

THE REGULATION OF CABLE
TELEVISION SUBSCRIBER RATES
BY STATE COMMISSIONS

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July 1978

Publication P-78-6

This report was prepared for Kalba Bowen Associates, Inc., in fulfillment of a subcontract to the Harvard Program on Information Resources Policy under National Science Foundation Grant #APR76-04827 A01.

Any opinions, findings, conclusions or recommendations expressed in this publication are those of the author and do not necessarily reflect the views of the National Science Foundation.

Abstract

The traditionally conceived concerns of stakeholders in the rate regulation game, i.e. prevention of consumer "gouging" by a monopolistic business v. overregulation by bureaucrats understanding little about the cable industry, are examined. Specific issues confronting these players, including whether or not there should be rate regulation at all, and if so, what form regulation should take, which systems and rates should be regulated, etc., are analyzed. The rate base rate-of-return method of regulation, as well as possible alternatives such as the common tariff procedure and "cost of living" adjustments, are assessed and some new insights concerning how cable-related stakeholders (i.e. cable operators, state regulators, municipalities, etc.) view state rate regulation are offered.

Acknowledgments

Special thanks are due the following persons, who reviewed the study plan, supplied data, criticized drafts, or otherwise helped me in preparing this report. However, they are not responsible for -- nor do they necessarily agree with -- the views expressed herein. Any factual errors or misinterpretations are solely mine.

Anne E. Birinyi helped gather much of the material for this study, as well as doing an excellent editing job. Claire Bishop supervised the production of the report. Margaret Helfrick ably prepared successive and numerous drafts of this report. Her patience does not go unnoticed.

Yale Braunstein

Konrad Kalba

Henry De Castilio

William Kenny

Paul Dezendorf

John LeGates

Les Dryden

Anthony Oettinger

Jeffrey Forbes

Bruce Owen

Winston Himsworth

David Sheehan

Philip Hochberg

Howard Slater

Manley Irwin

Michael Suffness

HARVARD UNIVERSITY - PROGRAM ON INFORMATION RESOURCES POLICY

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The state cable television regulation project addresses the political dynamics, legal options, regulatory issues and economic impacts of state government involvement in cable television. This 18-month project was conducted by the Harvard University Program on Information Resources Policy in conjunction with Kalba Bowen Associates, Inc., under a National Science Foundation grant.

The following is a complete list of this report series.

- P-78-2 Regulatory Politics: State Legislatures and the Cable Television Industry, Konrad K. Kalba, Larry S. Levine, and Anne E. Birinyi, August 1978.
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- P-78-11 Executive Summary of Findings of the State Cable Television Regulation Project, Konrad K. Kalba, Larry S. Levine, Yale M. Braunstein, and Philip R. Hochberg, December 1978.

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1.0 INTRODUCTION

The regulation of cable television subscriber rates is of great concern to the many interests involved in providing CATV service. This concern is reflected in many ways, but one useful gauge is the fact that all eleven of the regulating states have been given statutory jurisdiction or have asserted jurisdiction over cable television subscriber rates.¹ As set forth in Section 2.0 below, the format and extent of this jurisdiction differ significantly across states but, nonetheless, the magnitude of activity in this area indicates a more than casual interest by legislators and regulators.

Depending upon one's perspective, the regulation of subscriber rates can be seen as a way to protect consumer "gouging" by a monopoly business or as evidence that cable is being over-regulated by bureaucrats who know little about the actual market within which the industry operates. There are several other shades of opinion between these extremes. The following outlines the traditionally conceived concerns of each of the parties at interest in the rate regulation game:

Legislators -- their concern is usually seen as stemming from the fact that the issue of cable regulation in some cases has been brought to the legislature by consumers or others who fear or have experienced cable operator improprieties. One of these improprieties (feared or experienced)

¹ This paper has adopted the distinctions between regulated and unregulated states originally set out in Philip R. Hochberg, The States Regulate Cable: A Legislative Analysis of Substantive Provisions, Harvard University Program on Information Resources Policy, Publication P-78-4, July 1978. The regulated states are: Alaska, Connecticut, Delaware, Hawaii, Nevada, New York, New Jersey, Massachusetts, Minnesota, Rhode Island and Vermont.

was that cable operators would take advantage of their "monopoly" position in communities and charges usurious rates for service. As a reaction to this argument and in order to appear active in the cause of consumerism, legislators have sometimes responded by giving broad jurisdictional mandates to regulatory agencies. In some cases where cable television has been simply defined as a public utility (with all of the existing utility regulations then applied), there has been little concern and debate over the differences between CATV and other utilities. This lack of concern has generally led to CATV rates being regulated as if they were public utility rates.

Regulators -- they are seen as concerned with fulfilling their mandates, but in cases where the legislature has given broad grants of jurisdiction, there is a good deal of discretion left to the regulatory agency. An agency may take on the task of regulating rates with fervor for several reasons: the "monopoly/rate gouging" argument cited above; the use of rate case loads to justify bureaucratic expansion and growing budget requests; or because it feels that municipalities do not have the time or expertise to perform effective oversight functions.² Subsequent to defining the limit of their rate jurisdiction, regulators become concerned with the methods

² As we will see in Section 4.0, however, much of the impetus for the movement towards alternatives to rate base rate of return has come from the burden imposed upon regulatory agencies by rate regulation responsibilities.

by which they determine whether or not rate adjustments should be approved. In addition, regulators are sometimes concerned about the interaction of rate regulation methods with policy considerations in other areas such as line extension. For example, if costs are not adequately covered by subscriber rates, there may be less system extension. On the other hand, if line extension requirements are too strict, then the costs of additional plant extension might be reflected in higher rates for all subscribers.

Consumers -- they are generally seen as concerned with getting the best possible service at the lowest price. In areas where there is little or no available over-the-air television, consumers have come to depend upon CATV to receive their broadcasting signals. This dependence has led them to believe that they are at the "mercy" of a monopoly similar to gas, electric and telephone services. They have come to expect that regulators, local and/or state, will protect them from being overcharged for CATV service. Therefore, pressure has been brought to bear upon legislators and regulators to become more active in subscriber rate oversight.

The Cable Industry -- it has asserted that many of the "monopoly" arguments made by legislators, regulators and consumers do not apply to the cable television industry. They claim that CATV competes with over-the-air broadcast television (in areas where signals can be received), rooftop antennas and other

entertainment outlets vying for the consumer's discretionary dollar. Therefore, cable television must be seen, they argue, as a luxury service industry where competitors and consumer demand can effectively control price levels. In the past, the industry has argued that if there is to be rate regulation, then local governments should assume this responsibility because they are the ones actually receiving the service and therefore know its value.³ It should also be noted that the cable industry is not monolithic, and therefore individual cable operators may have divergent concerns depending upon such factors as size of the system, ownership, type of community, etc. In addition, there has been a concerted effort by the industry to have subscriber rates deregulated at the local level, an effort which has recently been gaining momentum.

Other Interests -- there are several other groups which appear to have stakes in the rate regulation game. Financial institutions, such as banks and insurance companies, which provide much of the capital the industry needs may be concerned that rates are set high enough so that systems do not default on their loans. But the interests of financial institutions will

³ Lately, however, this industry position may be changing. As we will see in Sections 2.2 and 2.3 below, cable operators may be realizing that state agencies can rescue them from the whims and political concerns of local officials. This could lead to the industry advocating more state regulatory authority in the rate area. For an analysis of the effect of state regulation on subscriber rate levels, see Yale M. Braunstein, Konrad K. Kalba and Larry S. Levine, The Economic Impact of State Cable TV Regulation, Harvard University Program on Information Resources Policy, Publication P-78-7, October 1978.

most likely depend upon whether these institutions represent debt or equity investors. If rate regulation assures that there is an equity return, then debt holders can be protected and equity risk might be limited. But if rate regulation constrains profits, this can work to the detriment of the equity holder. Potential service competitors such as the telephone company may be interested in seeing that the cable services which might be competitive (such as point-to-point data transmissions) are regulated at some level of government so that the cable industry will be prevented from engaging in predatory pricing.⁴

These concerns and interests are generally translated into specific policy questions. The following is an outline of the specific issues which confront interested parties in the rate regulation arena.

- Should there be regulation of rates?
- If so, what level of government should have major responsibility for rate regulation: federal, state or local?
How should the various levels of government interact?

⁴ One case in New York illustrates this telephone company attitude. Manhattan Cable began to provide point-to-point data transmission services to several banks in Manhattan in 1974. Subsequent to this service offering, the New York Public Service Commission (PSC) issued an Order to Show Cause why Manhattan Cable should not be required to file a tariff with the PSC. In New York Telephone's comments in that case, they stated:

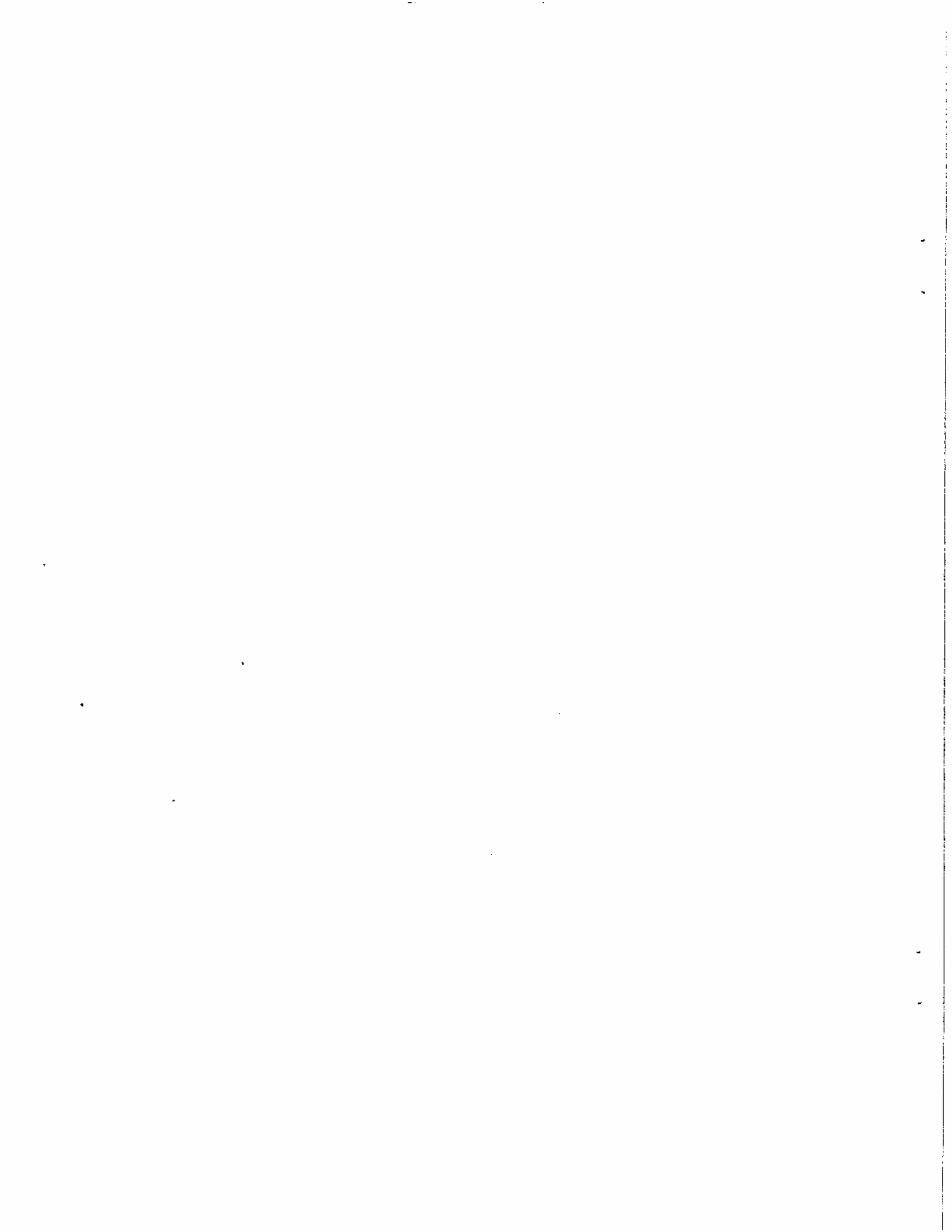
"...to subject the service of one entity [the telephone company] to strict regulation while subjecting the same service of another entity [Manhattan Cable] to little or no regulation is illogical, unfair, and unconstitutional."

See Order to Show Cause -- Case #27091, New York Public Service Commission, October 26, 1976, and accompanying responses.

- If jurisdictional need has been established, what form should rate regulation take: approval, actual rate setting, etc.?
- What specific methods should an agency use in approving or setting cable subscriber rates, i.e. what financial and/or accounting techniques should be applied?
- Which systems should be regulated? Do all systems need rate oversight? Can any useful distinction be made between competitive and noncompetitive cable systems, and should different procedures, methods, standards, etc., be applied to each category?
- What rates should be regulated? Should pay and other ancillary service rates be regulated by some level of government? What are the cross-subsidy issues and outcomes which flow from the decision to regulate or not to regulate certain classes of rates?
- Are the costs of rate regulation to the system operator, and ultimately to the consumer and taxpayer, justified by the benefits which might accrue to the subscriber and taxpayer?

To some extent, this paper will touch upon all of the above questions. However, we will concentrate on the structure and methods of rate regulation currently being used or proposed by state agencies. This descriptive approach should help the reader to determine the options available and tentative answers to the underlying question: should there be rate regulation, and if yes, what level of government should have this responsibility?

The intent of this paper is to provide a retrospective look at cable television rate regulation by state regulatory authorities. The method used will be a case history approach, whereby we will review the history of rate regulation in several states by looking at statutes, administrative rules and regulations, and case decisions which apply to rate regulation. From this limited history, it will be up to the interested parties to determine the future directions of state cable television rate regulation.



2.0 THE FORMAT OF RATE REGULATION

As mentioned in Section 1.0, all of the states which regulate cable television have been given or have taken jurisdiction in the subscriber rate area.⁵ In some states, regulatory oversight is minimal (i.e. Delaware), while in other states, regulation takes on a more important role (i.e. Connecticut and Massachusetts). In addition to how obtrusive rate regulation is at the state level, several other important differences emerge. At what point in the rate setting process does the agency become involved? What role do municipalities play when state agencies become involved? What are the statutory requirements and limitations which are placed on the state agency? If one were to delineate the format of rate regulation in individual states, these questions would need to be answered.

Several approaches are outlined in Sections 2.1 to 2.3. We will review an approach which effectively limits the role of municipalities to that of a party in rate proceedings at the state level (New Jersey and Connecticut exemplify this approach). An alternative format limits the state role to verifying or approving rates which have been negotiated at the local level (New York and Massachusetts serve as examples of this structure). A third alternative places the state in a quasi-mediator role whereby the state agency may set rates only after negotiations between the municipality and the cable system have reached an impasse (again, New York and Massachusetts are used as examples).

⁵ See Hochberg, op. cit., pp. 29, 91-96, for a summary of the statutory provisions relating to rate regulation.

2.1 Rate Setting by the State Agency: Connecticut and New Jersey

In both Connecticut and New Jersey, subscriber rates are set at the state level. However, the format of this regulation differs between these two states. The major differences revolve around the role of municipalities in the rate setting process. As we will see below, municipalities have more authority in New Jersey than in Connecticut, but only in the fixing of initial rates.

In Connecticut, cable television systems are defined as public service companies, and therefore come under the jurisdiction of the Public Utilities Control Authority (PUCA).⁶ Cable systems are subject to all of the general laws and rules and regulations which affect other public service companies. CATV operators must obtain a certificate of public convenience and necessity prior to construction or operation of a CATV system.⁷ In the initial application for a certificate of public convenience and necessity, the CATV system applicant must submit a statement of proposed rates which will be charged.⁸ The PUCA, in approving or rejecting the application in whole or in part, must:

...take into consideration the public need for the proposed service, the suitability of the applicant or, if the applicant is a corporation, of its management, the financial responsibility of the applicant and the ability of the applicant to perform efficiently the service for which authority is requested.⁹

⁶ §16-1, Connecticut General Statutes Revised (hereinafter CGSR).

⁷ §16-331, CGSR.

⁸ §16-1-86 (f), Administrative Regulations, Connecticut Public Utilities Control Authority (hereinafter "Connecticut Regulations").

⁹ §16-331, CGSR.

Although the standard of review for proposed rates is essentially the same as for rate adjustments, there is one difference: in approving proposed rates, the only data available are projections. For rate adjustments, actual financial figures are available. This is why the PUCA often treats a rate application by a start-up company in a more flexible manner than a rate adjustment by a company which is already operational.

In the case of rate amendments, proposed changes must be approved by the PUCA, which is obligated to hold a public hearing concerning the rate amendment application.¹⁰ The standard for reviewing rate amendment applications is specifically outlined in the statute. The PUCA is to assure:

...that the level and structure of rates be sufficient to allow public service companies to cover their operating and capital costs, to attract needed capital and to maintain their financial integrity, and yet provide appropriate protection to the relevant public interests, both existing and foreseeable;...[and that] rates charged customers reflect prudent and efficient management of the franchise operation.¹¹

Therefore, the Authority is required not only to look at the overall return on investment, but is also empowered to assure that the cable system is being managed efficiently.

The Authority must make a final decision on a rate amendment application within 150 days from the time of filing. If a decision is not rendered within this time period, the system operator may put the proposed rates into effect. Prior to this 150-day deadline, if the cable company asserts that substantial deterioration of the adequacy and reliability of service will occur without an immediate rate increase, the PUCA may approve an interim rate increase.

¹⁰ §16-19 (a), CGSR.

¹¹ §16-19 e (a) (4) and (5), CGSR.

In both cases, interim rate revenues are subject to refund if the Authority determines that rates should be lower than those allowed in the interim.¹²

The PUCA has promulgated several procedural rules governing the application for rate adjustments. If the public service company serves more than 50,000 customers, it must file a notice of intention to file an amended rate schedule. This notice must be delivered to the Chief Executive of each municipality served by the public service company (as well as the governor's office and the PUCA), between 30 and 60 days prior to actually filing the amended rate schedule with the PUCA.¹³ As of April 1978, however, no cable system in Connecticut served 50,000 customers, and therefore none came under this regulation.¹⁴ The other PUCA regulations on rate setting are concerned with what a cable operator must submit to the PUCA in support of a rate increase application. Among those materials is a cable system computed rate base rate of return calculation which would indicate the rate of return earned within the past four years by the cable company and the return which would be earned under the proposed rates.¹⁵ While this does not necessarily bind the PUCA to using this method of determining whether rates comply with statutory requirements, it does seem that the PUCA is predisposed to this method.

As can be seen from the foregoing account, Connecticut generally treats cable television systems exactly like other public service companies. Franchising and initial rate setting occur at the state level. Rate adjustments must be approved by the PUCA in accordance with rather specific statutory

¹² §16-19 (b), (c) and (d), CGSR.

¹³ §16-1-22 (b), Connecticut Regulations.

¹⁴ Letter from Howard Slater, Counsel for the Connecticut Cable Television Association, April 26, 1978.

¹⁵ §16-1-55 (j), Connecticut Regulations.

requirements. There appears to be a predilection towards one method of rate regulation. This stems both from the statutory requirements and the actual administrative regulations. Finally, a structure of rate regulation emerges which limits the participation of municipalities to that of a party in the proceeding. The one regulation which seems to facilitate municipal participation in the rate setting process (i.e. requiring Chief Executive notification of any rate adjustment petition) was not, as of 1978, applied to any cable system in the state.

In New Jersey, cable television systems are regulated by the Office of Cable Television, which is an office of the Board of Public Utilities.¹⁶ In contrast to the Connecticut case, however, the New Jersey Cable Television Office does not franchise cable systems directly. The Office issues certificates of approval, but the statute requires that the CATV company must first obtain a consent from the municipality or municipalities where it plans to operate.¹⁷

The municipal consent must include a schedule of rates which is to be worked out between the municipality and the cable operator.¹⁸ The Office of Cable Television, in approving the municipal consent, may approve or amend the rate schedule. The Office can only amend the rates in the municipal consent if the rates "...are or may be excessive, unreasonable, unjustly discriminatory, or unduly preferential...".¹⁹ In this situation the Office

¹⁶ §48:5a-4 through §48:5a-9, New Jersey Statutes Annotated (hereinafter NJSA).

¹⁷ §48:5a-22, NJSA. It should also be noted that §48:5a-17 (d), NJSA, allows a company to seek and obtain a certificate of approval without municipal consent, if the company can establish that a municipal consent was arbitrarily denied to them.

¹⁸ §48:5a-28 (g), NJSA.

¹⁹ §48:5a-16 (c), NJSA.

must hold a hearing. Subsequent to the hearing, a new schedule of rates may be approved by the Board of Public Utilities which supersedes the schedule in the municipal consent. If the Office finds that there is no problem with the rates in the municipal consent (either before or after a hearing), the municipally-approved rates go into effect. This is the only point in the rate setting process in which the municipality has actual decision-making powers.

Once initial rates are set, rate amendments are approved by the Office of Cable Television with the municipality active only as a party in the proceeding.²⁰ The Board of Public Utilities may also change the rates charged by a CATV system on its own motion. The statute requires that

...from time to time [the Board] shall cause the established rates and rate schedules of each CATV company for cable TV reception service to be reviewed...²¹

After reviewing rates, if the Board determines that any cable system's rates are excessive, unreasonable, unjustly discriminatory, or unduly preferential, the Board must hold a hearing which allows the cable operator to state why the rates charged are not excessive, etc. Subsequent to the hearing, the Board can amend rates if it chooses. However, this procedure seems to indicate that any review of rates initiated by the Board would eventually have to include a review of all cable systems within the state.²² The municipality where each system is certificated is explicitly allowed to intervene in any hearing resulting from a general rate review of New Jersey systems.²³

²⁰ §48:5a-28 (g), NJSA.

²¹ §48:5a-11 (b), NJSA.

²² It also appears that there has never been a total review of all cable rates initiated by the Board.

²³ §48:5a-11 (c), NJSA.

In the Connecticut situation (outlined above in this section), we saw how the PUCA-promulgated rules required a cable system to submit a rate base rate of return calculation in petitioning for a rate amendment. This called into question whether there was an implicit orientation towards using this method to determine rate adjustments. The New Jersey Board of Public Utilities also has outlined what must be submitted in support of a rate adjustment petition.²⁴ The type of material required, however, does not appear to fix the method by which reasonable rates are determined. The statute, however, does speak to the method issue. While it does not prescribe a particular method which must be used, it does indicate that certain revenues must be taken into account when the Board does prescribe rates:

"Whenever pursuant to the provisions of this act the Board or the Director is required to determine whether any of the rates, charges, fees, tariffs, and classifications of a CATV company...are unjust, unreasonable, discriminatory, or unduly preferential, there shall be taken into consideration any fees which are charged for the use of a CATV system, or part thereof, as an advertising medium, or for services ancillary to such use, and from which the CATV system derives revenue, directly or indirectly, and the effect thereof upon the company's requirements for revenue from such fees, rates, charges, tariffs, and classifications...."²⁵

The statute specifies that the Board must take into account all advertising revenues and ancillary service revenues in determining other rates (for example, basic subscriber rates). While this is not significant as of 1978 (advertising revenues on cable systems are quite small), it could mean that in the future basic subscriber service rates will be cross-subsidized by advertising and ancillary service revenues. In fact, the New Jersey

²⁴ §14:22-6.17, "Tariff Filings or Petitions which Propose Increases in Charges to Customers," New Jersey Office of Cable Television Rules of Procedure.

²⁵ §48:5a-11 (e), NJSA.

Office of Cable Television has been using the above statutory requirement when applying rate base rate of return methods.²⁶

The format of rate regulation in both New Jersey and Connecticut illustrates an environment where municipalities have few (if any) formal decision-making powers. This can be contrasted with the structure of rate regulation in Massachusetts and New York, where municipalities have considerably more formal decision-making authority.

2.2 Rate Review by the State Agency: Massachusetts and New York

The legislation which created the Massachusetts Community Antenna Television Commission gave the agency the option of regulating subscriber rates. However, this option could not be exercised until three years from the date the Commission was created. During this three-year period, the Commission was directed to study the necessity and desirability of rate regulation.²⁷ The legislation was generally silent as to the structure this regulation could take (if jurisdiction was deemed desirable), although it did include procedures by which aggrieved parties could appeal Commission rate decisions to the courts. The legislature also placed a seven-dollar maximum rate ceiling on subscriber rates during the three-year period.²⁸

While the Massachusetts legislation was silent as to the exact form of rate regulation which the Commission could impose, it did, nonetheless,

²⁶ This statutory directive has been followed, according to a telephone conversation with Dennis Linken, Deputy Director of the New Jersey Office of Cable Television; Joseph Fischer, Senior Hearing Examiner, Office of Cable Television; Michael Suffness, Hearing Examiner, Office of Cable Television; and Paul Dezendorf, Coordinator of State and Local Planning, Office of Cable Television, September 23, 1977.

²⁷ §15, Chapter 166a, Massachusetts General Law (hereinafter "MGL").

²⁸ §20.2, Chapter 166a, MGL.

cite the standards and the general structure by which regulation should be governed.

...[The Commission] may, upon its own motion or upon request of any issuing authority or licensee, after due hearing and investigation, fix and establish for each community antenna television system in the Commonwealth, a fair and reasonable rate of return from subscription rates charged to subscribers, said rates to be adequate, just, reasonable and non-discriminatory.²⁹ [Emphasis added]

Several points can be made about these legislative instructions. First, they left open the possibility that the Commission could either totally preempt jurisdiction over rates (although localities would have to remain a party in any state proceedings), or the Commission could leave rate-making responsibilities to the municipalities with little or no state oversight. Second, the legislature gave little guidance as to the methods which the Commission could use if they ultimately entered into the rate-making area. The only criterion was that the method chosen would have to assure that the cable system could reap a "fair and reasonable rate of return" from rates that were to be "adequate, just, reasonable and non-discriminatory."³⁰ The "fair and reasonable rate of return" standard conveyed a very specific legal and precedential meaning taken from the

²⁹ §15, Chapter 166a, MGL.

³⁰ In addition, one other point about this mandate can be made. The legislation as originally worded said "...fix and establish individually". This meant that each cable system's rate would have to be set in a separate proceeding if the Commission was to take rate jurisdiction. An amendment to this wording was passed by the legislature (at the request of the Commission) in 1974 which deleted the word "individually". This opened up the possibility for consolidated proceedings, i.e. a number of cable systems serving adjoining areas under common ownership could come before the Commission requesting rate adjustments for all their systems. It also allowed the Commission to consider the establishment of a common tariff procedure, a method of rate-making which may have been foreclosed had the amendment not been passed. (See Section 4.1, below.)

history of formal public utility regulation, i.e. rates could not be "confiscatory".

The Commission's three-year study period ended in November 1974. On December 18, 1974, it issued its First Report and Order outlining the proposed structure of rate regulation in Massachusetts. The Commission concluded that rate regulation at the state level was both necessary and desirable. Before coming to this conclusion, the Commission held two public hearings (November 8th and 9th, 1974) and had the services of several consultants. Among the justifications for state jurisdiction included in the report were the following:

...the Commission can bring to bear on the process of rate regulation informative guidelines and criteria. These have been developed from intensive analyses of cable's past financial and operating experience and future projections throughout the Commonwealth.... Assuming rate authority will also permit us to carry out the mandate of Section 16 [Chapter 166a, MGL], namely to mediate between cities and towns in the event of a conflict of jurisdiction. Some cable systems utilize a single headend to provide service to more than one community. In such instances, it may not be practicable for each separate local authority to ascertain the appropriate allocation of costs, and such rate determinations may be made more efficiently at the state level.³¹ [Emphasis added]

Essentially, the justifications were both that the municipalities did not have the expertise to remain in the rate-making arena unassisted, and the state was the only governmental body which had the jurisdiction to set rates on a regional level when it seemed most appropriate. Two additional reasons were behind the Massachusetts decision to accept rate regulation jurisdiction. During the Commission study period, 15 rate proceedings came

³¹ First Report and Order, Commonwealth of Massachusetts Community Antenna Television Commission, December 18, 1974, pp. 3-4.

before municipalities. Of these, 14 rate increases had been denied in what was termed "an arbitrary fashion".³² Taking the rate-making function out of the local political arena can therefore be cited as another justification for the Commission taking rate regulation jurisdiction.³³ In addition, the Commission wished to standardize the rate-setting procedure at the local level.

The final outcome of this complex interaction of considerations is the dual regulatory structure which has existed in Massachusetts since late 1974.³⁴ The licensing authority (the municipality) is given the right to negotiate

³² Interview with Jeffrey R. Forbes, Executive Director for the Massachusetts Community Antenna Television Commission, September 22, 1977.

³³ This raises an interesting question of whether the Commission would have decided to enter the rate regulation field if they had perceived that the municipalities had been doing an adequate job. Traditionally, the reasons cited by regulators for concern over rates is that consumers need to be protected from the industry. Does the Massachusetts case represent a reversal of this traditional concern, i.e. was rate regulation jurisdiction assumed so that the industry would be protected from "arbitrary" rate decisions by municipalities?

³⁴ On March 6, 1978, the Massachusetts Commission released a Notice of Proposed Rulemaking Re: Rate Regulation Procedures, Docket #R-2, which would radically change the structure of rate regulation in Massachusetts if put into effect as proposed. This Notice follows an earlier one (July 6, 1976), which proposed revised procedures, but which was rejected in Report and Order in Docket #R-1 (May 20, 1977) (see Section 4.1 below, for a discussion of this earlier proposal). The March 1978 Notice presents the following structure: A cable operator wishing to change subscription rates would file a form (including financial data) directly with the Massachusetts Commission. Sixty days after filing, the cable operator may put the rates into effect on an interim basis (subject to rebate if the proposed rates are eventually denied). In addition, within 60 days of the initial cable operator filing, the Commission must either order a hearing on the proposed rates or set forth reasons for not ordering a hearing. If the Commission does not order a hearing, the municipality has 30 days in which to file a motion to request a hearing. The burden is on the municipality to show that a hearing is needed. If the municipality does not request a hearing within 30 days, the rates will take final effect. If a motion for a hearing is filed, the Commission may either order a hearing or reject the motion requesting a hearing. As can be seen, this structure limits the rate-making responsibilities of the municipalities. Although this is a departure from the existing structure in Massachusetts, this new structure was still in the proposal stage as of early 1978. We will therefore concentrate on the rate regulation procedures which existed in Massachusetts as of March 1978.

initial rates and rate adjustments with the cable system. Rate adjustments, when an agreement can be reached, are then forwarded to the state Commission for approval. The procedure which municipalities must follow is also set out in the rules of the Commission: a local hearing with public notice must be held within 45 days of a request for rate adjustment (this request may be initiated by the cable operator or the municipality); the findings of the municipality must be forwarded to the Commission within 45 days from the start of the hearings; the Commission must take action on this report by either approving the rates or setting a hearing de novo between 30 and 60 days after the municipality's report is forwarded. If the rates are approved, the longest the process could possibly take is 150 days or five months from the day the process was begun.³⁵ The Commission may disapprove the rates recommended by the municipality if the rates do not meet the standard of fairness and reasonableness. In this situation, the Commission would hold hearings and set rates in a de novo proceeding, with the licensing authority and the licensee included as parties to the proceeding.

There appears to be a three-fold rationale for adopting this dual regulatory approach. In the first place, most of the other sections of the cable statute and Commission rules require this municipal/state regulatory structure. For example, franchises or licenses are granted at the local level, but within guidelines set by statute and by Commission rules. Therefore, the rate-setting structure is congruent with the spirit of the legislation in

³⁵ Section 2.0 through Section 4.1 of the Procedural Regulations for Determination of Changes in Cable Television Rates and Charges, issued by the Massachusetts Community Antenna Television Commission. This procedure holds true only in those circumstances where the licensee does not exercise its right to protest the findings of the municipality. But if there was a protest, this would mean that the licensee and the issuing authority had not come to an agreement at the local level. Therefore, the procedural rules governing this situation are outlined in Section 2.3, below.

other areas. Secondly, the Commission recognized that rate negotiations could be used by municipalities as a leverage point in negotiating the quality of service to the community. The Commission was reluctant to preempt this important municipal negotiating point.³⁶ Finally, the Commissioners wanted to give those communities which had a fairly good relationship with their cable licensees a chance to achieve an agreement without the intervention of a state agency.³⁷

Despite this desire to keep the municipalities in the process, there are two situations in which the Commission can set rates without an initial hearing at the local level. If the rate regulation procedures at the local level (outlined above) are not followed, the Commission is allowed to establish rates. The second situation occurs when the Commission determines:

...that the public interest requires that the rate in one or more cable television license areas be established in a consolidated proceeding.³⁸

In contrast to the Massachusetts example, the New York State statute (creating the New York Commission on Cable Television) is quite specific as to how rates will be regulated. The overall structure of this rate regulatory oversight in New York, however, is similar to the Massachusetts structure. The New York Commission is empowered to oversee and approve all

³⁶ See note 32, supra.

³⁷ See note 32, supra.

³⁸ Section 4.1(b) of the Procedural Regulations for Determination of Changes in Cable Television Rates and Charges, issued by the Massachusetts Community Antenna Television Commission. It should also be noted that a company can bypass the local hearing process by petitioning the Commission directly for a consolidated rate hearing.

franchises granted at the local level.³⁹ The rules promulgated by the Commission require that a schedule of rates be included in any franchise submitted to the Commission for confirmation.⁴⁰ Therefore, the New York agency has jurisdiction over initial subscriber rates. The rate set in the franchise cannot bind a franchisee for more than 10 years.⁴¹ The Commission may disapprove initial rates set forth in the franchise if those rates are found to be discriminatory or preferential.⁴² Unless amended, the rates which the cable company is allowed to charge are those outlined in the franchise.⁴³

The rate regulation process which is most interesting, however, is not this initial rate approval, but the procedure by which rates may be changed during the course of a franchise. The only way in which rates may be altered is through amendment of the franchise.⁴⁴ The statute calls for Commission approval of any franchise amendments, but these amendments must first be negotiated at the municipal level.⁴⁵ Hence, the structure is similar to the Massachusetts procedure because municipal negotiation occurs first, with subsequent approval at the state level. If rates are found to

³⁹ §821 of Article 28, New York Executive Law (hereinafter "NYEL").

⁴⁰ §595.1(e) of the Rules and Regulations of the New York Commission on Cable Television (herein cited as "New York Rules and Regulations"). §595.1(e) also has a provision which would allow the franchise not to state subscriber rates. In place of these rates, the franchise must indicate that rates could not be agreed upon. For a fuller explanation of this provision, see Section 2.3, below.

⁴¹ §825.3(a), Article 28, NYEL.

⁴² §825.3(b), Article 28, NYEL.

⁴³ §825.1, Article 28, NYEL.

⁴⁴ Ibid.

⁴⁵ §822.1, Article 28, NYEL.

be discriminatory or preferential, either in approving a franchise amendment or in the initial approval of the franchise, the Commission may order that the municipality and the franchisee negotiate a new rate structure.⁴⁶ In any event, the municipal rate negotiation process is encouraged, and as will be seen in Section 2.3, below, the only point at which the New York Commission may prescribe rates is when these negotiations do not yield a satisfactory resolution.⁴⁷

Although the rules and regulations governing the New York Commission's operation were filed in April 1973, rules outlining franchise amendment procedures were not proposed until January 1976. The Notice of Proposed Rulemaking in Docket #90058 attempted to codify Commission practice which had been developed on an ad hoc, case-by-case basis. The most important case in this lineage was KLM Video, Inc., April 16, 1974, in which the Commission disapproved the adoption of a municipally-negotiated franchise amendment because a public hearing with due public notice had not preceded their adoption.⁴⁸ The procedures advanced in this Notice of Proposed Rulemaking made it mandatory that public hearings be held at the local level concerning amendments. The Commission would not approve any amendments in the future if it was found that these procedures were not followed.⁴⁹

⁴⁶ §825.4, Article 28, NYEL.

⁴⁷ The standard which the Commission uses in determining if rate amendments should be confirmed is similar to the standard outlined in the statute which governs Commission rate-setting procedures. Since these rate-setting obligations are only invoked when the negotiations at the local level break down, a discussion of these standards appears in Section 2.3, below.

⁴⁸ KLM Video Corp., Order Approving Amendments in Part and Requiring Adjustments, April 16, 1974, p. 3.

⁴⁹ Notice of Proposed Rulemaking in Docket #90058, January 15, 1976, p. 2.

But the January 1976 proposed rules had far greater implications for subscriber rate franchise amendments. The Notice was issued partly in response to a Joint Petition for Rulemaking filed by a group of New York cable television companies. The petition, citing long delays at the state level in approving rate amendments, requested that the municipally approved rates go into effect prior to the Commission approval of the amendment.

The proposed rules did not accept this suggestion in toto. They did, however, provide for interim implementation of the rate 20 days after the Commission had received an application for amendment approval. This interim implementation was subject to two conditions: the difference between the old rate and the new rate was to be held in escrow until final approval of the rate increase, and the cable system was required to inform subscribers that the rate increase needed further ratification and how subscribers could file objections to the increase.⁵⁰

On February 22, 1978, the New York Commission on Cable Television adopted regulations pertaining to implementation of interim rates and procedures for applying for Commission determination of rates.⁵¹ This order rejected the proposal to allow interim rates prior to final Commission approval.

⁵⁰ Not surprisingly, the cable industry was not particularly pleased with the conditions under which interim rates could be implemented. For example, Viacom International's Comments in Docket #90058, February 13, 1976, outlined several objections: the 20-day waiting period would mean that operators who did not bill monthly might have to wait an additional billing cycle; the escrow account served no useful purpose and hindered the system's cash flow; and if subscribers were informed that the rate increase was not final, they might elect not to pay all or part of their service bill.

⁵¹ Orders Adopting Amendments in Dockets #90058 and 90111, adopted February 22, 1978; released April 11, 1978.

2.3 Rate Setting by Default

Both the New York and Massachusetts Commissions set subscriber rates in instances where municipalities and the franchisee cannot agree on an appropriate rate -- in the case of Massachusetts, on a rate that provides the cable operator an adequate rate of return. Although this basic structure is similar in these two states, the procedures which are followed differ. These variations tend to set a distinctive tone for proceedings in each of the states and therefore deserve attention.

As mentioned above, the rate setting process in Massachusetts begins at the local level with hearings preceded by public notice. Subsequent to the hearings, the licensing authority makes a recommendation concerning the proposed rates. If, for example, the licensee requested an increase in the basic subscriber charge from \$5.50 to \$7.00 (subsequent to hearings), the municipality could grant the \$7.00 rate, choose to leave the rate at \$5.50, or could grant a rate somewhere between these two figures.⁵² In any case, the municipality makes a recommendation, which is then forwarded to the Commission (and all other parties, including the licensee).

As mentioned above, the Commission has several options. It can issue a certificate of verification (COV) or refuse to confirm the municipality's findings. The grounds on which the Commission can reject this report are: the finding that the rates do not provide an adequate rate of return; the

⁵² Of course, the municipality could agree to a rate higher than the requested \$7.00 figure, but this situation is highly unlikely. In addition, the municipality could grant a new rate on the condition that the licensee provide some new service or increase the quality of current service. If the licensee does not agree to these conditions even though the requested rate has been granted, this too could lead to a petition before the Commission. We will, however, concentrate on the usual situation where the licensee petitions because rates requested were not granted.

discovery that procedures have not been followed; or the determination (either on an ad hoc basis or as the result of a petition) that rates should be set on a regional basis. There is, however, one other set of circumstances in which the Commission cannot confirm the municipality's findings without a new hearing held at the state level. This occurs when:

...Within thirty (30) days after the receipt of an issuing authority's report and findings, a licensee adversely affected by the same files a petition for a change in rates and charges with the Commission....⁵³
[Emphasis added]

According to these regulations, the Commission is required to hold a hearing de novo if the licensee does not agree with the licensing authority's decision. The licensee, on a unilateral basis, is therefore able to bring the state into rate-setting activities. Once that petition is filed, the state must enter. This sharply contrasts with both the statute and the rules and regulations of the New York Commission, which is limited in its authority to set rates.⁵⁴

The municipality, of course, could precipitate the state's entry by automatically refusing to grant a rate increase, thereby forcing the cable operator to file a petition to disapprove the municipality's findings. In

⁵³ §4.0(a) of the Procedural Regulation for Determination of Changes in Cable Television Rates and Charges, issued by the Massachusetts Community Antenna Television Commission.

⁵⁴ There is also another major difference between New York and Massachusetts. Massachusetts operates under a statute which requires that the Commission insure that cable operators receive an adequate rate of return. This allows the issue of confiscation to come into play, i.e. if rates are not high enough to insure an adequate rate of return, then the state (or the municipality) could be charged with confiscating private property. New York's statute says nothing regarding adequate rates of return. See text accompanying footnotes 58 and 61, infra.

some cases, this posture could be politically advantageous to local authorities who wish to appear consumer-oriented (by taking a hard line on rate increases) while simultaneously forcing the resolution of the issue into a different decision-making arena. An examination of the number of rate cases adjudicated by the Massachusetts Commission tentatively supports this hypothesis. The Commission's rate jurisdiction took effect March 1, 1975. Between that date and January 11, 1978, the Commission had 26 consolidated or individual municipal findings before them. In 15 cases (all individual proceedings except one), the municipalities granted all or some of the requested rate increases and these municipal findings were approved by the Commission. In 11 cases (six individual, five consolidated), the municipalities refused the rate increase request (except in two cases where the municipality issued no report); and the cable operator petitioned the Commission, which granted some or all of the increase requested. This indicates that 42% of the cases were resolved by the state rather than by the municipality. Therefore, this "escape clause" may have been recognized by municipal officials who wish to remove themselves from the political ramifications of a rate increase decision.⁵⁵

In New York a different type of "escape clause" exists. In Section 2.2, above, we outlined how the New York Commission approves locally agreed upon rates. The questions addressed here are: which circumstances call for

⁵⁵ This 42% figure does not reflect the number of communities which were relieved of the duty of having to make a final rate decision because of the number of consolidated proceedings. If we calculate the figures on a community basis, we find that 50 communities were involved in rate proceedings, of which 32 were resolved (either individually or consolidated) at the state level. This represents 64%, in contrast to 42%. (Information was provided by the Massachusetts Community Antenna Television Commission, March 1978.)

the New York Commission to set rates; what standards must the Commission apply in setting rates; and, how long are these rates effective?

The New York statute is quite specific in answering the first of these questions. There are four situations in which the New York Commission may actually set rates:

- (1) if rates which have been agreed upon by the municipality and the cable operator are found to be discriminatory or preferential;
- (2) if a cable system is found to be providing inadequate service, the Commission may reduce rates;⁵⁶
- (3) upon complaint by an interested party that rates being charged have not been established by or are not in accordance with the franchise;
- (4) or finally, if the municipality and the cable television company indicate that they are not able to agree upon rates to be included in the franchise or renewal.⁵⁷

These sets of circumstances appear to give the New York Commission broad powers to regulate rates. However, this appearance is deceiving because it does not require the Commission to act. Several qualifications of its authority must be noted. In each situation cited above, the New York Commission is given the option of sending the municipality and cable television system back to the negotiating table to work out new rates which are either non-discriminatory or non-preferential (for situation (1)) or reflect the inadequate service being provided (for situation (2)). In

⁵⁶ §824, Article 28, NYEL, defines adequate service.

⁵⁷ §825 (5)(a) through (3), Article 28, NYEL.

situations (3) and (4), the Commission is also given this option. Therefore, while the Massachusetts structure presents an "escape clause" for municipalities, the New York structure allows the Commission to side-step their rate setting opportunities by claiming that the municipality and the cable operator have not had a reasonable opportunity to negotiate appropriate rates. Hence, a Commission "escape clause".

The New York Commission's authority gives it other alternatives. In situation (2), the Commission can set rates when inadequate service is being provided. But once this inadequacy has been remedied, the reduced rates are void and the locally agreed upon rates stipulated in the franchise become effective again. In situation (4), the New York Commission may set rates if municipalities and cable operators cannot agree. Yet, if there is agreement subsequent to this state intervention, the state-set rates are void and the agreed-upon rates become effective (as long as they are non-discriminatory and non-preferential). This indicates an attitude on the part of legislators that although the state should become involved in rate setting under certain conditions, locally-set rates should take precedence over state-set rates.

The statute and subsequent Commission policy statements have also enumerated the standards which the New York Commission must use in setting rates. In situation (1), the Commission must set non-discriminatory and non-preferential rates. The statute is not clear as to the precise meaning of this standard other than that the cable company:

...may establish, or provide for the establishment of reasonable classifications of service and categories of subscribers, or charge different rates for differing services or for subscribers in different categories.⁵⁸

⁵⁸ §825 (1), Article 28, NYEL.

The company would also not be charging discriminatory rates if it provided free or reduced service to government, educational or charitable institutions. The New York Commission rules and regulations further define what is not a discriminatory or preferential rate:

Nothing contained herein shall be construed to prevent the offerings, on a non-discriminatory basis, of sales promotion or other discounts not specified in the franchise.⁵⁹

In 1975 the New York Commission instituted a proceeding which might eventually lead to an exact interpretation of the non-discriminatory and non-preferential standards. In Notice of Inquiry in Docket #90040, the New York Commission requested that all cable television companies respond to a questionnaire concerning the extent of use of several billing and rate differential practices, as well as justification for these practices. The rate differentials with which the agency was most concerned were: volume discounts for apartment buildings and other multiple dwellings; reduced charges for second set connections; reduced charges for prepaid bills; waivers of installation charges as promotions; and seasonal rates. Although the Commission has tentatively acted (by issuing a Notice of Proposed Rule-making) on the information it received concerning billing practices,⁶⁰ there has been no action (as of early 1978) on the determination of what constitutes a discriminatory and preferential rate.

As for situations (3) and (4) cited above, the statutory standards and subsequent application of these standards has been much clearer. In both these circumstances:

⁵⁹ §595.1 (e), Footnote 3, New York Rules and Regulations.

⁶⁰ See Notice of Proposed Rulemaking in Docket #90040, July 19, 1977, and Extension of Time to File Comments in Docket #90040, August 10, 1977.

...the Commission shall fix rates at a level comparable to rates currently being fixed in cable television franchises for comparable service in comparable service areas...⁶¹

Although this standard was intended to be used in the event the Commission was forced to set rates, it has been applied in cases where the Commission has been asked to approve rate increase franchise amendments negotiated at the local level. A clear explanation of the application of this in-line standard can be found in NewChannels Corporation -- Order Approving Amendments, July 12, 1973, where the Commission stated (in approving a rate increase from \$4.95 to \$5.95) that:

In reaching this conclusion we note that the proposed rates do not appear out of line with rates charged by other cable companies, although many similar systems are charging lower rates.⁶²

This philosophy has led to the development of what is called the in-line method of determining rates, i.e. are the rates, being approved or set, "in line" with rates being charged in other systems in the state? An examination of this in-line standard and its adjustments will be discussed in Section 4.2, below.

The New York Commission has also recently clarified the procedures which must be followed when a municipality and cable operator request that the Commission prescribe rates due to non-agreement. In Massachusetts, we saw that if a municipality and cable operator could not agree on subscriber rates, the municipality usually made a decision on rates, forwarding this decision to the Massachusetts Commission for verification. We also noted

⁶¹ §825 (5)(3), Article 28, NYEL.

⁶² NewChannels Corporation -- Order Approving Amendments, July 12, 1973, p. 2.

that it was likely that in some cases a decision denying a rate increase would be made on the assumption that the cable operator would protest the decision and the Commission would be forced to prescribe rates. But because the municipality had taken some action, it was also forced into supporting this decision at any state-level hearing. The result is that although the state is in the decision-making position, an adversary relationship between the cable operator and municipality (as well as the state and localities) is fostered by these procedures.

The procedures adopted by the New York Commission also call for the Commission to make rate decisions when agreement cannot be reached. But they do not foster this adversary relationship cited above. In Order Adopting Amendments in Dockets #90058 and 90111, the New York Commission adopted the following procedure: the municipality and the cable company must submit a joint application containing certification that they are unable to agree upon rates. The municipality's certification must be in the form of a resolution or other official action of the municipal legislative body. In addition, prior to this petition the municipality must hold a hearing to gather citizen input on the advisability of having the state set rates.⁶³

These procedures seem to accomplish several objectives. The hearing and resolution aspects work against the prospect of making a quick decision to deny a rate request in hopes that the state will take on the burden. If several individuals in either the city council or the community believe that the issue can and should be decided at the municipal level, those negotiating for the municipality could be sent back to the bargaining table. By requiring that the cable operator and the municipality jointly approach

⁶³ Order Adopting Amendments in Dockets #90058 and 90111, February 22, 1978.

TABLE 2

RATE BASE RATE OF RETURN EXAMPLE

B1. What is Net Depreciated Plant?

\$700,000 = actual capital investment
-200,000 = accumulated depreciation
- 75,000 = depreciation for current year

\$425,000 = Net Depreciated Plant

B2. What are return and debt/equity ratio assumptions?

- A. Interest cost = 11.2%
- B. Equity return = 20%
- C. Percentage of total capital which is debt = 70%
- D. Percentage of total capital which is equity = 30%

Overall return (a weighted average)

11.2% x 70% = 7.8% = Debt Return
+ 20% x 30% = 6.0% = Equity Return

13.8% = Overall Return according to our assumptions

B3. What is the revenue needed to cover debt costs?

net depreciated plant x $\frac{\% \text{ of plant value}}{\text{which is debt}}$ x debt return
\$425,000 x 70% x 11.2% = \$33,320

B4. What is the revenue needed to cover equity costs?

net depreciated plant x $\frac{\% \text{ of plant value}}{\text{which is equity}}$ x equity return
\$425,000 x 30% x 20% = \$25,500

3.0 RATE BASE RATE OF RETURN REGULATION AS APPLIED TO CABLE TELEVISION

As we have seen above, the structure of rate regulation differs across the states we have examined. Subsequent to defining this structure, however, the regulatory agency must determine what financial and accounting principles and techniques it will apply when determining if specific rates meet statutory requirements. One method used by several agencies (Massachusetts, Connecticut and New Jersey, among others) is called "Rate Base Rate of Return" (RBROR). This method has been extensively used by public utility regulatory agencies in setting gas, electric and telephone rates and is now being used by PUC's and separate cable commissions in setting CATV subscriber rates. Because of its extensive use and the complexity of the method, this section is devoted to an in-depth examination of RBROR. In Section 3.1, we will look at the basic RBROR method which seeks to allow the cable firm a return on capital invested plus coverage of reasonable expenses. Section 3.2 will then examine how several agencies have handled specific elements in the RBROR method and some of the implications of defining an element in different ways.

3.1 An Illustration of the Method

Tables 1 and 2 illustrate the basic RBROR method. The following example is included only as an illustration and should not be construed as representing the way any existing regulatory entity actually determines CATV rates. It will, however, give the reader a general idea of the RBROR method as well as an introduction to many of the important terms and their definitions.

Table 1 is merely an introduction to the various characteristics of the hypothetical system we will be examining. We can note that the system is only four years old, is located in a suburban area, and has a penetration rate of 40% of the 10,000 homes passed by cable. The system has no pay service and charges a relative low \$5.00 for basic service (first set) and a charge of \$1.50/month for additional television set hookups within basic service subscribers' homes.

From the basic system characteristics, we can compute system revenues for the current year: \$278,000 including first set charges, second set charges, and 1,000 new installations for the year at \$20.00 per installation.⁶⁵ Because taxes will be a basic figure in our RBROR calculation, we will compute this next. In most states and for federal returns, income taxes are based on net income, i.e. gross revenues minus operating expenses, current depreciation, and debt service or interest. Operating expenses are hypothesized to be \$150,000, or 53.9% of net revenues. Current depreciation is \$75,000, or approximately 10% of total plant investment to date (assuming total investment was \$700,000). The interest charge included will be discussed below. Taking all of these numbers into account, the system has a before-tax income of \$19,680. Assuming a combined federal and state tax rate of 48%, taxes for this system are \$9,446, with an after-tax net income of \$10,234.

Table 2 illustrates our first Rate Base Rate of Return example. We first need to know the current net depreciated plant (NDP) investment. NDP is the rate base on which most of the subsequent figures are based.

⁶⁵ In reality, some of these installations would be given away free as a promotional device. For our purposes, however, we will ignore this and compute the installation income as if all installations were charged at the full \$20 rate.

TABLE 1

CHARACTERISTICS OF A HYPOTHETICAL CABLE SYSTEM

System Characteristics

4 years old, suburban
100 miles of plant
1 headend
1 local origination studio
no pay service
100 homes per mile - 10,000 homes passed
4,000 first set subscribers @ \$5.00 per month
1,000 second set subscribers @ \$1.50 per month
penetration of homes passed 40%

Gross Revenues for Present Year

\$240,000 - first set charges
\$ 20,000 - installation fees, assuming 1,000 new installations
this year @ \$20.00/installation
\$ 18,000 - from second set fees

\$278,000 = gross revenues for year

Net Income for Present Year

\$278,000 - gross revenues
- 150,000 - operating expenses present year
- 75,000 - depreciation for present year
- 33,320 - interest for present year

+\$ 19,680 = net income for current year before taxes

Taxes for current year @ 48% of net income (combined federal
and state taxes) = \$9,446

Net income after taxes = \$10,234

TABLE 2

RATE BASE RATE OF RETURN EXAMPLE

B1. What is Net Depreciated Plant?

\$700,000 = actual capital investment
-200,000 = accumulated depreciation
- 75,000 = depreciation for current year

\$425,000 = Net Depreciated Plant

B2. What are return and debt/equity ratio assumptions?

- A. Interest cost = 11.2%
- B. Equity return = 20%
- C. Percentage of total capital which is debt = 70%
- D. Percentage of total capital which is equity = 30%

Overall return (a weighted average)

11.2% x 70% = 7.8% = Debt Return
+ 20% x 30% = 6.0% = Equity Return

13.8% = Overall Return according to our assumptions

B3. What is the revenue needed to cover debt costs?

net depreciated plant x $\frac{\% \text{ of plant value}}{\text{which is debt}}$ x debt return
\$425,000 x 70% x 11.2% = \$33,320

B4. What is the revenue needed to cover equity costs?

net depreciated plant x $\frac{\% \text{ of plant value}}{\text{which is equity}}$ x equity return
\$425,000 x 30% x 20% = \$25,500

TABLE 2 (cont'd.)

B5. What is the revenue requirement?

revenue on debt required = \$33,320

revenue on equity required = \$25,500

total revenue requirement = \$58,820

B6. What is the gross revenue requirement, including operating expenses, depreciation and taxes?

\$ 58,820 - total revenue requirement

75,000 - depreciation for current year

150,000 - operating expenses for current year

9,446 - taxes for current year

\$293,266 = gross revenue requirement

In Section B1 of Table 2, we start with the actual capital investment of \$700,000. This is the actual cost of putting in the cables, head-end and local origination studio, and the purchase of all other equipment to begin the business.⁶⁶ The sum of \$200,000 is subtracted for depreciation for the first three years (28.6%), and another \$75,000 is subtracted for depreciation for the current (fourth) year. This yields a net depreciated plant figure (or rate base) of \$425,000.

Section B2 of Table 2 indicates what return and debt/equity assumptions will be used for this example. Debt/equity ratios are used to determine how much of the rate base is debt and how much is equity. In this example, we see that 70% of the rate base is debt, i.e. when the system was first built or purchased, the owners borrowed 70% of the purchase price from a bank or other lending institution. We also see that 30% of the rate base is equity, i.e. 30% of the system was built with the owner's money or through common stock issues.⁶⁷ For the portion of the rate base which is debt, the RBROR method allows for a return equal to the

⁶⁶ In Section 3.2.1 of this report, we will discuss the implications of including various other components in the capital investment figure, i.e. goodwill, excess fair value, capitalized start-up losses, etc. For purposes of this example, none of the above are included in capital investment. However, subscriber drops are capitalized and not expensed, and therefore this capital investment figure would include \$20,000 for drop costs (4,000 subscribers x \$5 installation; the other \$15 for installation is for labor and therefore could not be capitalized but would be expensed).

⁶⁷ This is, of course, a simplified example of the debt/equity ratio issue. Initial funding ratios are generally not used in the traditional RBROR method. Instead, book capitalization ratios are used, which would mean that stockholders' equity could be reduced (from initial funding ratios) due to start-up losses. Therefore, a situation could occur whereby the more a system loses initially, the less it can earn in the future. This would be only partially offset by including start-up losses in the rate base because the percentage of equity in the system has been reduced. See Section 3.2.1 for a discussion of the treatment of start-up losses.

rate of interest to be paid on outstanding debt. Interest charges are here computed on the actual cost of debt money to the owners, in this case 11.2% per year. The return allowable on the portion of the rate base which is owner's equity is much more judgmental and is based on (among other things) the risk involved in the enterprise. In most cases, the higher the risk the higher the equity return.⁶⁸ In this example, a 20% equity return will be used. This results in an overall return on debt and equity of 13.8% (a weighted average).

In Sections B 3 and B 4 of Table 2, we compute the amount of money needed for the return on debt and equity described above. In both cases the net depreciated plant is used as the basis for this computation. In B 5, the return on debt and equity is added together to produce a revenue return requirement of \$58,820.

In addition to allowing for debt and equity return, the RBROR method allows the system to cover reasonable operating expenses (salaries, benefits, etc.), depreciation, and taxes for the current year. As can be seen in B 6 of Table 2, this results in a \$293,266 gross revenue return. In other words, for this system to cover all expenses, depreciation and taxes, to receive an adequate return for debt service, and to give a reasonable return to investors, the system would have to raise \$293,266 in revenues in the current year.

The regulatory agency would then compare this gross revenue requirement figure to the actual revenues collected in the current year (or projected revenues for a pro forma year). If the gross revenue requirement was greater than the revenues for the current year (or projected revenues), the regulatory agency would allow the company to set a schedule of rates

⁶⁸ See Section 3.2.4, below.

which would yield the gross revenue requirement figure. In our example, the gross revenue requirement exceeds the gross revenues (for the current year from all services) by \$15,266. The system operator would then be allowed to set a rate schedule for all services which would yield an additional \$15,266 per year. The operator might choose to collect these revenues by increasing first set charges, installation fees, and/or second set fees. If, for example, the system operator decided to increase rates for first set subscriptions alone, the operator would be allowed to increase rates by \$.32, to \$5.32:

$$$.32 \times \frac{4,000}{\text{subscribers}} \times \frac{12}{\text{months}} = \$15,360$$

But this method by no means requires that the operator elect to raise rates to the \$5.32 figure. An operator could elect to raise second set fees or installation fees. The only requirement is that total revenues from all services may not exceed the gross revenue requirement computed by the RBROR method. Alternatively, the regulatory agency might require that the system operator recoup any difference between the revenue requirement and the actual revenues under the old rate by increasing basic service rates alone.

A recent case in Connecticut illustrates an alternative method of determining rates using RBROR. TelePrompTer of Danbury, Connecticut, was providing a pay service along with basic cable service.⁶⁹ All pay expenses were included in operating expenses in determining the gross revenue requirement. Concurrently, the PUCA included projected revenues from pay in the gross revenues for the projected year. By including pay expenses, the PUCA was allowing the gross revenue requirement to be increased, but at the same time, by including pay revenues, the difference between the gross revenue

⁶⁹ See TelePrompTer of Danbury, Inc., Docket #770606, December 22, 1977.

requirement and the gross revenues was decreased. Therefore, TPT was not allowed to raise its rates as much as it had proposed in its petition, and the PUCA indicated that TPT could make up the difference between the gross revenue requirement and the gross revenues by adjusting rates for all services, including pay.

An alternative way of treating pay revenues, expenses and rates would be to separate pay expenses from other expenses, treat gross revenues as revenues from services other than pay and allow the difference between the gross revenue requirement and the gross revenues to be made up by allowing the operator to adjust basic service rates only. Therefore, a regulated return would be allowed for basic services, while the operator would be free to charge what the market would bear on other services without an overall return being imposed.

There are several implications for each method. In the first method (the TPT case), an overall return for all services (basic and ancillary) is imposed. This is de facto (if not de jure) rate regulation of ancillary services. But it has some merits. If one were to wholly accept the philosophy of the second method, the regulatory agency would not only have to separate out the revenues and expenses attributed to pay service, but separate the amount of capital invested which could be attributed to pay service as well. This might be done so that basic service subscribers do not have to contribute to a return on a rate base, all of which is not being used for their benefit. While formulas could be devised to allocate the rate base to basic and pay services, these formulas would most likely be "guesstimates" and open to lengthy court battles. By using the first method, the regulatory agency does not have to become involved in the allocation of expenses, revenues and assets. But if cross-subsidy is an issue to the

regulatory agency, use of the first method will require that more attention be paid to rate structures. This could be a tiresome procedure and one that could also be challenged in the courts.

In terms of fostering the growth of ancillary services, the first method would probably not be as effective as the second method, which allows market forces to determine ancillary service rates. The second method might help develop ancillary services to an even greater extent if the rate base used in determining basic service rates was not allocated to basic and ancillary services. This would mean that basic subscribers would be cross-subsidizing ancillary services to some extent. Whether the benefits of ancillary service development is worth the costs to basic subscribers, and whether cross-subsidy in CATV is a tenable policy position, is difficult to determine at this time.

In the next section we will return to our hypothetical system when we examine the implications of using the replacement costs of the cable plant in lieu of actual capital invested.

3.2 The Method Refined and Its Implications

As is evident from the example of rate base rate of return, the method is complex. There are several subparts of the procedure which must be defined. For example, the illustration of the method began with a figure for capital invested. This became the foundation for computing the rate base of our hypothetical system. But in many instances "capital investment" is open to several definitions. Therefore, it is useful to explore the various definitions of components of the RBROR method while simultaneously

drawing conclusions as to the implications of defining a component one way rather than another.⁷⁰

This section is not meant to duplicate previous studies which examine rate base rate of return concepts and components in the public utility context. There are several texts which deal with these issues quite effectively.⁷¹ What this section will provide is an introduction to the components of RBROR with specific reference to the problems encountered in the cable television arena. We will also look at how various agencies have attempted to deal with the special character of the cable television industry when applying RBROR methods.

3.2.1 The Rate Base

One of the first components which must be defined in the RBROR method is the rate base or net depreciated plant. There are several subparts to this component: capital invested, accumulated depreciation, amortization, and working capital. (The last two subparts were not used in our example

⁷⁰ We will attempt to remain neutral in the following discussion of alternative RBROR methods. Statements such as "defining this component in this way benefits the cable operator" are both simplistic and value-laden. Instead, we will point out that if such-and-such definition of, for example, capital investment is used, higher or lower rates are likely to occur using the RBROR method (assuming all other components remain the same). It will then be up to the reader to determine which definition of the component "benefits" cable operators, consumers, or other interests.

⁷¹ For the standard texts which examine public utility ratemaking, see Alfred E. Kahn, The Economics of Regulation: Principles and Institutions, 2 Volumes (New York: Wiley, 1971); Paul J. Garfield and Wallace F. Lovejoy, Public Utility Economics (Englewood Cliffs, N.J.: Prentice-Hall, 1974); James C. Bonbright, Principles of Public Utility Rates (New York: Columbia University Press, 1961); Emery Troxel, Economics of Public Utilities (New York: Rinehart, 1947); and Martin T. Farris and Roy J. Sampson, Public Utilities: Regulation, Management and Ownership (Boston: Houghton Mifflin, 1973).

for purposes of clarity.) We will review the various components of the rate base below.

There are several issues currently of interest in the capital invested subpart. The first issue involves whether the regulatory agency should use the historical cost of the cable plant as capital invested, or the estimated replacement cost at current dollars. The Massachusetts Community Antenna Television Commission has turned towards the use of replacement costs rather than historical costs. In Stan-Fran Corporation, Docket #AFD-10 and AFD-2, September 10, 1976, the Massachusetts Commission cited the following reasons why replacement costs of the cable plant should be used:

...if the investment in plant is defined as the historical cost of the plant in place, the rate base tends to shrink as depreciation is taken, and hence, at a given cost of capital, the return also decreases. When the plant is fully depreciated, the return is zero and revenue equals direct operating expenses, and there is no money available to pay dividends to stockholders...in order to compensate partially for the shrinking rate base effect, we think it reasonable in this case to reckon investment in plant as the value of the physical assets at their current replacement cost as estimated by the petitioner.⁷²

The Massachusetts Commission has also used replacement costs instead of historical costs in another case.⁷³

⁷² Stan-Fran Corporation, Docket #AFD-10 and AFD-2, September 10, 1976, p. 9. It is interesting to note that this justification for using replacement cost rather than actual cost in computing the CATV rate base differs from traditional public utility justifications. While the former stresses the "shrinking rate base" problem, the latter uses "demand" arguments to justify using replacement cost rate base valuation. The reason for this is because utilities have not traditionally experienced this shrinking rate base because capital is continually being invested. This has not yet been the case in the CATV industry. See Bonbright, op. cit., pp. 225-26, and Harry Gunnison Brown, "Railroad Valuation and Rate Regulation", Journal of Political Economy, 33 (1935): 505-530.

⁷³ Pioneer Valley Cablevision, Inc., Docket #AFD-8, 9, 11, 12, 13, 14, 15, 16, 17, 19, 20, 22, June 28, 1976.

It would be useful to estimate what the effect of using replacement costs would be in our hypothetical example in Section 3.1. Table 3 illustrates a fairly simple computation of replacement costs. We see that each mile of plant is estimated to cost \$6,000.⁷⁴ Each subscriber drop is multiplied by \$25 for materials.⁷⁵ Second set drops are estimated to cost \$10, an origination studio (black and white) \$100,000, and the headend and tower \$75,000. This results in an estimated replacement cost of \$885,000, or \$185,000 above the actual capital investment of \$700,000.

Assuming that the regulatory agency allows the actual depreciation on historical costs to be subtracted from the replacement costs to compute the rate base,⁷⁶ and all other expenses, taxes and return assumptions remain the same, we can now compute the needed revenue return on this \$185,000 figure.

$$\begin{array}{r} \$185,000 \times 13.8\% \\ \text{(overall} \\ \text{return)} \end{array} = \underline{\underline{\$25,530}}$$

This \$25,530 amount can be directly passed through our former calculations to arrive at a new gross revenue requirement of \$318,796 (\$293,266 + \$25,530 = \$318,796).

⁷⁴ This is assuming that all of the cable plant is constructed above ground. If there was undergrounding, the number of underground miles would be multiplied by a higher figure to account for the higher cost of underground construction.

⁷⁵ The example uses only 4,000 as the number of subscriber drops. In reality, however, the system operator would have more than 4,000 subscriber drops in place because of disconnects. This would make the difference between replacement costs and historical costs even larger.

⁷⁶ Subtracting the actual depreciation from replacement costs, rather than a derived replacement depreciation figure, is a more liberal policy approach because it allows the net depreciated plant figure to be higher. This in turn would lead to a larger revenue requirement and ultimately higher rates.

TABLE 3

REPLACEMENT COSTS FOR A HYPOTHETICAL CABLE SYSTEM

100 Miles of Plant	x \$6,000/Mile	= \$600,000
4,000 Subscribers	x \$25/Drop	= \$100,000
1,000 Subscribers	x \$10/Drop	= \$ 10,000
1 Origination Studio		= \$100,000
1 Headend		= \$ 75,000
<hr/>		
Total Replacement Cost		= <u>\$885,000</u>
Actual Capital Invested (from B1 on Table 2)		= \$700,000
<hr/>		
Difference between Replacement Cost and Actual Capital Invested		= <u>\$185,000</u>

Subtracting out the revenues which were collected under old rates for all services (\$278,000), the additional revenues which the system operator would be allowed to collect using the replacement cost rate base is: \$40,796 (\$15,266 + \$25,530 = \$40,796). If the operator chose to collect all of these additional revenues by increasing first set subscriber fees, the operator could charge a maximum rate of \$5.84, or \$.52 more than when historical costs were used. This has only been an example and does not represent any specific case, but in general the use of replacement costs will increase the rate base, which in turn will increase the gross revenue requirement. This would lead to higher subscriber rates being approved.

There are several other issues which arise in computing the actual capital investment figure. The general rule of thumb which can be used in

evaluating the resolution of these issues is: any decision which increases the rate base can lead to higher subscriber rates. In New Jersey, the Board of Public Utilities (in 1977) denied a request by a cable operator to calculate as actual capital invested the total purchase price of the system. Service Electric, an MSO, had purchased a partially-constructed system for a price higher than the net value of the plant at the time of purchase.⁷⁷ Service Electric argued that the purchase price was actual capital invested. In denying this request, the Board stated:

...such reasoning, although it may at first appear equitable, ignores economic reality. The hard fact is that if a return were to be allowed on such an "excess", subscribers would be forced to bear higher rates with no corresponding increase or improvement in service. In short, were the petitioner to prevail in its argument, the mere sale of a cable television system would be sufficient to raise rates. It is clear that the Board should not allow or condone such regulatory practice.⁷⁸
[Emphasis added]

In a Massachusetts rate case, the regulatory commission allowed the inclusion of unamortized start-up losses in the rate base. Start-up losses were defined as the "...excess of expenditures required to build and operate the fixed plant over revenues received from the initially small subscriber base."⁷⁹ By including these start-up losses, the rate base was increased by \$291,315. The stated reason for allowing a return on these prior losses was:

⁷⁷ The difference between the purchase price of the system and the net value of the plant at the time of purchase is generally referred to as "excess fair value".

⁷⁸ Garden State CATV, Inc., Docket #758C-6126, January 20, 1977. This conception of including only used and useful property in the rate base valuation has a long history in the public utility field and dates back to a Supreme Court decision in Smyth v. Ames, 169 U.S. 466 (1898).

⁷⁹ Stan-Fran Corporation, Decision and Reconsideration, Docket #AFD-10 and 2, February 17, 1977, p. 5.

These operating losses are properly allowable in the rate base because they represent funds prudently invested in the construction and maintenance of the system at the time when the bulk of expenditures had to be made.⁸⁰

The increase in the rate base was one of several factors involved in the Massachusetts Commission approving a rate of \$6.95 in a reconsideration of a case where the \$6.95 rate had not been approved.⁸¹

On March 21, 1978, the Connecticut PUCA initiated an inquiry which addressed the start-up losses issue.⁸² In this Notice of Hearing the PUCA asked for,

...proposals and testimony germane to the methodology for determining an adequate return on investment for...CATV utilities as they reach a mature stage of development. Items for discussion include, but are not limited to: Present treatment to be afforded early year losses, risk of investment, treatment of start-up costs, traditional

⁸⁰ Ibid.

⁸¹ This practice might cut both ways, however. For example, if a CATV system had a rate approved in the past based on test year expenses with an allowed rate of return, but decreased operating expenses in a subsequent year, the rate of return actually earned would be greater than allowed (based on test year expenses). The next time the CATV company came to the regulatory agency for a rate adjustment, could the agency take these "excess" profits into account in determining future rates? Similar to the situation in which the Massachusetts Commission has allowed the rate base to be increased to account for start-up losses, could the rate base be correspondingly decreased to account for past excess returns? Alternatively, the allowed equity return could be adjusted upwards and downwards, depending on whether the firm had a history of past losses or excess returns. Allowing the companies to retain (without future punishment) the excess profits obtained from efficient cost management between rate reviews has been suggested by several authors as a way to foster management efficiency. For a discussion of this issue, see William J. Baumol, "Reasonable Rules for Rate Regulation: Plausible Policies for an Imperfect World", pp. 193-96, and Richard A. Posner, "Natural Monopoly and Its Regulation", p. 31, both in Paul W. MacAvoy, ed., The Crisis of the Regulatory Commissions (New York: W. W. Norton and Company, 1970); and also Bonbright, op. cit., p. 147, note 1.

⁸² Notice of Hearing in Docket #780311, issued by the Connecticut Public Utilities Control Authority, March 21, 1978.

or innovative approaches to application of rates of return on equity and rates of return on rate base or alternatives in determining revenue levels.⁸³

Several of the proposals submitted by industry representatives suggested that the rate base should include an allowance for funds used during development (essentially start-up losses). The PUCA has not, as of 1978, made any determination as to how cable systems should be treated during different phases of their development, i.e. start-up, maturing, mature and rebuild stages.

Another issue involving the size of the rate base is concerned with inclusion of franchise acquisition and system development costs. These costs are generally incurred prior to receiving franchise rights and usually include legal and engineering fees, administrative overhead, etc. In New Jersey, the Board of Public Utilities has allowed these costs to be included in capital investment, but with the proviso that they must be amortized over the life of the plant rather than the duration of the franchise. In the specific case in which this decision was made, the usable life of the plant was shorter than the franchise duration, implying that these costs would reduce more rapidly (thereby decreasing the rate base) under the former method.⁸⁴ The inclusion of working capital in the rate base is generally allowed. In Connecticut, working capital is defined as the amount equal to operating and maintenance expenses for a period of 45 days.⁸⁵ And finally, in most states, depreciation and amortization schedules, which must be adhered to when computing a

⁸³ Ibid.

⁸⁴ North Bergen Cable Television Co., Docket #752C-6076, May 15, 1975.

⁸⁵ United Cable Television Corporation, Docket #760807, January 27, 1977.

rate base, are fixed by the state regulatory agency. This in effect standardizes accounting practices across systems in one state.⁸⁶

3.2.2 Allowance for Operating Expenses

In general, this item has been an area of concern for most regulatory agencies.⁸⁷ In a review of several New Jersey rate decisions, we found that a good deal of discussion was given over to deciding what expenses were and were not allowable. An interview with several staff members of the New Jersey Office of Cable Television brought out the fact that a majority of the time spent in reviewing rate cases was spent in analyzing, item by item, the operating expenses of the cable system.⁸⁸

This concern with direct operating expenses is understandable, given that each dollar claimed as an operating expense is allowed to be covered

⁸⁶ See State of New Jersey Department of Public Utilities Office of Cable Television, Uniform Accounting System, January 1, 1977, p. 56; Massachusetts Community Antenna Television Commission, Uniform Reporting System, p. 32; and New York Commission on Cable Television, Uniform Accounting System, §599.40. It should also be noted that the depreciation schedule guidelines outlined in the above three documents are virtually identical. In addition, uniform reporting and accounting systems which establish definitions of capital invested, goodwill, expenses, etc. for all CATV systems within one state have been used by regulatory agencies to assess the equitability of financial figures submitted by systems in rate proceedings. While the importance of uniform reporting and accounting requirements should not be minimized, an in-depth analysis of these requirements is beyond the scope of this paper.

⁸⁷ "Generally, the veracity of operating costs can be tested by two questions: Are rewards to common equity owners disguised as operating cost [sic] and, Are some costs incurred for purposes that benefit stockholders and not customers?" Alan E. Finder, The States and Electric Utility Regulation (Lexington, Kentucky: The Council of State Governments, 1977), p. 46.

⁸⁸ Telephone conversation with staff members of the New Jersey Office of Cable Television, September 23, 1977 (see note 26, above).

by revenues. In Section 3.2.1, above, we saw (in Table 3) that an increase in the rate base of \$185,000 increased the maximum allowable first set rate by \$.52. This was because the \$185,000 increase was first multiplied by the weighted return percentage (13.8%) and the resulting figure was added to the revenue requirement. In the following example, we will see what would happen in our hypothetical system if certain operating expenses were allowed or disallowed.

An operating expense item which receives much attention from regulatory agencies is "intercompany charges". This item usually appears when a system is a subsidiary of a parent multiple system operator. In many instances, the subsidiary does not perform certain day-to-day administrative tasks, but instead purchases these services from the parent company. These services at times include legal, engineering, bookkeeping and/or billing duties. Although there are economies of scale which can result from the parent performing these functions for all of its subsidiary companies (i.e. in some cases the parent can do bookkeeping and billing for less cost to the subsidiary than if the subsidiary performed these functions itself, or if they purchased these services from a commercial firm), the regulatory agency is concerned that the parent is not receiving money (above the actual cost of the services rendered) in addition to a return on its equity.

In New Jersey, the Office of Cable Television actually voiced this concern in a 1977 rate decision.⁸⁹ They indicated that intercompany charges would be closely examined to make sure that parent services were actually rendered. In Connecticut, the then Public Utilities Commission examined the management services rendered by Sammons Communications, Inc., to its subsid-

⁸⁹ Garden State CATV, Inc., Docket #758C-6126, January 20, 1977.

iary, Waterbury Community Antenna, Inc.⁹⁰ The fee for the parent's services was computed on the basis of 5% of gross revenues. The PUC indicated that the kind of services which Waterbury claimed it was purchasing from Sammons seemed more appropriate for a system in its start-up phase. By tying the amount of the fee to gross revenues, the PUC claimed that larger, more stable systems could be cross-subsidizing the services which Sammons performed for its newer franchises. The PUC indicated that they did not think it was appropriate for Connecticut rate-payers to subsidize the development costs of franchises in other parts of the country.

The PUC was attacking the method of computing intercompany charges rather than the absolute dollar amount of these charges. They allowed Waterbury Community Antenna, Inc., however, to include as an operating expense 2.5% of gross revenues for intercompany charges. It would be useful to see what effect this charge would have on the hypothetical system we have been using as an example. As was seen in Table 1, the system had \$278,000 in gross revenues and \$150,000 as operating expenses. Let us assume that part of the \$150,000 operating expenses was an item called "intercompany charges", equal to 5% of gross revenues, or \$13,900. If the regulatory agency disallowed this charge, then the gross revenue requirement would be reduced to \$279,366, and this would exceed actual revenues by only \$1,366. The maximum allowable first set rate would be \$5.03, versus the \$5.32 rate found by including intercompany charges in operating expenses. If the regulatory agency only allowed half of \$13,900 as intercompany charges (as they did in the Connecticut case), then the maximum allowable first set rate would be \$5.17. Thus, the disallowance of operating expenses affects the

⁹⁰ Waterbury Community Antenna, Inc., Docket #1161, June 2, 1975.

maximum allowable first set rate. Of course, the extent of the effect will depend upon the level of subscribers.

There are several other operating expense items which have received attention from regulatory agencies. In New Jersey, the Board of Public Utilities has allowed rate hearing costs (i.e. the amount expended by the system to have their rates reviewed by the state regulatory agency) to be included as an operating expense. However, they will only allow 1/5 of the actual cost to be included as an operating expense for each of five years, going on the assumption that a rate review will only be requested every five years.⁹¹ In addition, the New Jersey Board has allowed a dollar charge equal to 2.5% of gross revenues to be included as a bad debt expense (i.e. 2.5% of the company's bills cannot be collected). In Connecticut, the PUCA in a specific case allowed \$4,700 to be included as an operating expense for cable association (state and national) memberships. They did, however, question what benefits from these charges accrued to the rate-payer and indicated that in the future the PUCA would look carefully at such expenses.⁹²

In 1974, the Massachusetts Community Antenna Television Commission retained the services of a consultant who developed a system of "benchmarking" expenses. Essentially, the consultant maintained that to effectively determine whether expenses for any given cable system were reasonable, it was necessary to compare this system with other cable operations which had similar characteristics. By computing an average level of expenses per subscriber in systems with like characteristics, it was possible to determine whether a given system's expenses per subscriber were within range of this

⁹¹ Middlesex Cablevision, Inc., Decision and Order, Docket #748C-6044, December 30, 1975.

⁹² TelePrompTer Corporation - Danbury, Decision, Docket #11662, July 1, 1975.

average figure. But because there has been no consensus as to what the proper classes of cable systems are and due to the lack of an adequate data base to compute average figures, this method has not been fully utilized. Nonetheless, this points to one way in which regulatory agencies may proceed in delineating reasonable expense rates in an industry which has little history of financial scrutiny.

3.2.3 The Capital Structure of the Firm

In general, the capital structure of a company is its debt/equity ratio. In other words: How much of the capital invested in the system was borrowed and how much is owner's equity? The effect of this variable on the ultimate rate which can be charged is quite simple to explain. As will be seen from Section 3.2.4 below, the return allowable on equity is usually higher than the return allowable on debt. The reasoning behind this is that equity capital returns generally need to be higher than debt capital returns in order to attract equity capital. This is primarily because equity investors are usually the last creditors to be repaid in the event of a bankruptcy or default and therefore they are in a riskier position than debt holders. All other things being equal, the more of the capital invested which is allowed to be considered equity, the higher the gross revenue requirement and the higher the maximum allowable first set rate.⁹³

In many situations it is difficult to determine what the capital structure of a company is. This becomes particularly difficult in cases where the regulated company is a subsidiary of a multiple system operator. In some cases, there may be two parent companies (i.e. a local cable system is owned

⁹³ However, we should note that the interest rate on bonds sold may depend on the debt/equity ratio.

by a parent which only owns other cable systems in the same state, and this statewide parent is then owned by a national multiple system operator owning many statewide parents).

In cases such as this, the regulated company (or local franchise holder) may have little actual equity capital invested in it and be highly leveraged by the parent corporation. But on the statewide or national level, the parent corporation may have a large amount of equity capital.

There are a number of ways in which the regulatory agency can handle this situation. In New Jersey, the Board of Public Utilities requires that a cable system must have a minimum amount of equity capital prior to the Board's approval of the municipal franchise. This minimum amount of equity is set at 20% of capital invested. Several staff members indicated that this was done so that the system would not be too highly leveraged.⁹⁴ In Connecticut, all borrowing packages for all cable systems are approved by the PUCA, and although a minimum amount of equity is not required by statute, the PUCA has refused to approve borrowing packages which would decrease the amount of equity to below 20%.⁹⁵

In Massachusetts, there has been a trend towards accepting the parent company's capital structure in lieu of the subsidiary's. This has occurred for two reasons in several different cases. In Pioneer Valley Cablevision,

⁹⁴ Sammons Communications, Inc., Hearing Examiner's Report and Recommendation, Docket #756C-6113, January 21, 1976, and telephone conversation with New Jersey Office of Cable Television staff members (see note 88, above). It is interesting to note that the minimum requirement of 20% equity is still low when compared with traditional public utilities, which sometimes have upwards of 50% equity capital. This 20% figure may reflect the realization by agencies that the cable industry has a more difficult time in raising large amounts of equity capital, a problem most established utilities do not have.

⁹⁵ See, for example, Application of United Cable Corp. of Connecticut for Approval of Bankloan Agreement and Issuance of Securities, Decision, April 20, 1976.

Inc., the Massachusetts Community Antenna Television Commission allowed the use of a 78/22 debt/equity ratio instead of the company's actual 95/5 debt/equity ratio. Pioneer Valley Cablevision was a wholly owned subsidiary of Communication Properties, Inc. (CPI). CPI had a debt/equity ratio of 78/22, and the Massachusetts Commission stated that:

...the capital structure of PVC can be changed at the will of the parent CPI, subject to CPI's own capital structure and ability to attract capital.⁹⁶

The ability of the parent corporation to change, through accounting methods, the capital structure of its subsidiary was also recognized by a company witness in one of the Warner Cable cases in Massachusetts.⁹⁷

In another case in Massachusetts, the Commission allowed the use of the parent's capital structure in lieu of the subsidiary's because the

...ability of Stan-Fran [the subsidiary] to attract debt and equity capital depends on the ability of the parent CPI to do so. We have, therefore, imputed the capital structure of the parent CPI to Stan-Fran in making our rate calculations.⁹⁸

The core rationale for imputing the parent's debt/equity structure was that the Commission's policy was to use the capital structure of the entity actually raising the capital.

Therefore, we see that in several states the regulatory agency has been attempting to grapple with the capital structure issue by either requiring a minimum of equity capital or using the parent's structure instead of the usually more highly leveraged subsidiary's structure.

⁹⁶ Pioneer Valley Cablevision, Inc., Docket #AFD-8, 9, 11, 12, 13, 14, 15, 16, 17, 19, 20, 22, June 28, 1976, p. 11.

⁹⁷ Warner Cable of Massachusetts, Inc., et al, Docket #AFD-3, 4, 5, 6, 7, 21, April 2, 1976, paragraph 54, p. 18.

⁹⁸ Stan-Fran Corporation, Docket #AFD-10 and 2, September 10, 1976, p. 10.

3.2.4 The Allowed Rate of Return

An obvious relationship between the rate of return allowed and the maximum monthly first set rate can be posited: the higher the rate of return, the higher the maximum first set rate. Regulatory agencies, however, have attempted to discern a separate rate of return for debt and for equity. In each instance, however, judgments must be made as to the proper allowable rate of return.

The U.S. Supreme Court has had a hand in setting standards which should apply to determining what should be a reasonable and non-confiscatory rate of return for public utilities. In general, this standard has applied to the overall rate of return (i.e. both debt and equity return), but as we shall see below, debt return is usually calculated at the actual cost of debt and equity return is based on a "risk" factor. One such statement about overall return can be found in Bluefield Waterworks and Improvement Co. v. Public Service Commission, where the Supreme Court stated that:

A public utility is entitled to such rates as will permit it to earn a return on the value of property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties.... The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties.⁹⁹

In addition to assuring confidence, the ability to raise capital, and allowing returns similar to other businesses with similar risks, the Supreme Court further elaborated in Hope Natural Gas v. The Federal Power Commission

⁹⁹ Bluefield Waterworks and Improvement Co. v. Public Service Commission, 262 U.S. 679 (1923) at 692-93.

that returns should be consistent with the risk inherent in the operation of the business. The higher the risk, the higher the allowable return.¹⁰⁰ We shall return to this concept of risk when we discuss equity return.

One might suppose that defining a rate of return on debt would be an untroubled task. Debt return should equal the interest rate charged on debt capital according to actual cost RBROR method. But in some cases, there has been difficulty in determining actual interest rates, and often this difficulty is caused by the parent/subsidiary relationship described above. In the Massachusetts Warner Cable, Inc. case, the subsidiary did not actually borrow money on its own.¹⁰¹ Instead, the subsidiary was advanced funds from the parent. The parent, however, did borrow money from lending institutions. Therefore, the Massachusetts Commission computed interest rates from the parent's cost of obtaining debt capital. In some instances, this debt capital cost could be considerably lower than if the subsidiary went out on its own to borrow money, given that the parent borrows money in greater quantities and there is less risk involved.

Another issue which has been difficult to resolve is that of floating interest rates. It is a common practice among borrowers of large sums of money, to obtain loans which have interest rates keyed into the prime rate being charged by the lending institution. Therefore, some cable companies have debt agreements which call for interest rates of 1% to 4% above prime rates. It is extremely difficult for the regulatory agency to determine what the proper debt return should be, given the rapid fluctuation of prime rates which has recently been witnessed. If the regulatory agency uses the

¹⁰⁰ Hope Natural Gas v. The Federal Power Commission, 320 U.S. 591 (1944).

¹⁰¹ Warner Cable of Massachusetts, Inc., et al, op. cit., pp. 16-17.

current prime rate (plus whatever increment above this rate which the company must pay) and prime rates fall, then the company will be receiving a higher return than its interest charges. If the prime rate rises, then the return on debt will be too small and the ultimate first set rate allowed might be "confiscatory". This has led to regulatory agencies using estimates¹⁰² and/or several interest return figures to create a "zone of reasonableness".¹⁰³

It is also a common practice in some instances for lending institutions to require what is called a "compensating balance". This is usually a certain percentage of the money borrowed which the cable company must keep in an interest-free account with the lending institution. So, for example, if Company X receives a loan for \$100,000 from Bank Y, then X might be required to keep 15% of the \$100,000, or \$15,000, in an interest-free account at Bank Y. If Y generally pays 5% per year for savings account deposits, then X is losing approximately \$900 each year. Therefore, in New Jersey, for example, the Board of Public Utilities has allowed the debt return percentage to be adjusted upward to account for loans taken out with compensating balance requirements.¹⁰⁴ On the other hand, Connecticut has refused to adjust debt return to account for compensating balances, saying:

This Commission traditionally has not adjusted actual interest rates to reflect compensating balance requirements, principally because companies have various escrow funds on deposit with the lending bank which will constitute a substantial part of the compensating balance required to be maintained. These funds, under company control until required to be remitted, include,

¹⁰² Eastern Connecticut Cable Television, Inc., Finding and Order in Docket #11610, March 13, 1975.

¹⁰³ Warner Cable of Massachusetts, Inc., et al, op. cit., paragraph 49, pp. 16-17.

¹⁰⁴ Warner Cable of New Jersey, Docket #754C-6092, March 11, 1976.

but are not limited to, social security and income taxes withheld from employees' wages, other payroll deductions such as health and hospital insurance premiums, pension contributions, employee saving plans, stock purchase plans and government bond purchase plans, as well as funds on deposit with the company from customers, such as security deposits, converter deposits, refundable advances toward construction, advance or seasonal billings, and funds from vendors through extended payment terms available. To allow a hypothetical effective interest rate increased by the effect of compensating balances would be to allow an interest rate on the above funds, which do not cost the utility interest, but can be used to constitute part of these balances.¹⁰⁵ [Emphasis added]

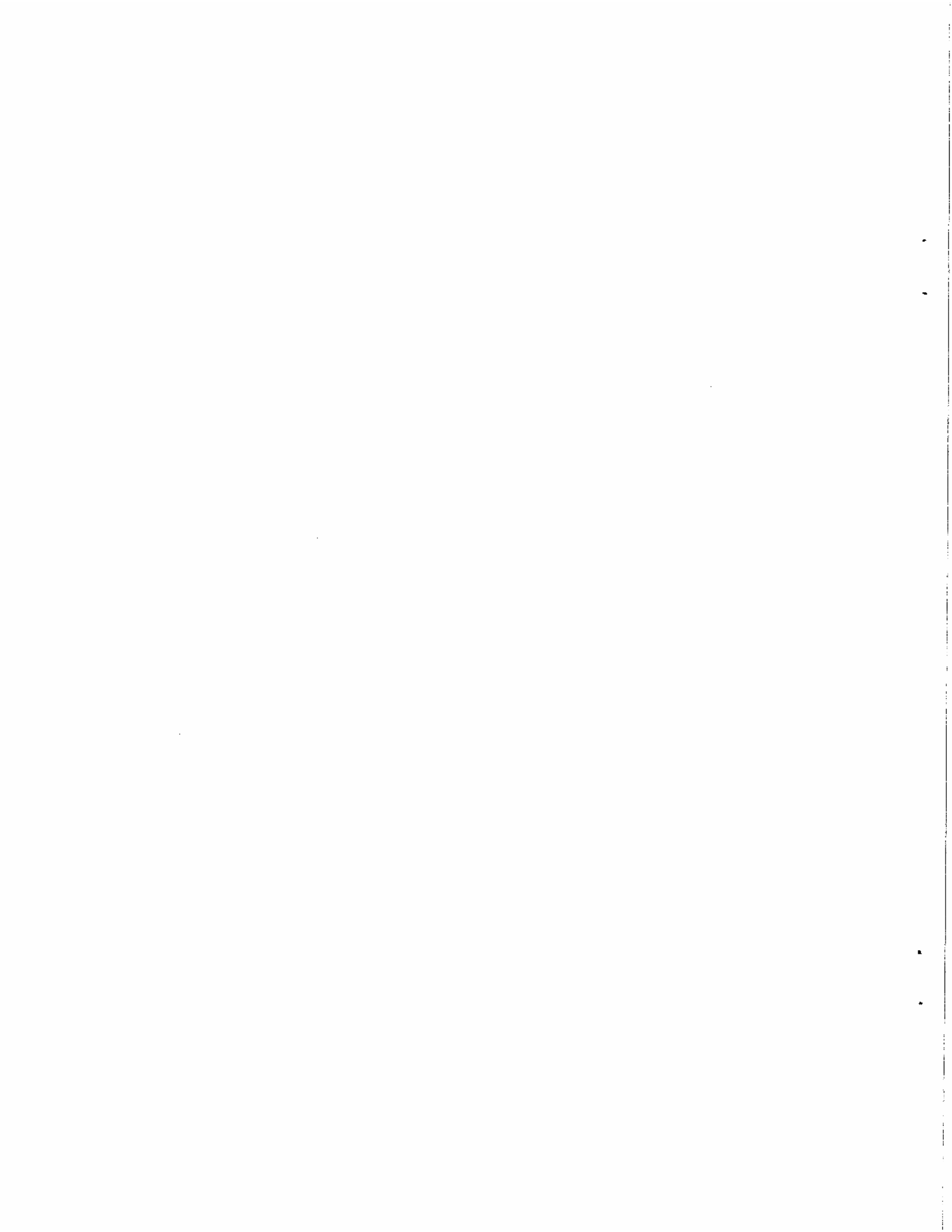
The final area which should be discussed is the allowable return on equity. This figure is quite judgmental because, as seen above, return on equity should be based on the riskiness of the venture and should be set at a level appropriate to insure the continuance of the business and the continued attraction of more equity capital. But how should the risk of the business be assessed? In New Jersey, the regulatory agency has correlated risk to three factors (although the weighting of each factor has been informal): the capital structure of the firm; the quality of off-air signals; and the level of penetration.¹⁰⁶ It is assumed that the more equity the company has, the less risk there is to equity owners (given that equity holders are the last group to be compensated in the event of bankruptcy), and therefore a lower return on equity is allowed. This would seem, however, to punish a firm which has sought and received equity rather than debt financing. As was seen above in Section 3.2.3, some agencies try to encourage the investment of equity capital. This policy of allowing a lower return on equity as the percentage of equity capital increases may actually run

¹⁰⁵ TelePrompTer Corporation -- Danbury, Decision, Docket #11662, July 1, 1975, p. 10.

¹⁰⁶ See Warner Cable of New Jersey, Docket #754C-6092, October 29, 1976, and Garden State CATV, Inc., Docket #758C-6126, January 20, 1977.

counter to this encouragement. The lower the quality of off-air signals, it was argued, the more of a necessity cable service is, and the less risk involved. The necessity of cable service will also be reflected in higher penetration rates, and therefore the higher the penetration, the lower the return on equity allowed. This also appears to have the effect of punishing cable operators who have actively marketed and achieved higher penetration rates in highly competitive environments. By combining these three factors, the New Jersey Board of Public Utilities has attempted to define an adequate return on equity. The success of using this method is hard to define, but as of early 1978 there have been no appeals to the courts which specifically charge that return percentages computed in this way are confiscatory.¹⁰⁷

¹⁰⁷ In Massachusetts, equity return figures have been based on several considerations. In Stan-Fran Corporation, op. cit., September 10, 1976, an 18-22% zone of reasonableness for equity return was used because the estimated cost of acquiring new debt capital was set at 11%. It was assumed that the cost of acquiring new equity capital would be "considerably higher"; hence the 18-22% range.



4.0 THE SEARCH FOR ALTERNATIVES

Several alternatives to the traditional rate of return method described in Section 3.0 have been or are being developed by state regulatory agencies. The objectives of these alternatives are multifaceted, but can be grouped in two categories: decreasing the time and money both the system operator -- hence the subscriber -- and the regulatory agency -- hence the taxpayer -- must expend in rate review proceedings, and accounting for the differences between the cable industry and other traditionally rate-regulated industries. A closer look at these two rationales follows.

Regulatory Lag and Administrative Burden. There are at least two perspectives on this issue: the industry's and the regulator's. But although the perspectives may differ, they converge as an impetus for finding streamlined rate-making procedures and methods. The industry has generally argued that rate-making procedures at the state level cost them an inordinate amount of time and money. By the time a rate review has concluded, they argue, economic conditions have sufficiently changed to warrant a new review within a short period of time. Estimates of the cost to the system operator having rates reviewed by the state agency (although no systematic study has been conducted) range from \$15,000 to \$50,000.¹⁰⁸ If rates are determined by the RBROR method, all or most of this expense can be directly passed on to the subscriber, thereby increasing subscriber rates substantially. Combined with the frequency of rate reviews, this can lead to inflated subscriber rates, the reverse of what rate regulation was supposed to achieve.

¹⁰⁸ As stated, these costs are "guesstimates". A thorough study of the costs of a rate case should include direct costs (lawyers, special staff, travel, etc.), indirect costs (overhead, general staff time, etc.), and regulatory lag costs (the amount of revenues lost due to the time between petition and implementation of rates).

On the regulator's side, similar cost-to-subscriber/taxpayer arguments have been made. But another equally important effect of long adjudicated rate proceedings (which the RBROR method implies with its rule of thumb estimation of rate of return and close examination of expenses) is that if the regulatory agency is busy spending time determining rates, its other functions may be neglected. While the regulation of rates may be one of the agency's more important mandates, the agency may have other responsibilities: developing a state plan, promoting regionalization and interconnection, encouraging new service developments, etc. With scarce resources, unless an agency can find ways to streamline rate-making procedures, it may find itself preoccupied with the day to day administrative details of rate regulation without the time to devote to long- and mid-range planning.

The Differences Between Cable and Traditional Public Utilities. There may also be a trend on the part of regulatory agencies toward recognizing that in some respects (or in some geographical areas) cable television is not a public utility. If one simply looks at the economic characteristics of traditional public utilities (leaving aside the philosophical and legal considerations of property dedicated to the public good), we see that CATV possesses several but not all of these characteristics. If competition is simply defined as competition between two firms providing the same service, then in most communities cable is a monopoly. The provision of cable service by two firms in one community would probably result in one firm going out of business, and head-to-head competition may be deemed by the community (and possibly by the consumer) as inefficient and unnecessary (much like dual telephone and gas services have been considered). The industry, however, has argued that competition can be defined in another way. Cable competes with other services for the consumer's discretionary dollar. Therefore

movie theatres, rooftop antennae, and legitimate theatre can be considered as CATV's competitors. In areas where there are ample over-the-air signals, CATV has yet another competitor.

This competition argument can then be coupled with the argument that CATV is not a necessity like other public utilities are. Together these arguments form a line of reasoning which could justify extensive rate regulation of some systems (those with high penetration rates in areas where there are few, if any, substitutes) and minimal oversight (with the marketplace determining rates) of other systems. This recognition of the diverse structure of the cable industry can be seen as one of the justifications for finding alternatives to across-the-board rate of return type regulation. In this section, we will examine two of these alternatives: the classification of cable systems and the subsequent setting of maximum rates for each class (commonly called the common tariff procedure); and the recognition of inflation by building cost of living adjustments into rate review procedures.

4.1 The Common Tariff Procedure

The first alternative we will look at attempts to construct logical classes of cable systems within a state, setting maximum rates which can be charged by systems falling within a class. Two states have considered this approach, but Massachusetts has rejected it while New Jersey, as of early 1978, is in the process of instituting a voluntary common tariff system. Another difference between these states is the position of the cable industry towards the common tariff proposal. In Massachusetts, industry filings have indicated a somewhat negative position, but in New Jersey, industry filings in a general rate regulation reform docket actually suggested the approach

to the New Jersey Board of Public Utilities. In the section below, we will review the general common tariff method with reference to the two states, as well as reviewing the two somewhat divergent industry positions.

The policy lineage of the common tariff system in New Jersey begins in April, 1975. In that month, the Office of Cable Television of the Department of Public Utilities issued a Notice of Proposed Rulemaking which was general in nature.¹⁰⁹ The notice indicated that the Office of Cable Television wished to substitute for traditional rate of return regulation some other form of rate regulation which would meet the statutory requirements.¹¹⁰ Among the reasons for finding alternatives cited were: the sheer number of petitions for rate increases received by the Office of Cable Television; lack of staff to deal with the number of petitions; requests for interim rate relief by cable systems due to the length of time needed to process regular rate increase applications; and the desire to base rate increases on quality of service and performance of the cable system. In essence, the Office of Cable Television wished to find a way to meet the statutory requirements, while effectively streamlining the rate setting process. A procedural alternative to a case-by-case determination of rates would lighten the burden on the Office's staff, and in addition, it would shorten the time between a rate petition filing and final rate determination, a feature which could assist cable systems as well.

In January, 1976, the New Jersey Cable Television Association (NJCTA) submitted their response to the Notice of Proposed Rulemaking. The NJCTA basically suggested that the Office of Cable Television adopt a common tariff

¹⁰⁹ Notice of Proposed Rulemaking in Docket #753C-6086, 7 New Jersey Register 172, April 10, 1975 (herein cited as "New Jersey Notice of Proposed Rulemaking").

¹¹⁰ For a discussion of the statutory requirements, see 2.1, above.

system. The filing outlined several objectives which a common tariff procedure would achieve: avoidance of rate of return regulation on a system-by-system basis; simplification of the rate review and adjustment process; and provision of incentives for cable operators to manage costs and employ capital most effectively. But the most important section of the NJCTA submission was the construction of and justifications for a cable classification system.

In the first instance, the NJCTA wished to divide cable systems into "classical" and "competitive" categories. Classical systems were those located in areas where off-air signals were of poor quality and cable service approached being a necessity. Competitive systems were located in major television markets, off-air signal quality was generally good and the number of signals received without the benefit of cable was high. Cable service in these "competitive" markets, the argument went, was being sold in competition with these numerous off-air signals.

In classical systems, the demand for cable service could be viewed as relatively inelastic, and rates are likely to be high. But in competitive systems, demand is more elastic, and cable is competing with other entertainment services for the consumer's discretionary dollar. In those situations, NJCTA argued, market forces could control the rates charged:

...judicious use of maximum rate levels under the common tariff will allow the regulators to more closely control rates in the classical markets while essentially letting the marketplace establish rates in the competitive markets.¹¹¹

¹¹¹ Response to Notice of Rulemaking Proceeding on Cable Television Rates Submitted by the New Jersey Cable Television Association, January 1976, p. 7.

After going through a number of different criteria which could be used in classifying a system as either competitive or classical (number of off-air signals which could be received by the community, subscriber penetration levels, etc.), the NJCTA concluded that the best criteria were mileage boundaries. A competitive system would be defined as one falling within a 35-mile "specified zone" radius of one of the two major markets in New Jersey (the New York-Linden-Patterson or Philadelphia-Burlington TV markets). Outside of this 35-mile radius, all systems would be considered classical.¹¹²

The second dimension by which systems were to be classified was system construction. This dimension would take into account the fact that systems with different channel capacities would have different capital requirements and operating expenses. It was argued that the best criterion to use for classification purposes was channel capacity: 12-channel systems would be in one class and 20+-channel systems would be in another class. This division would reflect the differences in capital investment (20+-channel systems require different amplifiers, etc.) and operating expenses.¹¹³

This dual dimension scheme divided cable systems into four classes. There was one final dimension which the NJCTA recommended implementing. This dimension would distinguish systems on the basis of service quality;

¹¹² The NJCTA stated the following reasons for choosing this criterion:

While it may be argued that this measure is no less arbitrary than any other measure, it does at least provide a standard that can be easily calculated, that is used as a basis for other CATV regulations enacted by the FCC, and that is theoretically related to a uniform broadcast signal attenuation level.

Ibid., p. 8.

¹¹³ The NJCTA did suggest that the Office of Cable Television might consider adjusting the maximum allowable rates upward for systems where the majority of construction was underground. The NJCTA did not, however, indicate that this criterion should be implemented immediately.

dividing cable systems into normal, substandard and superior service on the basis of technical standards, number of system outages, amount of local origination equipment and programming, among other criteria. Those systems with substandard service would only be allowed to charge the maximum rate in their class minus one dollar; those with superior service, the maximum rate in their class plus one dollar. The NJCTA suggested that this dimension would encourage higher service quality.

The NJCTA then went about classifying each cable system within New Jersey according to the above criteria, as well as computing the average and maximum rates of systems falling within each class. The NJCTA then made recommendations as to the maximum rate which should be established for each class. These rate recommendations were not, however, based on rate of return calculations, but were keyed into the maximum rates currently being charged within each class. The reasons cited by NJCTA for not using average rate of return levels were: the inadequacy of the data collected by the Office of Cable Television, and the fact that the book value of cable television capital investments generally underestimate the actual market value of capital assets. Regardless of these justifications, the rate recommendation probably reflected a concern on NJCTA's part that rates should not be much lower than the maximum rates already being charged, so that fewer cable operators would have to adjust rates downward. If the average of rates currently being charged was used as the maximum allowable rate in each class, those system operators currently charging below the average could raise their rates, but systems charging above the average might have to lower their rates. Given that the common tariff system was to be voluntary at the beginning (i.e. the NJCTA suggested that a cable system could choose to be governed by the common tariff procedure or could take the option of going through a

full rate proceeding before the Office of Cable Television), these rate recommendations may have also reflected the objective of getting the most systems into the common tariff procedure. Those cable operators most likely to be hurt by such a procedure would choose the case-by-case approach. It should also be noted that the NJCTA recommended that ancillary service rates not be regulated at this time. It appears that by leaving these ancillary service rates open to market forces, the possibility of cross-subsidy of ancillary services by basic service rates would be ignored, and in fact might be encouraged.

Table 4 shows the results of the NJCTA's analysis and classification of 128 of the 179 cable systems in the state, as well as their recommendations for the maximum allowable basic subscriber rate within each class. As can be seen from the table, although the NJCTA suggested four separate classes, only two rates were suggested: a \$6.50 rate for classical systems and a \$7.50 rate for competitive systems. In all cases, the recommended rate is higher than the average rate in that class, but in three cases the recommended rate is lower than the maximum rate being charged by systems within that class and in the fourth case (competitive 12-channel) the suggested rate is equal to the maximum rate being charged.

In addition to the above classification scheme, the NJCTA recommended several procedural guidelines which could be followed. These included procedures to be used when rate increases are requested which are no higher than the maximum allowable rate for that class, procedures to be used when altering the maximum rate for each class in the common tariff system, and the process which would be implemented if a cable system chose to have rate adjustments be determined on a case-by-case basis. It is important to note that public hearings would not be required for systems adjusting rates

TABLE 4
NEW JERSEY CABLE TELEVISION ASSOCIATION SUGGESTED COMMON TARIFF CLASSES
AND RATES -- 1976

CLASS	Number of Systems Within Class	Average Rate Being Charged as of 1/76	Maximum Rate Being Charged as of 1/76	NJCTA's Suggested Maximum Allowable Rate
Classical 12-Channel	64	\$5.13	\$6.95	\$6.50
Classical 20+-Channel	10	\$6.40	\$7.00	\$6.50
Competitive 12-Channel	22	\$5.91	\$7.50	\$7.50
Competitive 20+-Channel	32	\$6.35	\$8.00	\$7.50

Source: Response to Notice of Proposed Rulemaking Submitted by New Jersey Cable Television Association, January 1976, pages 11, 17, 19.

within the common tariff scheme, but would be required if a system chose the case-by-case approach. Public hearings would be required on a yearly basis to determine if the maximum allowable rates for each class should be adjusted. The NJCTA also proposed that an adequate data base be collected by the Office of Cable Television and that a uniform accounting system be developed and implemented by the NJCTA, not the regulatory agency.

In response to this filing, the New Jersey Board of Public Utility Commissioners has decided to implement policies and procedures similar to those in the NJCTA proposal. In October 1976, the Board issued a Notice of Proposed Amendments on Tariff Filings, which transformed the earlier general rate regulation reform proceeding into one which focused on whether the Board should adopt the common tariff approach.¹¹⁴ On December 16, 1977, the Board's Hearing Examiner submitted his Report and Recommendations to the Board, and on January 31, 1978, the Board accepted the Hearing Examiner's report, made some modifications, and issued an order promulgating rules and procedures which would implement a common tariff approach.¹¹⁵

Although the structure and the basic philosophy of the NJCTA proposal was accepted by the Board, there were some modifications to the original January 1976 recommendations. These modifications follow:

- A. The classification scheme was changed. Classical systems are defined as those systems operating in communities outside of the Grade A contours of at least three network broadcast

¹¹⁴ Notice of Proposed Amendments of Tariff Filings in Docket #753C-6086, 8 New Jersey Register 484, October 7, 1976.

¹¹⁵ Order Adopting Hearing Examiner's Report and Recommendations and Promulgating a Proposed Rule of Practice and Procedure, Docket #753C-6086, January 31, 1978. On April 17, 1978, the Board of Public Utilities adopted the common tariff approach for implementation ninety days thereafter.

stations. A competitive system operates within the Grade A contours of at least three network broadcast signals. The 35-mile specified zone criterion has been dropped. The 12/20+ channel categories have remained unchanged. In addition, the Board instituted two new categories: high vs. low density. A low density system would be one which has a potential of less than 200 subscribers per system mile and a high density system would have a potential of equal to or greater than 200 subscribers per system mile.¹¹⁶ This new category, however, was not used for "competitive" systems, but only applied to classical systems to produce a total of six categories.¹¹⁷

- I. Classical high density 12-channel systems
- II. Classical low density 12-channel systems
- III. Classical high density greater-than-12-channel systems
- IV. Classical low density greater-than-12-channel systems
- V. Competitive 12-channel systems
- VI. Competitive greater-than-12-channel systems

¹¹⁶ Rule 14: 17-18.1 (a) through (f). Grade A contour definitions are those used by the FCC in 17 CFR §73.683 (a).

¹¹⁷ The 200-subscribers-per-mile figure for each system would be taken from the FCC Form 325. The reason for adding this new density category is:

... [it] would serve to prevent companies in high density areas from achieving windfall profits. It would also hopefully encourage extension of cable television services to the less densely populated areas of the state.

Hearing Examiner's Report and Recommendations in Docket #753C-6086, December 16, 1977, p. 9. It should be noted that this new classification scheme was worked out as a stipulation between three interested parties: the Office of Cable Television, the NJCTA, and the Division of Rate Counsel, New Jersey Department of the Public Advocate.

- B. The maximum basic service first set charges for each class were revised. Using the Roman numerals above, the following rates proposed are:

Classes I and III	--	\$6.25
Classes II and IV	--	\$6.75
Classes V and VI	--	\$7.50

In addition, for those systems with greater than 12 channels which use converters, one extra dollar per converter charge is allowed.

- C. Systems which elect to be governed by the common tariff (rather than by the case-by-case) approach could not petition for a rate increase individually for a period of 18 months after such election. Systems with pre-existing rates higher than the maximum rate within their class could keep these higher rates if they choose the common tariff approach. If a system has its rates increased in an individual proceeding and then elects the common tariff procedure, the system cannot raise its rates for a period of nine months after the individually set rates went into effect.¹¹⁸

- D. To prevent systems from electing the common tariff approach and then immediately increasing their rates to the maximum for their class, limitations have been set. Systems may only raise their rates \$.50 the first 12 months after choosing the common tariff

¹¹⁸ Rule 14: 17-18.3 (f) through (h).

and an additional \$.75 in the second 12 months. After that, the system could raise its rates to the ceiling in its particular class.

- E. There is a provision for substandard and superior service rate adjustments. If a system is found to be providing inadequate service (either through general service adequacy hearings or by specific complaint), the Board could schedule a hearing and require that the system deposit up to \$.50 of each subscriber's monthly primary service rate in an escrow account to be used to rectify the inadequacy. If a system can demonstrate that it is providing superior service, the Board could allow the maximum rate for that system to be increased by up to \$.50.
- F. And finally, if a system is proposing to raise its rates below the ceiling for its class, it would submit a letter to the Office of Cable Television and rates could be implemented within 30 days. There are procedures for changing the classification of a system, changing the maximum rate for each class, and notifying the municipality and subscribers of any rate adjustments.¹¹⁹

This proposal illustrates one example of how the regulators and the regulated can come to an agreement on rules and procedures despite their differing

¹¹⁹ Rule 14: 17-18.4 (a) through (d).

perspectives.¹²⁰ The Massachusetts case (which follows), however, points out what can happen when the industry and its regulators clash on both perspectives and policies.

In 1976, the Massachusetts Community Antenna Television Commission proposed adopting a common tariff scheme similar to the NJCTA recommendations.¹²¹ This Notice of Inquiry and Proposed Rulemaking also cited several reasons for considering rate regulation procedures other than the case-by-case approach then being used by the Massachusetts Commission.¹²² The following justifications for a streamlined approach were given: the case-by-case approach indicated to the Commission that there are degree of competitiveness and cost differences between cable systems operating in different areas of the Commonwealth and in different broadcast markets; that there are differences between cable television service and public utilities (particularly in the necessity of the service); and finally,

...most municipalities have had difficulty in committing the resources required to recommend rates to the Commission or to present their cases as parties. We have also become concerned as to how to make the most effective use of the resources and budget of this governmental agency and about the effects of regulatory lag.¹²³ [Emphasis added]

¹²⁰ It should be noted that although procedures have been established for adjusting the maximum rates for each class of systems, methods for determining maximum rates have not been specified. It is quite possible that industry/regulator conflicts will emerge in the maximum rate adjustment proceedings, and therefore the situation in New Jersey may not be as harmonious as it appears on first glance.

¹²¹ See Notice of Inquiry and Proposed Rulemaking in Docket #R-1, July 6, 1976.

¹²² For a discussion of the format of rate regulation in Massachusetts, both before this Notice of Inquiry, at the present time, and what is being proposed in a recent Notice of Proposed Rulemaking, see Sections 2.2 and 2.3, above.

¹²³ Notice of Inquiry and Proposed Rulemaking in Docket #R-1, op. cit., p. 1.

Given this reasoning, the Commission then proposed instituting a common tariff structure which would create the four classes suggested in the NJCTA filing: competitive/non-competitive, 20+/12 channel dimensions. The Commission did not specifically propose the criteria to be used in classifying systems along these dimensions, nor did they suggest what the level of maximum allowable rates should be for each class.¹²⁴ In fact, these two issues were among the 12 areas on which the Commission asked for comments. Some of the other areas were: the appropriateness of the proposed classifications; the appropriate interval to be used for review of the maximum allowable rate when and if a common tariff system was instituted; and what role the municipalities should play in a common tariff rate regulation structure.

The response to this Notice of Inquiry by the New England Cable Television Association (NECTA) can be contrasted with the NJCTA filing before the New Jersey Office of Cable Television. The NECTA recommended that the 4-class system proposed by the Massachusetts Commission should be adjusted in the following ways. In the first instance, the 12/20 channel dimension should be eliminated. The NECTA argued that allowing higher rates of return for 20+-channel systems would penalize lower channel capacity systems and would not allow these 12-or-fewer channel operations to amass sufficient capital to rebuild a higher capacity configuration. In addition,

¹²⁴ The Commission did, however, say that higher returns would be allowed those systems operating in competitive markets, and those systems with a 20+-channel configuration. Therefore, it appears that they were suggesting the following:

Non-competitive 12-channels	LOWEST RATE
Non-competitive 20+-channels	↓
Competitive 12-channels	
Competitive 20+-channels	HIGHEST RATE

the reward aspect of being in the 20+-channel class would significantly affect the cable operator's business judgment concerning the proper time to build a higher capacity system. These judgments (they argued) should be based on community needs and marketplace demand.

In terms of the other dimension (classical/competitive), the NECTA made the following suggestion. This dimension would be adequate if the following criterion was used in classifying cable systems:

A CATV system is non-competitive if the system does not fall within the grade A contours of at least three different network broadcast signals.¹²⁵

All other systems would be classified as competitive. If one compares this definition to the one proposed by NJCTA, one notices that the NECTA definition is stricter, i.e. it is harder to be classified as a non-competitive cable system in the NECTA model than in the NJCTA model. According to the NJCTA figures, 74 systems out of a total of 128 systems classified (or 58%) fell within the classical category. While the NECTA did not classify all of the systems in Massachusetts, they did provide a map which indicated which areas of the state did not receive three grade A network broadcast signals. Only three very small areas fell into this classification: Cape Cod; a small area in the middle of Massachusetts, roughly midway between Worcester and Springfield; and a small area in the western part of the state. If the NJCTA definition had been used in the Massachusetts case,

¹²⁵ Comments of the New England Cable Television Association in Docket #R-1, November 10, 1976, p. 6. It is interesting to note that although the NECTA and NJCTA definitions of a non-competitive system differ, the NECTA proposal and the New Jersey Board's rules are identical.

a much larger area of the state would have been classified as classical or non-competitive.¹²⁶

Given this definition, the NECTA proposed that those systems classified as classical would be allowed to raise their rates to the maximum allowable rate for classical systems, without significant Commission involvement. This maximum or guideline rate would be equal to the highest rate currently being charged by cable systems in the competitive class. This guideline rate, however, would only be an interim rate. When the Commission had developed an adequate data base to determine a zone of reasonableness for rates of return, cable systems in the non-competitive class could structure their rates any way they wished, as long as the overall return from all services did not exceed the maximum return level allowable.

In addition, several procedural guidelines were included in the NECTA recommendation: guideline rates were to be reviewed annually; systems charging higher than the guideline rate when the system was instituted would be grandfathered for three years; any system classified as non-competitive could petition to have its classification reviewed; and systems could choose whether to follow the common tariff structure or file for rate increases directly with the municipality, subject to right of appeal to the Commission.

In May 1977, the Massachusetts Commission released its Report and Order in Docket #R-1.¹²⁷ This Report and Order effectively rejected both the common tariff proposal outlined in the earlier Notice of Inquiry and

¹²⁶ Although there is no map of New Jersey which shows which parts of the state fall within the grade A contours of three different network stations, it appears likely that if this (the NECTA) definition was used in New Jersey, fewer systems would be classified as classical than if one used the NJCTA definition.

¹²⁷ Report and Order in Docket #R-1, May 20, 1977.

the NECTA recommendation. Its reasons for rejecting the common tariff classification as initially proposed were:

After review of these comments and upon further analysis, we have decided not to adopt the particular classification structure which was proposed. We have concluded that while we are still committed to the goals discussed in the Notice, the particular classification framework does not sufficiently advance our objectives so as to warrant its substitution for the current regulatory structure.¹²⁸ [Emphasis added]

The basic reason for rejecting the classification system was the "...variation in costs among cable systems [which] would make it difficult to set statewide rates that would be equitable for all systems that might be placed in one of the four categories which were suggested."¹²⁹ It appears as if the Commission was indicating that a large amount of the variation in operating costs and capital employed could not be accounted for by the 12/20+ channel and competitive/classical dimensions. In terminating this particular docket proceeding, the Commission said:

We are still interested in adopting a regulatory structure that will allow us to regulate more effectively and efficiently the rates of profitable systems and to reduce the regulation, but not oversight, of clearly unprofitable systems.¹³⁰

Obviously, the proposed classification system did not produce the distinction between profitable and unprofitable systems for which the Massachusetts Commission was searching.

In summary, this section has reviewed an alternative to rate base rate of return regulation. We have seen that regulatory agencies in two states

¹²⁸ Report and Order in Docket #R-1, May 20, 1977, p. 1.

¹²⁹ Ibid., p. 2.

¹³⁰ Ibid., p. 2.

have explored this possibility for several reasons, including decreasing regulatory lag and the burden on the agency, as well as accounting for differences between public utilities and the cable industry in terms of market forces and characteristics. In these two states, we have also examined the divergent reactions of the cable industry to the common tariff approach. Finally, while one state -- New Jersey -- has decided to adopt the approach as an experiment, Massachusetts has found it lacking in definition and was searching (as of early 1978) for another alternative which meets the above objectives. The experience with the common tariff procedure, which New Jersey is likely to accrue, will be a significant factor in determining how widely accepted the approach will become in other states.

4.2 The Use of "Cost of Living" Adjustments

In this section we will briefly review rate regulation policies developed by two states which allow for increases in rates on a cost of living basis. Although New York and Delaware have both used this method, in Delaware increases do not have to be approved as long as the proposed increase is no more than a certain percentage above existing rates. On the other hand, New York has used cost of living indexes to determine if proposed rate amendments should be approved.

Delaware has limited franchising authority, i.e. in only very specific cases does the Public Service Commission actually issue franchises. This limited authority extends to rate regulation as well. The Public Service Commission's primary rate regulation function only applies to systems which it has actually franchised (i.e. systems outside the boundaries of incor-

porated municipalities).¹³¹ The statute, however, does provide for the review of other municipal franchises in accordance with the rules and requirements imposed on state-franchised systems.¹³² This implies that if the Delaware Public Service Commission takes on the responsibilities of reviewing all municipal franchises, the standards can be no more burdensome than the ones used in state-franchised cases. Therefore, we will only review the latter.

The Delaware statute requires that most rate adjustments proposed by state-franchised systems must be approved by the Public Service Commission. There are, however, certain circumstances which allow for rate adjustments to be implemented without prior PSC approval. The conditions specify that cable systems may increase rates without approval if there have been increased taxes or license charges imposed on the cable system facilities, operations or income. In addition, rate adjustments do not have to be approved if the adjustment increases present rates by less than 5% in one 12-month period.

While this structure does not really constitute a cost of living method, several points can be made. The structure does provide for automatic increases in rates if there are substantial increases in taxes. Therefore, higher taxes can be passed through directly to the consumer. On the other hand, the structure does not allow for automatic rate increases greater than 5% for increases in operating expenses such as salaries, rents, etc. If operating expenses increase by a factor greater than 5%, and the cable operator wishes to cover these increases dollar-for-dollar, the system

¹³¹ §604 (n), Title 26, Delaware Code Annotated (hereinafter "DCA").

¹³² §608, DCA.

must then go through a full rate proceeding. As will be seen in the New York illustration below, cost-of-living indexes sometimes reveal an annual increase in operating expenses and other costs which are higher than 5%. Therefore, the Delaware statute could in some years allow for automatic increases which are less than increased expenses and in other years greater than increased expenses. The 5% figure is stated in the statute and would require legislation to adjust the figure.

As discussed in Section 2.3 above, New York has used the in-line standard in approving rate amendments to franchises.¹³³ In 1973, the Commission approved a rate amendment for NewChannels Corporation which allowed the system to increase rates from \$4.95 to \$5.95.¹³⁴ This was the beginning of the in-line standard. But in 1976, Commission staff members began to construct a system which would provide for adjustments in the in-line standard according to the increases in the consumer price index.¹³⁵

At first, staff members attempted to show that from 1973 to March 1976, the consumer price index had escalated 35.1 points, or 26.5%. This meant

¹³³ It should be noted that since late 1977, the New York Commission on Cable Television has moved away from using the in-line standard and towards assisting municipalities in reviewing rates. Nonetheless, this alternative is being examined as one example of how a state agency might regulate rates without using the RBROR method.

¹³⁴ NewChannels Corporation, Order Approving Amendments, July 12, 1973.

¹³⁵ Memo from L. S. Dryden and J. A. Wright to the New York State Commission on Cable Television, April 29, 1976. A decision made by the Commission in July 1976 allowed for an increase in the in-line standard from \$5.95 to \$7.50. See Continental CATV, Order Approving Amendments, July 25, 1975. The above memo, however, was an attempt to make changes in the in-line standard congruent with specific price index figures and use the \$5.95 figure as the in-line standard, as well as July 1973 as the base year.

that the current adjusted in-line standard should be \$7.53 ($\$5.95 + (\$5.95 \times 26.5\%) = \7.53). In May 1975, the Commission approved a rate amendment for Continental CATV adjusting the in-line standard to \$7.50.¹³⁶ From May 1975 to March 1976, the Consumer Price Index had escalated 8.2 points, or 5.5%, which would call for an adjusted in-line standard as of March 1976 (using the Continental \$7.50 base) to \$7.91. In addition, the staff indicated that a 5% increase above the adjusted figure could be justified because of regulatory lag which would increase the \$7.53 NewChannels adjusted rate to \$7.90, and the \$7.91 adjusted Continental rate to \$8.30.

A second method to adjust the in-line standard was also outlined in April 1976. This would select various elements of the composite Consumer Price Index which would correlate with specific cable television operating costs. The Consumer Price Index elements chosen were: Insurance and Finance; Utilities and Public Transportation; Home Ownership; Housing Fuels and Utilities; Transportation; and Reading and Recreation. Increases in each of these separate indexes were computed from June 1973 to February 1976, and then averaged, giving each element equal weight. The resulting figure was 29.7%. Applied to the NewChannels rate of \$5.95, this would allow for a \$7.72 rate plus 5% for regulatory lag.

Since the use of specific cost indexes was being explored, this led to a third method which called for the development of a Cable Television Price Index (CTPI). Operating costs for a cable system would be broken down into various components and weighted according to how much of the total costs were accounted for by each component. Each cost element would then be associated with a specific cost index taken from annual Consumer Price Index figures. Adjustments to the in-line standard could then be

¹³⁶ See Continental CATV, Order Approving Amendments, July 25, 1975.

made by multiplying the current standard by the cost element and then again by the specific index. The staff analyzed 28 mature cable companies and computed the following:

TABLE 5

ANALYSIS OF NEW YORK CABLE TELEVISION SYSTEM COSTS
AND RELATED PRICE INDICES

<u>Cost Element</u>	<u>Percent of Total Costs</u>	<u>Related Index</u>
Salaries and Benefits	26.4	Department of Commerce Wage Index
Interest Expense	8.3	Insurance and Finance
Depreciation and Amortization	13.5	Home Ownership
All Other	51.8	Selected Consumer Price Indices
Total	<u>100%</u>	

Source: Memo from L. S. Dryden and J. A. Wright to the New York Commission on Cable Television, April 29, 1976.

We can see that although there are not many cost element categories, this process could yield a more precise adjustment. Applying this method to the original NewChannels \$5.95 standard, the following resulted:

TABLE 6

APPLICATION OF THE CABLE TELEVISION PRICE INDEX -- 1976

<u>Cost Element</u>	<u>% of Total</u>	<u>1973 New Channels Rate</u>	<u>Related Index Increase 7/73 - 2/76</u>		<u>New In-Line Rate</u>
			<u>%</u>	<u>Amount</u>	
Salaries and Benefits	26.4	\$1.57	29.0	\$.46	\$2.03
Interest Expense	8.3	.49	32.6	.16	.65
Depreciation and Amortization	13.5	.81	30.2	.24	1.05
All Other	51.8	3.08	29.7	.91	3.99
Total	<u>100%</u>	<u>\$5.95</u>		<u>\$1.77</u>	<u>\$7.72</u>

Source: Memo from L. S. Dryden and J. A. Wright to New York Commission on Cable Television, April 29, 1976.

As can be seen from Table 6, the resulting adjustment to the in-line standard is 29.7%, which was also the increase found by using the second method of unweighted averaging of selected Consumer Price Index elements. This result was most likely coincidental (as stated in the memo).

The hypothesis that agreement between the second and third methods was merely coincidental was confirmed in a later analysis. In a memo written in May 1977, several aspects of the CTPI were refined.¹³⁷ The operating costs of 32 mature, profitable cable systems were analyzed, and the resulting percentage breakdowns of cost elements were modified.

In addition, the index used for salaries and benefits was changed from the Department of Commerce Wage Index to the Consumer Price Hourly Earnings

¹³⁷ Memo from unidentified staff member to L. S. Dryden, May 16, 1977.

Index. In 1976, selected Consumer Price Index elements were used for the "all other" category. In 1977, the Commodity Service and Expenditure elements of the Consumer Price Index were used. The resulting adjustment to the \$7.72 1976 in-line standard appears in Table 7.

TABLE 7

APPLICATION OF THE CABLE TELEVISION PRICE INDEX -- 1977

<u>Cost Element</u>	<u>% of Total</u>	<u>In-Line Rate</u>	<u>Related Index Increase 2/76 - 3/77</u>		<u>New In-Line Rate</u>
			<u>%</u>	<u>Amount</u>	
Salaries and Benefits	29.3	2.26	6.0	.14	2.40
Interest Expense	9.4	.73	6.3	.05	.78
Depreciation and Amortization	14.2	1.10	5.7	.06	1.16
All Other	47.1	3.63	8.9	.32	3.95
Total	<u>100%</u>	<u>\$7.72</u>		<u>\$.57</u>	<u>\$8.29</u>

Source: Memo from unidentified staff member to L. S. Dryden, May 16, 1977.

The results show that between February 1976 and March 1977, the in-line standard would have to be adjusted by 7.3% to meet rising costs. However, the general annual Consumer Price Index only increased 6.6%, which would adjust the in-line standard to \$8.23. Therefore, it appears that by using selected Consumer Price Index elements, correlating them to specific cost elements and then weighting, a higher in-line standard would be adopted in this example. Of course, the differences between using the general Consumer

Price Index method and the CTPI method would depend upon how fast costs are rising in the specific areas used in the CTPI when compared to the overall Consumer Price Index.

In this section, we have looked at two states which have attempted to use cost of living-type adjustments when approving rates. This trend is quite similar to methods being adopted by public utility regulatory agencies when dealing with electric companies. In some states, fuel adjustment procedures have been instituted which allow for automatic non-PSC approved rate adjustments when the cost of fuel used in generating electricity rises. While neither of the states analyzed above strictly conforms to this fuel adjustment example, the fact that methods have been constructed to account for operating cost increases might indicate that agencies are becoming sensitive to the problems faced by cable operators in times of inflation. On the other hand, consumers may be faced with one more commodity or service whose cost is rising faster than their real income. For example, if the 7.3% increase in the in-line standard found in 1976-1977 is projected for three more years, the standard in 1979-1980 would be \$10.22. Similar (yet slower) increases might be foreseen with Delaware's 5% rate adjustment clause. The effect of raising rates in this manner must therefore be counterbalanced by the obvious effect on consumer demand and extension of services.

5.0 RATE REGULATION: MYTH VS. REALITY

Much of the folklore which surrounds cable regulation implies that regulatory schemes elicit knee-jerk reactions from interested parties. The industry is likely to reject rate regulation as unnecessary, legislators may view it as a necessary evil, regulators or bureaucracies will embrace new responsibilities, and consumers are likely to advocate control over industries which they feel are in the position to take advantage of them. Yet, as one attempts to delineate the interests of various parties in cable rate regulation, one is struck by how much reality can diverge from myth.

One of the traditional views of rate regulation is that it was instituted to protect the consumer from an industry where market forces are non-existent or have failed in one or several respects. But in terms of rate regulation at the state level, it appears that much of the impetus for entering into the regulatory field came as much from a feeling on the part of legislators and regulators that municipalities did not have the expertise to do the job effectively. In Massachusetts, for example, the regulatory Commission was concerned that municipalities were making arbitrary decisions in rate cases. This calls into question whether rate regulation responsibilities are typically taken on because of a perception of market failures, which could leave the consumer unprotected. Instead, a recognition of municipal failures which would leave the industry unprotected may underlie the assumption of rate regulation responsibilities.

Concurrently, we may see a shift in municipal officials' attitudes towards state involvement in CATV rate regulation. As we saw above, municipal officials may welcome the state role because it rescues these officials from having to make politically delicate decisions to allow rate increases

(and risk consumer and voter dissatisfaction) or deny a rate adjustment (and risk being sued by the cable operator). This is an interesting reversal of what is often seen as local government's reaction when issue areas are pre-empted by the state.¹³⁸

Despite the conventional wisdom concerning bureaucratic tendencies to expand jurisdiction, we may be witnessing the opposite tendency in state regulation of subscriber rates. Several states we have examined seem to have become disenchanted with the rate regulation task. This disenchantment (evidenced by moves toward simpler procedures and/or deregulation of rates) stems from two sources: the burden imposed on the regulatory agency and a recognition that market forces have not necessarily failed in some cases.¹³⁹ The regulatory burden aspect is likely to exist when staff members, who would prefer to be involved in long-range policy planning, must instead be concerned with the details of expenses, rate bases and rates of return. When this is coupled with the discovery that many of the cable companies which come to them for rate adjustments could not earn an adequate rate of return unless rates are increased to an unacceptable level, disenchantment is heightened.

The consumer has looked upon rate regulation as a way to protect him/herself from monopoly pricing situations. But as we pointed out above, rate regulation may have been instituted to protect other interests (the

¹³⁸ See Konrad K. Kalba, Larry S. Levine and Anne E. Birinyi, Regulatory Politics: State Legislatures and the Cable Television Industry, Harvard University Program on Information Resources Policy, Publication P-78-2, August 1978, Section 7.0.

¹³⁹ Another possible explanation for this disenchantment is that the deregulation of rates by state authorities is used to gain industry support for expanding the agency's responsibilities in other areas. These other areas may require legislative approval and/or industry acquiescence. This represents a more dynamic view of the bureaucratic expansion thesis.

industry from municipalities; competing industries from the cable industry). Despite the actual reasons behind instituting rate regulation at the state level, the consumer is likely to inquire whether he/she is better off with jurisdiction at the state level, at the local level, or no jurisdiction at all. In a companion study using econometric methods, it was found that the rates of systems in areas with state regulation were higher than in systems which had local regulation alone.¹⁴⁰ These differences were found to be statistically significant using 1974 data. When 1971 data were examined, (i.e. prior to the introduction of regulation in large states such as New York and New Jersey), no differences in rates were found. In 1976, rates were found to be higher in state-regulated systems with 13 or more channels when compared to locally regulated systems with 13 or more channels.

A full discussion of these results is beyond the scope of this paper, but nonetheless, what do these tentative findings imply? If the differences in rates found in 1974 and 1976 are due to the fact that state agencies are more lenient in granting rate increases than municipalities, consumers may resist the movement of jurisdiction from the local to the state level.¹⁴¹ The political pressures which the municipal official may wish to avoid may be precisely the pressure which the consumer wishes to use and can more effectively employ at the local level. Therefore, municipal officials and

¹⁴⁰ Braunstein, et al., op. cit.

¹⁴¹ Of course, there are alternative explanations for these differences, all of which cannot be ruled out by the data developed in the report cited in footnote 140. For example, rates may be higher in regulated states because expenses are higher. Expenses may be higher because of the costs of regulation, i.e. fees which must be paid by the system operator to support the regulatory agency, or because it is simply more expensive to do business in regulated states, which tend to be industrialized and may have higher inflation rates than non-regulated states.

consumers could be developing conflicting views on the jurisdictional question.

The industry is certainly not monolithic in its reaction to rate regulation. We have seen that in two states the industry reaction to a common tariff proposal differed significantly. One may hypothesize that other differences exist as well. Some cable operators have probably recognized that in certain cases they have been able to "get a better deal" from state authorities than from local officials. Other cable operators are still likely to believe that the municipality (with whom they have developed a working relationship) will better understand the cable operators' problems. Reactions and positions, however, are likely to be developed more out of perceptions of self-interest and less out of any ideological concern for the "proper" level of jurisdiction; and in the end the industry would prefer the freedom to raise or lower rates at will, partly because of the effects on revenues, but also because the industry would like to know what the elasticity of demand is for cable services. These demand figures can only be estimated by using empirical data, most of which neither the industry nor the regulators possess.

This leads to one final area of discussion: the data problem. The view that the marketplace can control rates in some markets seems to be gaining momentum. While the argument is persuasive when based on the assumption that cable does have numerous competitors and is not yet a necessity, much of the discussion is based on philosophy rather than on a clear understanding of the cable service marketplace. If this study points in any direction, it should be towards the development of indicators by which reasoned regulation and deregulation decisions can be made. These indicators could include elasticity of demand, expenses and capital

invested per subscriber, cost of equity capital, and value of service figures.

The growth of ancillary services, such as pay and point-to-point data transmission, poses unique problems for the development of an adequate data base on which to make policy decisions. It is likely that growth in those areas will lead regulatory agencies into an examination of rate structures as cross-subsidy issues arise. In the most narrow sense of the concept, cross-subsidy exists when given the costs of a service, revenues from that service do not meet those expenses. This implies that the service is being cross-subsidized by some other service(s) which the firm is providing. Problems arise, however, in the calculation of the costs of a particular service when all the services being offered jointly use the capital plant and staff of the firm. Depending upon whether a cross-subsidy exists, various interested parties may argue for costs computed on a marginal basis (i.e. the cost for pay services are those which must be incurred over and above the cost of providing basic service) or on a fully allocated basis. Whether either of the definitions are used, sufficient data is not now available to even address these cross-subsidy issues as well as the implications (for demand and service development) of using fully allocated vs. marginal cost calculations.

It should be clear to those who are familiar with the historical development of telephone rates that these questions, although new to the cable industry and consumer, are ones which have posed difficulties in other industries as well. The fact that cable regulatory agencies are searching for alternative methods of regulating (and deregulating) subscriber rates, oftentimes basing these decisions on an insufficient data base, merely

points to the fact that the industry and its regulatory agencies are still in their infancies. This is yet another reason to begin collecting and analyzing the evidence which can then be brought to bear on the outputs of these agencies in determining their successes and failures.