reasonable. Charitable contributions have been allowed. The Commission can disallow payments to affiliated interests if not in the public interest. The Commission has not enunciated any standards for allocating expenses or joint costs.

The Commission permits utilities to normalize both accelerated depreciation and investment tax credits. Post-1970 credits are included in the capital structure as common equity.

The Commission has not adopted any single method for arriving at a reasonable return on equity, although the staff generally employs some variation of the discounted cash flow method. The Commission has not enunciated any risk situation where it would feel compelled to award a higher than normal rate of return, nor has it made allowances in rate of return either as an incentive or penalty for utility companies. The Commission has not employed double-leveraging in determining the cost of equity, although it will impute a parent's capital structure and cost of capital to a utility subsidiary.

CHAPTER 2

REGULATION OF PUBLIC UTILITIES IN VIRGINIA

I. PUBLIC AGENCIES WHICH REGULATE PUBLIC UTILITIES

The authority to regulate public utilities is vested generally in the State Corporation Commission (Commission). The Commission is comprised of three members elected by a joint vote of the two houses of the general assembly. Commissioners serve six-year terms.^{1/} They must be free from any employment or pecuniary interests in any company subject to the supervision and regulation of the Commission.^{2/}

The Commission is charged with the primary responsibility of supervising and regulating public utilities. However, local governments retain the power to grant franchises and otherwise regulate the use of streets and other public property.^{3/} In addition, municipally-owned utilities are not within the jurisdiction of the Commission to the extent that they operate within corporate limits.^{4/}

II. JURISDICTION OF THE COMMISSION

Certain of the Commission's powers extend to all "public service corporations"; other powers extend only to "public utilities." "Public service corporation" is defined to include "gas, pipeline, electric light, heat, power and

water supply companies, . . . and shall exclude all municipal corporations [and] other political subdivisions. . . ."^{5/}

"Public utility" is defined to include:

. . . every corporation (other than a municipality), company, individual, or association of individuals or cooperative, their lessees, trustees, or receivers, appointed by any court whatsoever, that now or hereafter may own, manage or control any plant or equipment within the State . . . for the production, transmission, delivery, or furnishing of heat, chilled air, chilled water, light, power, or water, . . . either directly or indirectly to or for the public. ^{6/}

The specific activities and facilities subject to the Commission's control are identified within this definition. The Commission may regulate the "production, transmission, delivery or furnishing" of the jurisdictional services. Its supervisory authority extends to "any plant or equipment or any part of a plant or equipment" used in connection with the jurisdictional operations.

The Commission has statutory authority over corporations, companies, individuals, or associations of individuals or cooperatives.^{7/} Thus, the Commission's jurisdiction is broad enough to extend to most conventional forms of utility ownership. Municipalities are excluded specifically from the definitions of both public service corporation^{8/} and public utility.^{9/}

The Commission's jurisdiction is not dependent upon a sale or furnishing of service for compensation. The Commission's regulatory powers extend specifically to services

provided directly or indirectly to the public.^{10/} Thus, the Commission does possess the power to regulate wholesale sales of energy.

The Commission's jurisdiction is dependent upon a furnishing of service "to or for the public."^{11/} There is no statutory definition of "public" and neither the Commission nor the Virginia courts have discussed this requirement in any reported cases. The provision defining "public utility" as used in the sections dealing with certificates of public convenience and necessity does, however, clarify this term somewhat. A company:

- (A) which furnishes electric service together with heating and cooling services, generated at a central plant installed on the premises to be served, to the tenants of a building or buildings located on a single tract of land undivided by any publicly maintained highway, street or road at the time of installation of the central plant, and
- (B) which does not charge separately or by meter for electric energy used by any tenant except as part of a rental charge ^{12/}

need not obtain a certificate of public convenience and necessity before initiating service. However, such companies are subject to the Commission's jurisdiction with respect to rates, standards of service and state operation in the event of emergency if it serves one hundred or more lessees.^{13/}

Thus, a company satisfying the requirements of this statutory provision and serving fewer than one hundred

tenants is completely exempt from the Commission's jurisdiction. Any such company serving one hundred or more tenants need not obtain a certificate before constructing facilities or initiating service, but is subject to the Commission's general regulatory authority over public utilities.

A company generating electric energy exclusively for its own consumption is also specifically exempted from the Commission's certificating authority.^{14/} While such an operation is not otherwise specifically excepted from the Commission's regulatory authority, generation for private use is not likely to be considered "to or for the public." Electric cooperatives are included specifically within the Commission's jurisdiction. However, with respect to wholesale sales, cooperatives are not subject to Commission regulatory authority over rates, service and fuel cost adjustments.^{15/}

III. POWERS OF THE COMMISSION

The Commission is charged with the supervision, regulation and control of public service companies "in all matters relating to the performance of their public duties and their charges therefor. . . ."^{16/} In addition to this general supervisory authority, the Commission has been granted numerous specific powers.

For example, the Commission must approve the issuance of securities by public service corporations,^{17/} certain affiliated interest transactions,^{18/} and certain agreements

between or arrangements among public utilities.^{19/} It has authority to regulate rates charged by public utilities^{20/} and to prescribe a system of accounts to be kept by public utilities.^{21/} In addition, the Commission must approve the construction of certain new utility facilities^{22/} and the initiation and extension of service,^{23/} and may prescribe standards of service.^{24/}

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

A. Generally

No public utility may acquire or construct any utility facility without first obtaining a certificate of convenience and necessity from the Commission.^{25/} In addition, a public utility must obtain a separate certificate of public convenience and necessity before initiating or extending any utility service.^{26/} No certificate is needed, however, for ordinary extensions or improvements within the territory in which the utility is authorized to operate.^{27/} Furthermore, no certificate need be obtained before constructing facilities or initiating service, by:

(2) Any company generating and distributing electric energy exclusively for its own consumption.

(3) Any company (A) which furnishes electric service together with heating and cooling services, generated at a central plant installed on the premises to be served, to the tenants of a building or buildings located on a single tract of land undivided by any publicly maintained highway, street or road at the time of installation of the central plant, and (B) which does not charge separately or by meter for electric energy used by any tenant except as part of a

rental charge. . . . Any company excluded by this paragraph (3) from the definition of "public utility" for the purposes of this chapter nevertheless shall, within thirty days following the issuance of a building permit, notify the State Corporation Commission in writing of the ownership, capacity and location of such central plant, and it shall be subject, with regard to the quality of electric service furnished, to the provisions of chapters 10 and 17 [relating to regulation of rates, standards of service and government operation of utilities; during emergencies] of this title and regulations thereunder and be deemed a public utility for such purposes, if such company furnishes such service to one hundred or more lessees. 28/

B. Competition

The Virginia statutes demonstrate a clear policy against competition among utilities. The Commission may not grant a certificate of public convenience and necessity authorizing a utility to operate in an area already receiving service from a certificate holder unless it determines that the service being rendered is inadequate to meet the requirements of the public convenience and necessity. 29/ If the Commission determines that the service is inadequate, the certificate holder will be given a reasonable time to remedy the inadequacy before a second certificate will be granted. 30/ In addition, no municipally owned electric utility may offer service in an area outside its own boundaries that has been allotted to a public utility unless the utility serving the area consents or the Commission determines that the service being provided is inadequate. 31/ Similarly, no public electric

utility may extend service into a municipality being served by a municipally-owned utility unless the municipality consents to the extension or the Commission determines that the service being provided by the municipally-owned utility is inadequate.^{32/}

C. Certificating Procedure

No specific procedure is provided for obtaining a certificate of public convenience and necessity. A public utility seeking such a certificate must file an application with the Commission. The Commission may issue the certificate if, after formal or informal hearing and after due notice to all interested parties, it determines that the proposed construction or service is required by the public convenience and necessity.^{33/} No other criteria are established by statute and neither the Commission nor the courts have articulated more specific criteria to be considered in granting or denying a certificate.

In 1972, a new section was added to the public service company statutes, which requires that the Commission consider environmental factors whenever approving the construction of any electrical utility facility.^{34/} This section has been interpreted and applied by the Commission as authorization to act as a siting agency when approving construction of electrical energy facilities. This siting

aspect of the Commission's functions is further discussed in Chapter 3.

D. Service Area Disputes

Except as noted in Paragraph B above, Virginia statutes make no special provision for the resolution of service area disputes. However, they do establish a general procedure for hearing complaints. Any person aggrieved by any action of a public service corporation may file a complaint with the Commission.^{35/} If the grievance is established before the Commission sitting as a court of record, the Commission may enter any order necessary to resolve the dispute.^{36/} All hearings must be public.^{37/}

V. APPEALS OF COMMISSION DECISIONS

Any party aggrieved by a decision of the Commission may appeal directly to the state supreme court.^{38/} The petition for appeal must be filed within four months from the entry of the final order of the Commission.^{39/} The court bases its review on the record before the Commission and may overturn the Commission's order only if the Commission exceeded its constitutional or statutory authority or the decision amounts to an unreasonable exercise of the Commission's authority, is based on a mistake of law, or is contrary to the evidence or without evidence to support it.^{40/}

FOOTNOTES

1. Va. Code § 12.1-6 (Michie 1978).
2. Id. § 12.1-10.
3. Id. § 56-14 (Michie 1974).
4. Id. §§ 56-1, 56-232, 56-265.4:1 (Michie Supp. 1980).
5. Id. § 56-1 (Michie 1974).
6. Id. § 56-232 (Michie Supp. 1980).
7. Ibid.
8. Id. § 56-1 (Michie 1974).
9. Id. § 56-232 (Michie Supp. 1980).
10. Ibid.
11. Ibid.
12. Id. § 56-265.1(3) (Michie 1974).
13. Ibid.
14. Id. § 56-265.1(b)(2).
15. Id. § 56-227 (Michie Supp. 1980).
16. Id. § 56-35 (Michie 1974).
17. Id. § 56-56.
18. Id. § 56-78.
19. Id. § 56-77.
20. Id. § 56-235 (Michie Supp. 1980).
21. Id. §§ 56-249 (Michie 1974).
22. Id. §§ 56-234.3 (Michie Supp. 1980), 56-265.2 (Michie 1974). See Chapter 3, infra.
23. Id. § 56-265.3 (Michie 1974).

24. Id. § 56-234 (Michie Supp. 1980).
25. Id. § 56-265.2 (Michie 1974).
26. Id. § 56-265.3.
27. Id. § 56-265.2.
28. Id. § 56-265.1(b).
29. Id. § 56-265.4.
30. Ibid.
31. Id. § 56-265.4:1 (Michie Supp. 1980).
32. Ibid.
33. Id. §§ 56-265.2, 56-265.3 (Michie 1974).
34. Id. § 56-46.1 (Michie Supp. 1980).
35. Id. § 56-6 (Michie 1974).
36. Ibid.
37. Id. § 12.1-26 (Michie 1978).
38. Id. § 12.1-39.
39. Ibid.
40. See Alexandria Water Co. v. City Council of Alexandria, 177 S.E. 454 (Va. 1934); Aetna Insurance Co. v. Commonwealth, 169 S.E. 859 (Va. 1933).

CHAPTER 3

SITING OF ENERGY FACILITIES IN VIRGINIA

I. PUBLIC AGENCIES WHICH ADMINISTER SITING LAWS

Rather than enacting a comprehensive energy facilities siting act, Virginia, in 1972, added a siting section to the public service company statutes administered by the State Corporation Commission (the "Commission").^{1/} The new section requires that the Commission consider scenic and environmental factors whenever approving the construction of electrical energy facilities. The Commission issues certificates of public convenience and necessity in approving such construction. The Commission's jurisdiction to issue such certificates, as well as the Commission's membership, and other powers and procedures are discussed in Chapter 2, while its siting function is discussed in the following Part II of this Chapter.

With respect to transmission lines, but not with respect to generating facilities, Commission approvals "shall be deemed to satisfy the requirements of [local comprehensive plans and local zoning ordinances]."^{2/} Local governmental units and interested persons can nevertheless participate in Commission hearings in connection with the approval of the construction of transmission lines, and local governmental units can request that the Commission consider their local comprehensive plans as well as any reports of state agencies concerned with environmental protection.^{3/}

The Commission need not follow the views of other agencies, and other agencies are not pre-empted from requiring

separate approvals.^{4/} The jurisdiction and powers of other state agencies are discussed in Part III, below.

II. STATE CORPORATION COMMISSION

The new siting section is largely self-explanatory and brief enough to set forth in its entirety. It is as follows:

Commission to consider environmental factors in approving construction of electrical utility facilities; approval required for construction of certain electrical transmission lines; notice and hearings. -- Whenever under any provision of law whatsoever, applicable to the Commission, the Commission is required to approve the construction of any electrical utility facility, it shall give consideration to the effect of that facility on the environment and establish such conditions as may be desirable or necessary to minimize adverse environmental impact. In such proceedings it shall receive and give consideration to all reports that relate to the proposed facility by State agencies concerned with environmental protection; and, if requested by any county or municipality in which the facility is proposed to be built, to local comprehensive plans that have been adopted pursuant to article 4 (§15.1-446 et seq.) of chapter 11 of Title 15.1 of the Code of Virginia.

No electrical transmission line of two hundred kilovolts or more shall be constructed unless the State Corporation Commission shall, after at least thirty days' advance notice by publication in a newspaper or newspapers of general circulation in the counties and municipalities through which the line is proposed to be built, and written notice to the governing body of each such county and municipality, approve such line. As a condition to such approval the Commission shall determine that the corridor or route the line is to follow will reasonably minimize adverse impact on the scenic and environmental assets of the area concerned. If, prior to such approval, any interested party shall request a public hearing the Commission shall, as soon

as reasonably practicable after such request, hold such hearing or hearings at such place as may be designated by the Commission. This section shall apply to such transmission lines for which rights-of-way acquisitions have not been completed as of April eight, nineteen hundred seventy-two. In any such hearing the public service company shall provide adequate evidence that existing rights-of-way cannot adequately serve the needs of said company. For purposes of this section, "interested parties" shall include the governing bodies of any counties or municipalities through which the line is proposed to be built, and persons residing or owning property in each such county or municipalities and "environmental" shall be deemed to include in meaning "historic."

Approval of a transmission line pursuant to this section shall be deemed to satisfy the requirements of §15.1-456 [local comprehensive plans] and local zoning ordinances with respect to such transmission lines. 5/

A. Facilities Subject To Siting Criteria

The Commission issued a Memorandum To All Electric Utilities ("Memorandum") on July 14, 1972, which clarifies what facilities are subject to the new siting section, and expands the procedures and criteria for applying for approval under that section. The Memorandum states that certificates will be required for the construction of electric utility facilities in the following instances:

1. Within a utility's service area:
 - a. For transmission lines of 200 kilovolts or more as described in §56-46.1 and for substations associated with such lines.
 - b. For generating units of 10,000 kilowatts

or more construction of which has not commenced on the date of this memorandum.

2. All facilities outside of the utility's service area.^{6/}

B. Procedures

1. Applications

The Commission's Memorandum requires that all applications for certificates respecting the construction of facilities subject to the Memorandum include, but not necessarily be limited to, the following information:

1. The necessity for the project.
2. Information concerning alternate locations which have been considered.
3. Design data of the facility including approximate size, material and appearance.
4. In the case of transmission lines, information should be submitted concerning the width of right-of-way, width of clearing, method of clearing, method of disposal of trees and brush, proposed ground cover and maintenance of the right-of-way after the line is constructed.
5. In the case of power plants, detailed information should be submitted concerning emissions into the atmosphere or water, waste heat disposal, and consumptive use of water.
6. A list of the state agencies which may reasonably be expected to have an interest in the proposed construction. ^{7/}

The Memorandum also requires that two copies of a map be submitted showing the location or route of the proposed construction.

2. Notice and Hearing

With respect to notifying other state agencies, the Memorandum states:

It is suggested that copies of applications for transmission lines of 200 kv and over or for power plants to be sent to all State agencies having concern with environmental matters which may be affected by the proposed construction. 8/

With respect to providing local notice and participation, the Memorandum repeats the statutory requirement that certification of transmission lines and generating stations must be preceded by at least 30 days notice by publication once a week for 2 consecutive weeks in newspapers of general circulation. The Memorandum further provides that "any interested party including residents or property owners in each county or municipality through which the transmission line is proposed to be built may request a public hearing."^{9/}

In Citizens for the Preservation of Floyd County, Inc. v. Appalachian Power Co., the Supreme Court of Virginia held that the statute does not require the Commission to seek out and solicit views of other agencies, but only to "receive" information that may be offered by other agencies and to give it due consideration.^{10/}

C. Criteria For Approval

The Commission's Memorandum expands the statutory criteria for approval of transmission lines, but not for approval of generating plants. With respect to transmission lines, the Memorandum states:

Approval is conditioned on the Commission's determination that the route the line is to

follow will reasonably minimize adverse impact on the scenic, environmental and historic assets of the area concerned Certification is contingent upon proof by the utility that existing rights-of-way do not adequately serve the needs of the utility It is further recommended that transmission lines be constructed to the extent practicable in accordance with the guidelines set forth by the Federal Power Commission in Appendix A, Docket No. R-365, Order No. 414, issued November 27, 1970. 11/

In the Appalachian Power case, noted above, the court sustained the Commission's approval of a 765-kilovolt transmission line. Overriding objections by a local citizens' group, the court held that the Commission had developed adequate environmental criteria by adopting the transmission line guidelines promulgated by the FPC. The court also held that the Commission had, consistent with the requirements of the statute, made a reasonable appraisal of site alternatives, including the possibilities of smaller capacity lines and of paralleling existing rights-of-way. Finally, the court held that there was sufficient evidence to support the Commission's finding that the adverse environmental impact of the line would be minimal.

III. LOCATION AND PLANNING OF DEVELOPMENTS GENERALLY

A. Council On The Environment

The Council, in the office of the Governor, is responsible for implementing the Virginia Environmental Quality Act. The purpose of that act is to promote wise use of the State's " . . . air, water, land and other natural resources and to protect them from pollution, impairment or destruction so as to

improve the quality of its environment . . . to initiate, implement, improve and coordinate environmental plans, programs, and functions of the State."^{12/} Although the Council does not have independent permitting jurisdiction, it may serve as a coordinating agency where multiple state permits are required. A single unified application for a project requiring a State permit or certificate from more than one State environmental regulatory agency may be submitted to the Administrator of the Council, and a single hearing may be held.^{13/} The hearing is to be held within 60 days after the application is complete. Although each participating state agency retains jurisdiction to render a separate decision, these decisions must be rendered within 30 days after the hearing, unless the deciding agency grants itself an extension; such extensions may not exceed 30 days.^{14/}

B. State Water Control Board

A certificate is required by the Board for the discharge of various types of wastes or deleterious substances into waters or for the alteration of the physical, chemical or biological properties of State waters.^{15/} An exception to the Board's jurisdiction over State waters is the authority of the State Corporation Commission to establish flow release schedules when a dam is required.^{16/}

C. Air Pollution Control Board

The Board may issue orders that require owners to construct facilities according to approved specifications to meet air quality standards.^{17/} The Board has power to prescribe permit fees for major stationary air pollution sources.^{18/}

D. Marine Resources Commission

A permit is required from the Commission for use of subaqueous beds to "build, dump, or otherwise trespass upon or over or encroach upon or take or use any materials from the beds of the bays and ocean, rivers, streams, creeks" ^{19/} The Marine Commission has taken an advisory role in siting power plants on river banks within its jurisdiction. ^{20/} However, the Commission has power to review and to modify, remand or reverse the decisions of the wetlands boards, discussed below. ^{21/}

E. Commission of Game and Inland Fisheries

Although no permit is required from this agency, it may act "as it may deem advisable for the conservation, protection, replenishment, propagation of and increasing the supply of game birds, game animals and fish and other wildlife of the State." ^{22/} It may serve in an advisory capacity and thus influence a siting decision.

F. Commission of Outdoor Recreation

As it is the purpose of the Commission to plan and provide for acquiring, maintaining, improving, protecting and conserving areas adapted to developing a comprehensive system of outdoor recreational facilities, the Commission may be influential in a State Corporation Commission decision relating to siting. ^{23/} It is the "duty of the Commission to recommend to the Governor and to the General Assembly rivers or sections thereof to be considered for designation as scenic rivers. ^{24/} If a river is so designated, then authority of the General Assembly is required to construct, operate or maintain a dam or structure impeding the river's flow. ^{25/}

G. Local Wetlands Boards

Counties, cities and towns that have enacted wetlands ordinances require permits for use or development of wetlands within their particular jurisdiction.^{26/} Wetlands Boards consist of five local residents appointed by the local governing body for 5-year terms.^{27/} Decisions by the Wetlands Boards are subject to review by the Maine Resources Commission, discussed above.

H. Local Zoning Boards

The local governing bodies of counties and municipalities may regulate, restrict, permit, prohibit and determine the uses of land, buildings and other structures through zoning ordinances.^{28/} No zoning provisions deal expressly with public utilities.

I. Local Planning Commission

Where a local comprehensive plan has been approved and adopted by the local governing body, approval of the local planning commission is required for the construction of public utility facilities whether publically or privately owned. Such approval is governed by the determination that the facility is substantially in accord with the commission's comprehensive plan.^{29/} A majority vote of the local governing body can override the plan commission.^{30/}

J. Division of State Planning and Community Affairs

The Division of State Planning and Community Affairs is responsible for developing standards and recommending means to control the use of land around "critical environmental areas."^{31/} As such, it may serve in an advisory capacity in the Commission's decision making process.

FOOTNOTES

1. Va. Code §56-46.1 (Michie Supp. 1980).
2. Ibid.
3. Ibid.; Citizens For The Preservation of Lloyd County, Inc., v. Appalachian Power Co., 248 S.E. 2d 797 (Va. 1978).
4. Va. Code §56-46.1 (Michie Supp. 1980).
5. Ibid.
6. Memorandum To All Electric Utilities State Corporation Commission, July 14, 1972, p. 2.
7. Id. pp. 3-4.
8. Id. p. 5.
9. Id. p. 4.
10. Citizens For The Preservation Of Floyd County, Inc. v. Appalachian Power Co., 248 S.E.2d 797 (va. 1978).
11. Memorandum To All Electric Utilities, State Corporation Commission, July 14, 1972, pp. 4-5.
12. Va. Code §10-178 (Michie 1978).
13. Id. §10-184.2
14. Ibid.
15. Va. Code §62.1-44.5 (Michie Supp. 1980).
16. Letter from A.P. Miller, Attorney General, to A.H. Paessler, Executive Secretary, State Water Control Board, February 5, 1971.
17. Va. Code §§10-17.18:1, 10-17.21 (Michie 1978).
18. Id. §10-17.30:1.
19. Id. §62.1-3 (Michie Supp. 1980).
20. Willrich, "The Energy-Environment Conflict: Siting Electric Power Facilities," 58 Va. Law Rev. 257 (1972).
21. Va. Code §62.1-13.13 (Michie Supp. 1980).
22. Id. §29-11 (Michie Supp. 1980).
23. Id. §10-21.4 (Michie 1978).

24. Id. §10-169.
25. Id. §10-174.
26. Id. §62.1-13.5 (Michie Supp. 1980).
27. Id. §62.1-13.6.
28. Id. §15.1-486 (Michie 1973).
29. Id. §15.1-456.
30. Ibid.
31. Id. §§10-192, 10-193 (Michie 1978).

CHAPTER 4

FRANCHISING PUBLIC UTILITIES IN VIRGINIA

I. AUTHORITY TO GRANT FRANCHISES

The Virginia Constitution prohibits any "gas, water, steam or electric heating, electric light or power . . . [or] any corporation, association, person, or partnership engaged in these or like enterprises" from using the streets, alleys or public grounds of any city or town without the consent of the municipal authorities.^{1/} This constitutional provision has been effectuated through an identically worded statutory provision^{2/} and restated in the statutory provisions relating to the regulation of public service companies.^{3/} Pursuant to these provisions, franchising power is granted to all cities and towns. Any person or entity providing any of the enumerated services or involved in any "like enterprise" may be granted a franchise. There is no requirement that the franchisee be a public utility or otherwise be providing service to or for the public.

County boards of supervisors have been vested with the same powers that may be exercised by the councils of cities and towns.^{4/} Thus, counties are authorized to grant franchises for the use of county roads and grounds.

II. PROCEDURES FOR GRANTING FRANCHISES

A specific statutory procedure is provided for granting franchises for terms in excess of five years. After

the terms of a proposed franchise ordinance have been approved by the mayor, or passed over the mayor's veto, the ordinance must be published in a local newspaper once a week for four consecutive weeks.^{5/} The advertisement must invite written bids for the franchise.^{6/} The franchise is to be awarded to the highest bidder, although the council may choose to accept a lower bid if acceptance of a lower bid is in the public interest.^{7/} If no satisfactory bid is received, the council may award the franchise to any person or corporation which makes application for the franchise.^{8/} The franchisee is to bear the expense of advertising the proposed franchise ordinance.^{9/}

Although public service corporations are required to obtain a certificate of public convenience and necessity before furnishing service in the state,^{10/} there is no express requirement that a potential franchisee obtain such a certificate before being granted a franchise.

III. CRITERIA TO BE USED IN EVALUATING FRANCHISE REQUESTS

As mentioned, franchises must be awarded to the highest bidder unless the council determines that the public interest would be served by granting the franchise to some other bidder.^{11/} A franchisee need not be a public utility or provide service to or for the public. A potential franchisee need not obtain a certificate of public convenience and necessity from the Corporation Commission prior to being granted a franchise; however, a public service corporation

may not offer service without having obtained such a certificate.^{12/} No additional criteria to be used in evaluating franchise requests are provided by statute or case law.

IV. CHARACTERISTICS OF A FRANCHISE

Franchises may not be granted for terms in excess of forty years.^{13/} While no conditions which will result in the automatic surrender of the franchise have been established by statute or case law, franchises should contain forfeiture provisions to assure "efficiency of public service at reasonable rates and the maintenance of the property in good order throughout the term of the grant."^{14/} However, despite the apparently compulsory language of this provision, a Virginia court has held that a franchise is not invalid if it does not contain a forfeiture provision.^{15/}

A franchise may provide that any facilities constructed pursuant to the franchise may become the property of the city or town upon termination of the grant. Compensation to the franchisee, if any, is also to be established in the franchise.^{16/} Any person occupying streets or other public property except pursuant to a valid franchise, is guilty of a misdemeanor and subject to a daily fine.^{17/} A statutory provision also provides for a declaration that the property is a public nuisance and must be removed.^{18/} This statutory provision provides cities and towns with a method of forcing the removal of facilities upon expiration or termination of a franchise.

Neither the statutes nor reported judicial decisions have expressly permitted or prohibited exclusive franchises. However, in one instance, a city granted an exclusive franchise to a company to lay and maintain gas pipes for a term of fifteen years.^{19/} While the court was not called upon to rule specifically on the question of the validity of an exclusive franchise, it gave no indication that this factor was relevant to the validity or invalidity of the franchise.

A municipality can preclude the operation of a utility authorized by the Corporation Commission to provide service by refusing to grant a franchise.^{20/} This is only true, however, when a certificated utility attempts to make its initial entry into the city. A municipality cannot force the removal of facilities of a certificated utility after annexing the area which it is serving regardless of the absence of a franchise from the annexing city or the expiration of any franchise under which the utility operated in the previously unincorporated area.^{21/}

The statutory grant of franchising authority does not limit the type of utility services which can be franchised. Neither abandonment of the franchise nor a mandatory franchise tax is provided for by statute.

FOOTNOTES

1. Va. Const. art. 7, §8.
2. Va. Code §15.1-375 (Michie 1973).
3. Id. §56-14 (Michie 1974).
4. Id. §15.1-522 (Michie Supp. 1978).
5. Id. §15.1-308 (Michie 1973).
6. Id. §15.1-309.
7. Id. §15.1-310.
8. Id. §15.1-311.
9. Id. §15.1-309.
10. Id. §56-265.3 (Michie 1974).
11. Id. §15.1-310 (Michie 1973).
12. Id. §56-265.3 (Michie 1974).
13. Id. §15.1-307 (Michie 1973), Va. Const. art. 7, §9.
14. Va. Code §15.1-307 (Michie 1973).
15. Town of Victoria v. Victoria Ice, Light & Power Co., 134 Va. 124, 114 S.E. 89 (1922).
16. Va. Code §15.1-307 (Michie 1973).
17. Id. §15.1-316.
18. Ibid.
19. Commonwealth v. Portsmouth Gas Co., 132 Va. 480, 112 S.E. 792 (1922).
20. Town of Culpepper v. Virginia Elec. and Power Co. 215 Va. 189, 207 S.E.2d 864 (1974).
21. Id. 207 S.E.2d at 867.

CHAPTER 5

RATE REGULATION IN VIRGINIA

I. RATEMAKING AUTHORITY

A. General

The Virginia Constitution empowers the State Corporation Commission (Commission) to regulate the rates, charges, services, and facilities of telephone, gas, and electric companies.^{1/} The Commission is charged with the duty of regulating all public service companies in the state in all matters relating to the performance of their public duties and their charges therefor.^{2/} The term "public service company"^{3/} includes public utilities.^{4/} The power to regulate rates and charges of public utilities extends to investor-owned public utilities and to cooperatives but excludes utilities owned by municipal corporations.^{5/}

The Virginia statutes grant authority to any city, town or county to prescribe rates to be observed by any public service corporation in connection with any services performed by it under a municipal or county franchise granted by such city, town or county.^{6/}

The Virginia Statutes grant the Commission authority to require any public utility to furnish to it in such form and in such detail as the Commission shall require, such accounts and reports as it may deem proper and in such form and detail as it may prescribe, in order to show completely the entire operation of the public utility in

furnishing service to the public.^{7/} Virginia has adopted the uniform system of accounts established by the Federal Energy Regulatory Commission (FERC) for use by gas and electric utilities.

B. Ratemaking Procedures

Every public utility is required to file with the Commission and to keep open to public inspection schedules showing rates and charges.^{8/} No change may be made in any rate schedule except after thirty (30) days notice to the Commission and to the public, and all such changed rates shall be plainly indicated upon existing schedules or by filing new schedules not less than thirty (30) days prior to the time the same are to take effect.^{9/}

Every public utility which desires to effect a rate change must meet two notice requirements. First, the public utility must publish, once a week for four successive weeks, a notice of its intention to change its rates. The last publication shall appear no less than thirty (30) days prior to the time any changed rates shall take effect. Second, the public utility shall mail to each of its customers a notice of its intention to change its rates. This notice shall be mailed no less than thirty (30) days prior to the time any such changed rate shall take effect.^{10/} The Commission may dispense with either or both of these requirements or, in the alternative, it may prescribe additional requirements for notification to a public utility's customers.

Whenever any schedule stating a change of rate is

filed with the Commission, the Commission shall upon reasonable notice conduct a public hearing concerning the lawfulness of the proposed rate.^{11/} At any such hearing involving a change of rate, the burden of proof shall be upon the applicant to demonstrate that the proposed change is just and reasonable.^{12/}

The Commission, either upon complaint or its own motion, may suspend the enforcement of any or all of the proposed rates for a period not to exceed sixty (60) days, during which time it shall investigate the reasonableness of the proposed rates.^{13/} If the Commission is unable to conclude its investigations and hearing within sixty (60) days, the Commission may further suspend the operation of the proposed rates for such reasonable periods as may be necessary to complete the investigation. However, such periods of further suspension shall not exceed a total of ten (10)^{14/} months.

C. Statutory Ratemaking Criteria

The statutes provide that "it shall be the duty of every public utility to furnish reasonably adequate service at reasonable and just rates to any person, firm or corporation," and to charge uniform rates for like service.^{15/} If upon investigation the rates of any public utility shall be found to be unjust or unreasonable, insufficient or unjustly discriminatory, the Commission has the power to fix and substitute therefor such rate(s) as shall be just and reasonable.^{16/} The statutes enumerate several factors that

are to be considered in determining the reasonableness of rates. Any rate shall be considered just and reasonable if:

- (1) the public utility has demonstrated that such rates . . . in the aggregate provide revenues not in excess of the aggregate actual costs incurred by the public utility in serving its customers within the jurisdiction of the Commission subject to such normalization for nonrecurring costs and adjustments for known future increases in costs, and a fair return on the public utility's rate base used to serve those jurisdictional customers; and
- (2) the public utility has demonstrated that such rates . . . contain reasonable classifications of customers. 17/

Beyond a general mandate that all rates must be just and reasonable, the statutes do not contain any provisions governing the disposition of particular issues which may arise in a ratemaking case.

D. Annual Review Procedure

In an attempt to minimize earnings erosion caused by regulatory lag, the Commission has established an annual 18/ review procedure.

This requires that a utility file a pro-forma revenue and expense statement a year following a rate decision covering the 12-month period subsequent to the date of filing. The procedure applying to all companies with more than \$3 million in revenues, provides the Commission with a later look at how the utility is faring under the allowed rates. Following a review, the Commission can quickly implement higher or lower rates. 19/

Pursuant to a House Joint Resolution of the 1979 Sessions of the Virginia General Assembly, the Commission modified its annual review filing procedures. Under this procedure a utility can increase its rates to earn its

authorized return, but the request for an increase in revenues cannot exceed the maximum increase allowed by the President's Council on Wage Price Guidelines or the average change in the Consumer Price Index for the twelve months of the designated test year, whichever is lower.^{20/}

II. RATE BASE DETERMINATION

A. Test Period

The Commission uses a year-end test period to calculate rate base. In one case the Commission stated:

It is the practice of this commission to use an end-of-period valuation of rate base. The value of utility plant and working capital after adjustments, in use on the final days of the test period constitute rate base for determining revenue requirements. ^{21/}

The Commission has recognized that utilities often do not earn their authorized rate of return, due to the effects of attrition and regulatory lag. "End-of-period rate base is a tool employed in an attempt to offset those factors and make rates representative of the period in which they are in use."^{22/}

The Commission also indicated in Re Chesapeake & Potomac Tel. Co.,^{23/} that it might be appropriate in certain instances to use an attrition allowance, as well as a year-end rate base. However, the Commission declined to make such an allowance in that case because it did not feel it could assume that the utility's rate of attrition would continue in the future due to the "vigorous national effort" to curb inflation.^{24/}

B. Rate Base Valuation

The Commission measures rate base according to original cost, less accumulated depreciation.^{25/}

C. Rate Base Components and Adjustments

Where a utility engages in jurisdictional as well as non-jurisdictional utility service, the Commission has excluded a company's investment in non-jurisdictional facilities from rate base. Thus, the Commission reduced one utility's rate base by the amount attributable to its investment in state, county, and municipal streetlighting facilities (over which the Commission has no jurisdiction).^{26/} However, in a subsequent case the Commission adjusted the utility's pro forma operating income on the "non-jurisdictional" portion of its rate base to coincide with the authorized rate of return, rather than reduce rate base by the amount of investment in non-jurisdictional facilities.^{27/} Thus, where it was determined that operating income on the company's non-jurisdictional rate base was \$15,682 (or a rate of return of 4.38%) and that the authorized rate of return (9.1%) would produce \$32,556 in revenues on the "non-jurisdictional" portion of the company's rate base, the Commission adjusted the pro forma operating income upwards to reflect the difference.

It is the Commission's practice to include construction work in progress (CWIP) as part of the year-end rate base.^{28/} However, the Commission includes an allowance

of funds used during construction (AFUDC) as a component of test year income. "The consequence of this accepted accounting procedure is that the return required on that increment of rate base attributable to CWIP, is offset by the amount of money comprising AFUDC."^{29/}

The Commission has permitted deviations from the foregoing general treatment of AFUDC-CWIP. In one case, the Commission held that the portion of AFUDC attributable to pollution-control equipment was properly eliminated from income, observing that the "installation of pollution control equipment . . . imposes a considerable financial burden on the company while simultaneously reducing plant productivity."^{30/} In the same case, the Commission accepted the company's proposal to eliminate the amount of AFUDC associated with distribution facilities which were under construction during the test year, but in service at the time of the rate case hearing. The Commission reasoned that the elimination of AFUDC associated with those facilities would have a minimal overall impact on test period income.

However, the Commission rejected the same company's request to eliminate AFUDC associated with a \$600 million generating facility. The Commission noted that it was cognizant of the benefits of improved cash flow, but was concerned about the impact that the proposed elimination of AFUDC would have on rates (\$10 million additional revenue requirement), as well as the uncertainty that existed as to the completion date of the generating facility.^{31/} In a

subsequent case, the Commission again refused to eliminate AFUDC from income, but noted that "the Commission and its staff are studying t[h]e ramifications of the AFUDC issue. This may lead to a revision of our policy" ^{32/}

One commissioner dissented from the Commission's treatment of CWIP-AFUDC in that case, with this comment:

When a generating unit under construction becomes commercial . . . the rate payer is required to convert paper AFUDC earnings to true earnings, the impact of which is substantial on the rate payer. Reduced AFUDC charged to a facility under construction would result in lower rates when the new facility becomes commercial than would be assessed if the larger AFUDC is capitalized during the construction period. I feel that the present accounting practice of capitalizing construction work in progress as a non-cash source of income is obsolete, inadequate and counterproductive to the consumer, the regulator and the utility. ^{33/}

Reported Commission decisions have not dealt with research and development or initial organization and start-up costs, incurred prior to the generation of revenue as rate base components. However, the Commission has considered the treatment of "property held for future use." In Re Potomac Edison Co., ^{34/} the Commission announced that "the test of inclusion with respect to property held for future use, is premised on the company's showing that the property will be used in the immediate future by the utility in rendering its public service." ^{35/} The company, arguing for inclusion of the land value of the site of a future nuclear plant, claimed it was arbitrary to exclude the property because it was not expected to be in use within a four year period, since plant construction normally runs in the range

of four to six years lead time. The Commission commented that "[t]he question is not whether the staff's recommended four-year time period is arbitrary. The question is whether the company had presented adequate evidence to demonstrate that the property in issue will be used in the immediate future by the utility in rendering its public service obligation."^{36/} The Commission found that the company had not.

In a more recent case, a company argued that even though it could not state that certain land would be placed in service in the immediate future, it should be allowed to include the land in rate base since it was uniquely valuable and because the amount involved was so small that inclusion would not affect rates. The Commission acknowledged that the issue was merely one of principle, but maintained that

. . . the applicable principle with respect to future use property is that a utility must show that the property will be used in the immediate future in rendering its public service before its cost may be included in rate base. ^{37/}

D. Rate Base Allocation

Only one reported Commission decision has dealt with methods of allocation of rate base (except insofar as the Commission prescribes the use of the "Separation Manual" published by the National Association of Regulatory Utility Commissioners for telephone utilities). In that case, the company used the peak responsibility method to allocate rate base (as well as costs) to Virginia jurisdictional service, while the staff employed the average and excess method.^{38/}

The Commission concluded that neither method was superior and averaged the figures proposed by the staff and company to determine rate base.^{39/}

In recent decisions, rate base allocation has not been a contested issue. The Commission has generally accepted company-proposed methods of allocation.^{40/}

III. COST OF SERVICE

A. Allowable Expenses

The Virginia Supreme Court has held that the Commission has no authority to disallow expenses actually incurred by a utility unless there is affirmative evidence that they are exorbitant, unnecessary, wasteful, extravagant or incurred in the abuse of discretion or in bad faith or are of a non-recurring nature.^{41/} Further, the Virginia Supreme Court has held that the Commission "should not be blind to the future" and may adjust the results of test year operations to reflect known changes.^{42/}

An allowance for charitable contributions was approved by the Supreme Court of Virginia in 1955.^{43/} The Commission recently followed that decision in Re Chesapeake & Potomac Tel. Co. of Va.,^{44/} observing

clearly, by present day standards, reasonable charitable contributions are a legitimate cost of doing business if a utility is to maintain its standing and goodwill in the community it serves.^{45/}

Reported Commission decisions have not discussed the issue of advertising expense per se. However, in a gas utility rate case,^{46/} the Commission declined to reduce a

company's sales promotion expense, observing that the designated expense included the salaries of several full time employees, who not only promote sales to new customers, but aid in the overall planning of the utility. The Commission stated that "[t]o cause a utility to abolish its sales division would not appear to be in the public interest."^{47/} However, the Commission noted that it would consider further reductions of the company's sales promotion expense, should the gas shortage continue. In an electric utility rate case,^{48/} although the Commission acknowledged that it had just disapproved promotional allowances and trade ally advertising, an expense claim based on such expenditure was not eliminated from operating expenses because the company could be expected to substitute some other forms of sales promotion activity which would have an equal or greater cost than the eliminated programs.^{49/} In 1975, the Commission, in an unreported decision, refused to adopt compulsory or advisory guidelines governing advertising by utilities.^{50/} However, on June 9, 1979 the Commission, in response to House Joint Resolution No. 331 of the 1979 Session of the Uniform General Assembly, requested comments on "how best to define and identify those categories of advertising, if any, to be excluded from operating expenditures of the utilities for ratemaking purposes." The Commission is to complete its study and present its recommendations and suggested legislation, if any, to the governor and the general assembly not later than December 15, 1979.

In addition to the generally contested items of expense, the Commission has statutory authority to disallow payments to affiliated interests, which are not in the public interest.^{51/} Generally, such expenditures will be allowed unless it is shown that the affiliate's profit margin is excessive or that the prices charged are higher than those charged by competing companies.^{52/} Thus, the Commission held that a company's purchases from its affiliate were reasonable, where the record established that the affiliate's prices ranged between 65% to 85% of the lowest available trade prices.^{53/} In another case, the Virginia Supreme Court reversed the Commission's reduction of a company's rate base to reflect excessive prices paid to an affiliate where: there was no evidence that the expenses incurred were exorbitant, unnecessary, wasteful, extravagant, or incurred in the abuse of discretion or in bad faith; there was evidence that the prices paid were as reasonable as could be obtained elsewhere; there was no evidence of any advantage taken of the affiliated relationship to the detriment of the utility's customers; and, there was no evidence that the affiliated company enjoyed a unique position of market power which rendered a comparison of prices and profits with those of other suppliers inadequate as a measure of reasonableness.^{54/}

B. Allocation of Expenses

The Commission has not enunciated any standards or indicated acceptance of particular methods of allocating

expenses. In fact, where a company had used the peak responsibility method to assign costs to Virginia jurisdictional business, but the staff had used the average and excess demand method, the Commission averaged the company proposed figures for total operation expense with staff's, noting that neither cost allocation method was superior to the other.^{55/}

More recently, the Commission has not taken issue with company proposed methods of allocating joint expenses.^{56/}

Reported Commission decisions have not discussed allocation of expenses to power pool operations or for determining charges for energy interchanges with other utilities.

IV. FEDERAL INCOME TAX ISSUES

A. Accelerated Depreciation

The Commission permits utilities to normalize accelerated depreciation for federal income tax purposes.^{57/}

B. Investment Tax Credits

Virginia utilities are permitted to normalize investment tax credits.^{58/} However, for ratemaking purposes pre-1971 tax credits are included in capital structure at zero cost. Post-1970 credits are included as common equity.^{59/}

C. Other Tax Timing Differences

Although reported Commission decisions do not address the issue specifically, the Commission has in the past permitted full normalization of all tax timing differences.

This would include such items as payroll taxes and other expenses capitalized for book purposes but expensed for tax purposes.^{60/}

V. METHODS OF DETERMINING RETURN TO BE ALLOWED A
REGULATED UTILITY

The Commission has not adopted any single method for arriving at a reasonable return on equity, although the staff generally employs some variation of the discounted-cash flow method.^{61/} In determining Appalachian Power Company's return on equity, the Commission commented that the wide range of recommendations by expert witnesses

. . . serves to underscore what this commission has said often; that notwithstanding the variety of techniques, and the sophistication thereof, for measuring the cost of equity, there is no single mathematically precise method of ascertaining its cost. The formulation of a fair and reasonable return is an art which requires informed judgment.^{62/}

The table in Appendix A lists the overall return and return on equity which have been allowed in recent rate cases.

The Commission has not enumerated any risk situation where it would feel compelled to award a higher than normal rate of return. The Commission generally selects a rate of return within the range proposed by the various expert witnesses. Among those factors which the Commission has considered in setting a company's rate of return is the quality of service. "Within a zone of reasonableness a utility's rate of return should be commensurate with the

quality of its service."^{63/} The Commission further observed that "[t]he level and quality of its service in Virginia has been good, and the company must be permitted the opportunity to earn sufficient revenue in order to continue providing such service."^{64/} The Commission authorized a 9.1% return, out of a recommended range of 8.41% - 10.1%.

In Re Potomac Edison Co.,^{65/} the Commission considered the fact that the company was "embarking on a major construction program, requiring substantial new financing", in arriving at a 13.3-13.6 per cent return on equity out of a recommended range of 12-14.5 percent. In Re Roanoke Gas Co.,^{66/} where the recommended return on equity ranged from 10.2-14 per cent, the Commission authorized an 11.5% return on equity, in consideration of the company's high debt ratio (65%), as well as the increased risk, due to the gas shortage.

The Commission has not made allowances in rate of return to provide either an incentive or penalty for utility companies which do particular things. However, it has indicated that such allowances may be appropriate. In determining one company's allowable rate of return, the Commission noted that "this commission must encourage and provide incentives for utilities operating in Virginia to achieve maximum economic efficiency."^{67/}

The Commission has not employed double leverage in determining the cost of equity. However, to reflect a utility's "source of funds" the Commission has imputed a

parent company's consolidated capital structure and cost of capital to a utility subsidiary.^{68/}

VI. RATE DESIGN CRITERIA

Electric and gas utility rates historically have been essentially cost-based.^{69/} However, in recent cases, the Commission has deviated from cost in setting such rates. For example, where a company's cost of service study indicated that the residential class was producing a rate of return which was substantially lower than the overall authorized rate of return, the staff rejected the utility company's proposed "across the board" increase. The Commission agreed with the staff, but held that the "base revenue" requirement of each class should not be increased more than 8 percent, to avoid drastic increases to particular classes of customers. This would serve to narrow the gap between the rates of return generated by the various classes.^{70/}

In a gas utility rate case,^{71/} a Commission staff witness proposed a reduction in the "system charge" for commercial and industrial non-heating and non-cooling customers who use less than 1,000 therms per year. The witness argued that it was unfair that this class of customer should pay a higher system charge twelve months of the year, than the overall commercial and industrial heating and cooling customer pays for nine months. The company opposed the reduction, maintaining that it was unnecessary because the "system charge" applicable to the non-cooling and non-heating commercial and industrial customer was less than

the fixed costs attributable to that class. The Commission concurred with the staff witness for the reasons cited above, noting "as we have said in [a previous] case . . . a cost-of-service study can only be used as a guide in determining rates."^{72/}

The Commission also approved a reduction in certain system charges to small volume users to recognize and soften the impact of increased rates on those customers (as the result of changing from a "declining block rate structure" to a "two part rate structure"), despite the fact that the small volume class of customer would not be contributing to the utility's return under the proposed rates.^{73/}

In the same case, certain intervenors argued that interruptible rates should not be increased because they were assigned without regard to cost and could not be justified on value of service considerations. The Commission made the following observations:

We recognize that interruptible customers have paid rates which produce a rate of return higher than other classes of customers. As such the other classes have benefited. At the same time interruptible customers have benefited by paying lower rates than firm customers, and usually lower prices than they would have paid for oil. Additionally, natural gas is a premium fuel and offers certain advantages over oil with respect to pollution control and ease of handling. ^{74/}

In light of the above observations, the Commission held that interruptible rates should be increased, but not as high as the company had proposed, so as to prevent the interruptibles from switching to an alternative fuel. In conclusion, the Commission noted that the authorized interruptible rate

". . . gives due regard to cost of service, value of service and historical rate relationships among all classes of service."^{75/}

It should be noted that the Commission sets telephone rates according to both cost and value of service. In fact, where certain witnesses had advocated the utilization of cost of service to the total exclusion of value of service, the Commission held that "both concepts are appropriate to the telephone rate-making process and must be used in appropriate balance, depending upon the conditions developed in each rate proceeding."^{76/}

Lifeline rates are not mandated by statute. However, in a recent rate case involving a telephone company, an intervenor suggested that the company should consider implementing an "economy" rate for elderly persons on fixed incomes. The company indicated it was receptive to the idea and the Commission therefore ordered the company to file a proposal for "economy service" to be reviewed by the Commission staff.^{77/}

The Virginia legislature has imposed a duty upon the Commission to investigate the "acts, practices, rates or charges of public utilities" to determine whether they promote energy conservation and economic efficiency.^{78/} The statute also gives the Commission authority to implement rates to promote conservation and efficiency

provided, however, that nothing in this section shall be construed to authorize the adoption of any rate or charge which is clearly not cost-based

or which is in the nature of a penalty to the otherwise permissible use of utility services. 79/

To this end, the Commission has encouraged utilities to institute flattened rate structures. In Re Roanoke Gas Co., 80/ the Commission noted

. . . [I]n an effort to provide greater energy conservation incentives, we encourage the company in future rate filings to reduce the number of rate steps for all schedules and the disparity in rates between the high and low steps in each schedule. 81/

Another gas company historically followed a "declining-block" rate structure, but in a recent rate case revised its rate structure and the company now charges customers a basic service fee and then a flat rate for all energy consumed. 82/

In addition to authorizing more flattened rate structures, the Commission has ordered experimental load management programs, including voluntary time-of-use rates to encourage energy conservation. 83/

Reported Commission decisions have not dealt with either the pricing of excess power generated by a utility or other generator or the pricing of by-product services resulting from electrical or thermal generation.

VII. ISSUANCE OF SECURITIES

A. Securities

The Commission is granted authority to control the issuance of stocks and stock certificates or other evidences of interest or ownership, and bonds, notes and other evidences of indebtedness by public utilities. 84/ A public utility may not issue a security payable at periods of

twelve months or more after the date of issuance without authorization from the Commission.^{85/} A public service company may issue stocks and stock certificates for the following purposes and no others, namely:

- (1) For the acquisition of property . . .
- (2) For the construction, completion, extension or improvement of its facilities;
- (3) For the improvement or maintenance of its service;
- (4) For the discharge or lawful refunding of its obligations; or
- (5) For the reimbursement of monies actually expended from income, or from any other moneys in the treasury of the public service company not secured by or obtained from the issue of its stocks or stock certificates payable at periods of twelve months or more after the date thereof^{86/}

B. Capital Structure

The Commission has not promulgated any specific standards as to what constitutes a reasonable or an acceptable capital structure for a public utility. A reasonable capital structure for a telephone company was found to consist of 57.18 per cent common equity, 34.62 per cent long-term debt, 2.90 per cent short-term debt, 2.08 per cent advances, 2.49 per cent deferred taxes, and .73 per cent job development credit.^{87/} However, in a subsequent case involving the same utility, the Commission, for ratemaking purposes, approved the use of the consolidated capital structure of the parent company, consisting of 44.53 per cent debt, 3.78 per cent preferred equity, 45.05 per cent common equity, and 6.64 per cent reserve for deferred taxes, reserve, as the capital structure of the operating subsidiary telephone utility.^{88/}

A reasonable capital structure of a power company was found to consist of 60.1 per cent long-term debt, 30.3 per cent common equity, 7.0 per cent preferred stock, 2.5 per cent cost-free capital, and .1 per cent customer deposits. ^{89/}

APPENDIX A

<u>CASE</u>	<u>ALLOWED % RATE OF RETURN</u>	
	<u>OVERALL</u>	<u>ON COMMON EQUITY</u>
<u>Re Delmarva Power & Light Co.,</u> 28 P.U.R.4th 138 (1978)	8.75	12.5-13
<u>Re Washington Gas Light Co.</u> 27 P.U.R.4th 369 (1978)	9.25	13
<u>Re Roanoke Gas Co.,</u> 26 P.U.R.4th 117 (1978)	9.82	13
<u>Re Central Tel. Co.,</u> 25 P.U.R.4th 422 (1978)	8.34	13
<u>Re Potomac Edison Co.,</u> 25 P.U.R.4th 465 (1978)	9.5	13.3-13.6
<u>Re Potomac Elec. Power Co.,</u> 25 P.U.R.4th 439 (1978)	9.1	12.75-13
<u>Re Appalachian Power Co.,</u> 22 P.U.R.4th 548 (1977)	9.14	13
<u>Re Chesapeake & Potomac Tel. Co.,</u> 10 P.U.R.4th 255 (1975)	9.1	11

FOOTNOTES

1. Va. Code §56-235 (Michie Supp. 1980).
2. Va. Const. art. 9, §2.
3. Va. Code §56-35 (Michie 1974).
4. See, Id., §56-1 for definition. See also ch. 2 for discussion.
5. See, Id., §56-232 (Michie Supp. 1980).
6. Id. §56-37 (Michie 1974).
7. Id. §56-249.
8. Id. §56-236.
9. Id. §56-237 (Michie Supp. 1980).
10. Id. §56-237.1.
11. Id. §56-237.2.
12. Ibid.
13. Id. §56-238 (Michie Supp. 1980).
14. Ibid.
15. Id. §56-234 (Michie Supp. 1980).
16. Id. §56-235.
17. Id. §56-235.2 (Michie Supp. 1980).
18. Re Potomac Edison Co., 25 P.U.R.4th 465, 468 (1978).
19. Re Chesapeake & Potomac Tel. Co., 3 P.U.R.4th 160, 170 (1974).
20. House Joint Resolution No. 348 (January 22, 1979).
21. Argus Regulatory Scope, July, 1978 pg. 3.
22. Commission, Office of General Council, letter dated 9/17/79.
23. Re Chesapeake & Potomac Tel. Co., 91 P.U.R.3d 437 (1971).
24. Id. at 444.

25. Re Potomac Elec. Power Co., 3 P.U.R.4th 197, 201 (1974).
26. Re Virginia Elec. & Power Co., 84 P.U.R.3d 1 (1970).
27. Re Potomac Edison Co., 25 P.U.R.4th 439, 442 (1978).
28. See, e.g., Re Appalachian Power Co., 22 P.U.R.4th 488, 552 (1977).
29. Ibid.
30. Id. at 552.
31. Id. at 553.
32. Re Potomac Edison Co., 25 P.U.R.4th 465, 469 (1978).
33. Id. at 472.
34. 25 P.U.R.4th 439 (1978).
35. Id. at 441.
36. Id. at 441.
37. Re Washington Gas Co., 27 P.U.R.4th 369, 375 (1978).
38. Re Virginia Elec. & Power Co., 84 P.U.R.3d 1 (1970).
39. Id. at 6.
40. Mr. S. Frank Lies, Asst. Director of Accounting and Finance, Commission, Telephone conversation 8/9/79.
41. City of Norfolk v. Chesapeake & Potomac Tel. Co., 64 S.E. 2d 772, 784 (Va., 1951), Central Tel. Co. v. State Corp. Comm'n, 252 S.E. 2d 575, 585 (Va., 1979).
42. Commonwealth v. Virginia Elec. & Power Co., 180 S.E.2d 657, 685 (Va. 1971).
43. Arlington County Bd. of Supervisors v. Virginia Elec. Power Co., 196 Va. 1102, 87 S.E.2d 139 (1955).
44. 3 P.U.R.4th 160 (1974).
45. Id. at 174.
46. Re Roanoke Gas Co., 96 P.U.R.3d 91 (1973).
47. Id. at 95.

48. Re Virginia Elec. & Power Co., 84 P.U.R.3d 1 (1970).
49. Id. at 9.
50. Re Investigation of the Advertising Practices of Gas, Telephone and Electric Utilities, Case No. 19523 (September 4, 1975).
51. Va. Code §56-78 (Michie 1974).
52. Re Chesapeake & Potomac Tel. Co., 10 P.U.R.4th 255, 260 (1975).
53. Ibid.
54. Central Tel. Co. v. State Corp. Comm'n, 252 S.E.2d 575, 585 (Va. 1979).
55. Re Virginia Elec. & Power Co., 84 P.U.R.3d 1 (1970).
56. Mr. S. Frank Leis, Asst. Director of Accounting and Finance, Commission, telephone conversation 8/9/79.
57. Ibid.
58. Ibid.
59. Re Washington Gas Light Co., 27 P.U.R.4th 369, 377 (1978).
60. Mr. S. Frank Leis, Asst. Director of Accounting & Finance, Commission., Telephone conversation, 8/9/79.
61. See, e.g. Re Central Tel. Co., 25 P.U.R.4th 422, 429 (1978); Re Potomac Elec. Power Co., 25 P.U.R.4th 439, 446 (1978); Re Appalachian Power Co., 22 P.U.R.4th 548 (1977).
62. Re Appalachian Power Co., 22 P.U.R.4th 548 (1977).
63. Re Chesapeake & Potomac Tel. Co., 10 P.U.R.4th 255, 265 (1975).
64. Ibid.
65. 25 P.U.R.4th 465 (1978).
66. 96 P.U.R.3d 91 (1972).
67. Re Appalachian Power Co., 22 P.U.R.4th 548, (1977).
68. Re Central Tel. Co., 25 P.U.R.4th 422, 429 (1978) rev'd on other grounds sub nom; Central Tel. Co. of Va. v. State Corp. Comm'n, 252 S.E.2d 575 (Va. 1979).

69. Mr. J. R. Wittine, Director of the Division of Energy Regulation, Commission, Telephone conversation 8/10/79.
70. Re Potomac Elec. Power Co., 25 P.U.R.4th 439, 448 (1978).
71. Re Washington Gas Light Co., 27 P.U.R.4th 369 (1978).
72. Id. at 382.
73. Ibid.
74. Id. at 384.
75. Ibid.
76. Re Chesapeake & Potomac Tel. Co., 3 P.U.R.4th 160, 179 (1974).
77. Re Central Tel. Co., 25 P.U.R.4th 422, 437 (1978).
78. Va. Code §56-235.1 (Michie Supp. 1979).
79. Ibid.
80. 26 P.U.R.4th 117 (1978).
81. Id. at 121.
82. Re Washington Gas Light Co., 27 P.U.R.4th 369 (1978).
83. Mr. J. R. Wittine, Director of the Division of Energy Regulation, Commission, Telephone conversation, 8/10/79.
84. Va. Code §56-56 (Michie 1974).
85. Id. §56-57.
86. Id. §56-58.
87. Re Chesapeake & Potomac Tel. Co. of Va., 3 P.U.R.4th 160 (1974).
88. Re Chesapeake & Potomac Tel. Co. of Va., 19 P.U.R.4th 349, 358 (1977).
89. Re Appalachian Power Co., 22 P.U.R.4th 548 (1977).

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

- 63 -

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.

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