

**CONTRACT PRICING OF ELECTRIC AND TELEPHONE SERVICE:
CURRENT PRACTICE AND POLICY**

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EXECUTIVE SUMMARY

Utility services are increasingly provided under contracts or special tariffs negotiated between utilities and customers outside the traditional rate case. Such contracts or special tariffs may be offered to provide economic development rates, incentive rates, interruptible rates, or rates for special services. They often include prices set below regular tariff rates for the same or similar services, and may be subject to less regulatory scrutiny than that applied to regular tariffs.

How widespread is the practice? What are commission attitudes and policies towards it? What criteria do regulators use in evaluating contracts and special tariffs? To what extent should regulators and ratepayers be concerned? Does the practice of providing utility services under individually negotiated contracts or special tariffs require developing new regulatory policy?

This report addresses these questions in several ways. In 1991 the NRRI surveyed state commissions to determine two things. First, the extent of contract activity for electric and telephone services. Second, the attitudes and policies of the state commissions toward the practice generally and toward incentive rates and economic development rates for electric and telephone service. Additionally, commission attitudes and policies toward interruptible rates for electric service and toward special contracts for telephone service were surveyed. This report presents the survey results, discusses the causes and likely consequences of contract pricing of utility services, and offers suggestions for appropriate policy.

Three concerns that regulators may have about contracts are identified. First, the traditional regulatory concept of aggregation and averaging which helped make attainable the goal of universal service is coming under pressure since contract rates are based on individual customer's cost causation and demand conditions rather than on averages for broad groups or classes of customers. Second, since tariff rates are designed to give the utility an opportunity to collect its revenue requirement, discounts from tariff rates mean that the utility will not meet its revenue requirement, creating

an implicit revenue deficit. This deficit can be borne by stockholders, offset by increases in rates charged other customers, or shared by customers and stockholders. Third, contracts create the possibility that otherwise similarly situated customers may obtain different terms for utility service, depending on bargaining power and the extent of competition. This is contrary to long-held regulatory principles stressing equal treatment for similarly situated customers unless a major characteristic of "situated" is whether a customer has an alternative supplier.

Survey results indicate that contracting is widespread. In general, commissions are active in evaluating contracts prior to their being implemented. Many commissions require preapproval, hold hearings, and most allow for staff analysis of proposed contracts. Most often, contracts are considered on an ad hoc or case-by-case basis, but some commissions have developed generic policies for dealing with them.

In ex ante evaluation of proposed contracts, commissions are most often concerned that contracts provide for rates that are just and reasonable; they are also concerned with load retention—more for electric than for telephone, discrimination between and within customer classes, and maintaining a price floor above marginal cost. Apparently, of less overall concern are antitrust issues and potential predatory pricing—more important for telephone than for electric, revenue loss occasioned by lower rates—more important for electric than for telephone, other anticompetitive effects, and economic versus noneconomic bypass.

The survey indicates that commissions are not generally as active in evaluating the effect of contracts on an ongoing basis. Relatively few report having specific oversight mechanisms for contract service; review of contracts would most often at the next rate case. Resource constraints may limit the extent of ongoing review. Also, in a number of responses indicated that it was too early to tell whether the projected benefits of the contracts had been achieved—except whether a customer was retained or not.

In carrying out oversight responsibilities related to contracts, commissions might consider the following actions.

- **Insist that contracts be priced to recover long-run incremental cost—at a minimum—except where there is clear demonstration that such pricing will result in stranded investment.**
- **Require that cost studies be consistent with the facts of the case and that they motivate pricing decisions rather than vice versa.**
- **Document the extent of competition if competitive reasons are given for entering into a contract, recognizing that competition will vary both within and across jurisdictions.**
- **Require utilities to demonstrate how contracts fit, individually and collectively, into the overall plan for the firm when proposing contracts.**
- **Protect core customers by rejecting attempts to shift revenue deficiencies to them.**
- **Review traditional cost allocation and revenue recovery methods to determine whether they have created opportunities for competitors to undercut the utility when they are not, in fact, more efficient.**
- **Allow utilities to compete but be watchful for anticompetitive behavior.**
- **Consider long-run effects of contracts including a loss of aggregation and averaging and unequal treatment of similarly situated customers.**
- **Prepare for an increasingly competitive environment and, accordingly, develop policies for dealing with contracts and for their ongoing oversight.**

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FOREWORD

Due mainly to competitive pressures, the practice of offering electric and telephone service under contracts or special tariffs negotiated individually between a utility and its customers has increased in importance in recent years. Moreover, the practice is likely to become still more widespread in the future. This creates questions of public policy that are of interest to regulators and ratepayers alike such as how to supervise the practice, how to encourage utilities to compete while preventing cross-subsidization and anticompetitive behavior, and how the practice will ultimately affect utilities and ratepayers.

This NRRI report sheds light on the topic by describing approaches that have been taken by the various regulatory commissions and by providing a framework for analyzing such contracts. We hope that commissioners and staff will find this report informative, readable, and useful.

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CHAPTER 1

BACKGROUND AND INTRODUCTION

Utility services typically have been provided under tariffs set by state regulatory commissions. Increasingly, however, utilities and individual customers are negotiating contracts or special tariffs under rates and service terms that differ from those contained in existing tariffs for the same services. Negotiated contracts or special tariffs for the supply of electricity and telephone service exist in most states, justified by a desire to retain existing customers, attract additional customers, or provide interruptible service as part of a demand-side management program. Negotiated contracts and special tariffs usually offer rates lower than those charged similar customers served under existing tariffs. Furthermore, the negotiated price is not necessarily determined using traditional cost-of-service standards. Such contracts and special tariffs are a product of bilateral negotiation and, in some instances, require no prior regulatory approval and are not subject to the same degree of scrutiny applied to regular tariffs. This report considers the phenomenon of contracts and special tariffs for electricity and telephone services, discusses the types of contracts and special tariffs offered, and explains reasons for and differences between traditional tariffs and contracts or special tariffs. It also presents results of NRRI surveys of commission policies and practices related to contracts and special tariffs for electric and telephone service, indicates some concerns raised by the existence of contracts and special tariffs, and makes suggestions for appropriate policies for dealing with them.

Tariffs and the Traditional Regulatory Paradigm

The traditional view of the implicit bargain between a regulated utility and its customers depicts the firm as giving up the right to set its own prices, allowing them to be approved by an administrative commission, and as undertaking an obligation to serve all customers under reasonable terms. The firm, in turn, receives from its customers valuable concessions or considerations including an exclusive franchise

—relying on the power of the state to limit entry, the power of eminent domain, and protection from most antitrust actions.¹ Implied in this relationship was that the commission would set prices or rates for the utility's services to allow the utility to earn a return that,

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.²

The utility was shielded from direct competition though in some cases inter-sector competition was present—for example, between electricity and natural gas used for space and water heating and for cooking. Its customers were protected from potential abuses of monopoly power because rates would be just and reasonable and not unduly discriminatory, and they were assured reliable service.

The Rate Case Method of Setting Tariffs

Traditionally, the prices or rates charged for utility services are found in published schedules or tariffs developed by the utility in accordance with prespecified and longstanding regulatory rules formally approved by the regulatory commission.

¹ A more thorough discussion of the traditional regulatory bargain may be found in Douglas N. Jones, *A Perspective on Social Contract and Telecommunications Regulation*, (Columbus, Ohio: The National Regulatory Research Institute: June 1987); Douglas N. Jones, "Regulatory Concepts, Propositions, and Doctrines: Casualties and Survivors," *Journal of Economic Issues* 22, no. 4 (December 1988): 1089-1108; and Paul J. Garfield and Wallace F. Lovejoy, *Public Utility Economics*, (Englewood Cliffs, New Jersey: Prentice-Hall, 1964), 12-13. Discussions of price discrimination by utilities may be found in James C. Bonbright, *Principles of Public Utility Rates*, (New York: Columbia University Press, 1961), 369-385 and J. Stephen Henderson and Robert E. Burns, *An Economic and Legal Analysis of Undue Price Discrimination*, (Columbus, Ohio: The National Regulatory Research Institute, August 1989), 26-61.

² *Bluefield Water Works & Improvement Co. v. Public Service Commission of West Virginia*, 262 U.S. 679, at 693 (1923).

These tariffs are designed to apply to broad classes of customers and offer little, if any, flexibility in pricing once the tariff is determined.

Tariffs result from a rate case in which the utility's rate base (traditionally, the value of "used and useful" investment) and its allowable operating expenses are set on a test-year basis. Then, the utility's allowable expenses (operating and maintenance expenses, taxes, and depreciation) and an appropriate rate of return times the rate base—all calculated on a test-year basis—determine the revenue requirement which is, in turn, allocated among broad classes of customers or services—residential and business customers and local exchange and toll services, for example. Prices are set for each service such that given efficient management and accurate estimates of expenses and sales for the test year, the utility has an opportunity to collect its revenue requirement. This process most often involves a rate case in which, before tariffs are approved, the parties to the case (the utility, its customers, and others) have the right to present evidence and question all aspects of the rates proposed by the utility. Furthermore, after the tariffs are approved, the parties may petition for rehearing or seek judicial review if they are not satisfied by the outcome. Among the issues often raised during and after rate cases are questions of the appropriateness of the cost or revenue requirement allocation and the related issue of cross-subsidization.³

The rate case method of setting tariffs is not well suited for operating in a fast-paced, competitive environment; it is slow and relatively inflexible because, once set, tariffs can be modified only by going through the process again.⁴ Rate cases do, however, provide ample notice to affected or interested parties, make allowance for their participation, and require that commissions make various findings of facts

³ See Appendix A for a brief discussion of cross-subsidization and related issues.

⁴ It is possible to hold special hearings to modify or reset individual tariffs but major revision or restructuring is typically reserved for rate cases.

including one to the effect that the rates approved under the tariffs are "just and reasonable" and (implicitly) therefore not unduly discriminatory.⁵

Relying on published tariffs has the advantage of openness, reduces transaction costs, and allows consumers to believe that they are treated (or mistreated) the same as others who are similarly situated (seeking the same or similar services).⁶ For the vast majority of transactions, especially small, repetitive ones where transactions costs would be large relative to value, tariffs work well.⁷ Their inflexibility in the sense that service offerings must be relatively standardized and prices equalized for groups of customers may imply that they are not optimal in an environment characterized by partial or potential competition, technological innovation, or both.⁸

Contracts and Special Tariffs Under Regulation

Primarily because of the more competitive nature of some market segments and secondarily because of the rigidity of the traditional tariff-setting process and the

⁵ The notion of undue price discrimination has been considered malleable enough to allow commissions to pursue social policy goals such as universal service and lifeline rates as well as value of service pricing.

⁶ The proposition that similarly situated customers would be treated alike has long been an essential concept of ratemaking. Compare this with the car buyer's situation in which two customers may pay much different prices for identical cars (even at the same dealer on the same day) depending upon bargaining skills and information held by the buyer and seller.

⁷ We may think of commissions acting to monitor and enforce the contracts between the utility and its customers, reducing transactions costs and benefiting both parties. This point is made in Sanford V. Berg and John Tschirhart, *Natural Monopoly Regulation*, (New York: Cambridge University Press, 1988), 289-90.

⁸ The concept of equal treatment of similarly situated customers often means that rates are set based on costs measured and averaged across broad groups of customers with potentially different service costs. This leads to some customers being charged more and some less than the costs they impose on the system. Such group "aggregation and averaging" may be justified on social policy or economic efficiency grounds—if, for instance, the expense of setting rates for smaller groups outweighs the benefits. However, unless entry restrictions are strictly enforced, competitors may find opportunities for cream skimming.

flexibility of contracts and special tariffs, utilities increasingly have been resorting to contracts and special tariffs to offer and price services to some major customers. Contracts and special tariffs are arrangements through which a utility offers normally regulated services with price and service terms determined not by existing tariffs but rather by negotiations between the utility and a customer outside the normal rate hearing.

Sometimes service is provided directly under a contract, but often a special tariff—which might be called an individual-case-basis (ICB) tariff, special assembly tariff, or a customer-specific offering (CSO)—is created by the utility and approved by the commission to cover the contract. Although service is then provided under a tariff, this situation may be contrasted with the traditional case in which the utility and a customer sign a contract for service but the charges and conditions of service are strictly governed by *preexisting* tariffs. From the customer's perspective, contracts and special tariffs are identical. From the utility's perspective contracts and special tariffs differ to the extent that other customers can subscribe to special tariffs. Given this similarity, in the following discussion "contracts" or "contract pricing" refer both to contracts per se and to special tariffs created and approved for individual customers with terms differing from existing tariffs.

Contracts differ from traditional tariff-based ratemaking in several ways. First, even though providing service under a contract results in higher transactions costs and is more time consuming than providing service under pre-existing tariffs, when faced with competitive situations or special service requirements, contracts are more expedient because in many cases they do not require prior commission approval as would a new tariff.⁹ Second, a contract is a unique, two-party document between the utility and a single customer whereas a tariff may be thought of as a common contract between the utility and a class of customers. Third, a contract may have a

⁹ If an appropriate tariff exists, a customer may obtain service under it more quickly than negotiating a contract.

different life span than a tariff.¹⁰ Fourth, contract pricing is usually discounted from equivalent tariffs when they exist. Finally, a longstanding regulatory doctrine—that similarly situated customers will be treated equally—may be in jeopardy because while tariffs are public documents, contracts are often proprietary and confidential. Thus, the outcome of negotiations depends on the bargaining abilities of the parties. These last two differences are probably of most concern to regulators. Pricing at a discount relative to equivalent tariffs means there needs to be some means for dealing with the resulting revenue deficiency, while the proprietary nature of contracts and the possibility that prices will vary across customers means that a longstanding regulatory concept—aggregation and averaging—is being modified if not eliminated.¹¹

Benefits of Contract Pricing

Contract pricing allows utilities to reduce profit erosion by giving them greater freedom to react to competition where present. The flexibility offered by contracts may aid them in retaining existing customers, attracting new customers, and making efficient use of existing plant in service. Depending on the firm's current capacity and demand conditions, maintaining or expanding sales may reduce short-run average total cost, which will enhance profits so long as sales under contracts make some contribution to fixed costs. Contracts may also allow for product differentiation which can enhance profit by segmenting the market and designing and pricing services to maximize the contribution to profits by individual customers. Product differentiation may also be simply a cover for price discrimination if nonsubstantive differentiation is used to create non-cost-based price differentials.¹²

¹⁰ Contracts have specified life spans (three to five years is common) and charges under them are usually stable during their life. The life span of charges under a tariff is indeterminate—until new rates are approved by the commission.

¹¹ System averaging has been listed as a concept that has given way to causation-based cost assignment and become a casualty of recent history due to technology and increased competition. See Jones, "Regulatory Concepts, Propositions, and Doctrines."

¹² See Appendix A for a brief discussion of price discrimination.

Types of Contracts and Special Tariffs

Several types of contracts or special tariff rates for electricity and telephone services have been identified and addressed. They are listed in Table 1-1, below. Note that "incentive rates" in this context is not directly related to incentive rates typically used in discussions of incentive regulation. Under incentive regulation utilities may be granted downward rate flexibility, given incentives to cut costs, and allowed to retain all or a portion of profits resulting from such actions. The incentive rates discussed in the present context refer to the utility offering incentives to customers who remain on the system or increase usage instead of incentives given

Table 1-1

SPECIAL PRICING OF UTILITY SERVICES

Type	Purpose
Economic development rates	To encourage a customer to locate within the franchise area or to promote expansion or increased use of existing facilities.
Incentive rates	To increase or retain sales to price-sensitive customers and/or retain and attract customers with competitive alternatives.
Interruptible rates	To offer service at rates lower than those for firm service to customers willing to have their service interrupted or curtailed by the utility.
Special contracts	To accommodate unusual and/or new services or equipment configurations for which there is insufficient demand to justify establishing a tariff.

Source: definitions from survey forms as contained in Appendix B.

the utility by regulators. "Competitive rates" or "load-retention rates" might be a more appropriate term since the impetus is clearly to retain customers and load when faced with the threat of competition. Interruptible rates may also be considered a type of incentive rate because, from the utility's point of view, they are another method of retaining and managing load or both. Note also that interruptible rates were considered only for electricity and that special contracts were considered only for telephone service.

Organization of This Report

Chapter 2 summarizes issues involved in contract pricing of electricity and illustrates various types of contracts using examples from several states. Chapter 3 presents results of the NRRI survey of current commission policies and practices relating to contract pricing of electricity. Chapter 4 summarizes issues involved in contract pricing of telephone services. Chapter 5 presents results of the NRRI survey of current commission policies and practices relating to the contract pricing of telephone service. Chapter 6 discusses some concerns about contract pricing of utility services and makes some recommendations for appropriate policy. There are also two appendices to this report. Appendix A contains brief discussions of a number of topics that may provide the reader with useful additional information but were not considered essential to the body of the report. Appendix B contains lists of the respondents and copies of the survey instruments, one for electric and one for telephone, that were sent to the commissions. To enhance accessibility, the report relies almost entirely on narrative analysis with only summary statistics presented for survey results. Furthermore, Appendix A minimizes the use of diagrams and algebra.

CHAPTER 2

CONTRACT PRICING OF ELECTRICITY

The popularity of contract pricing of electricity can be explained by the emergence of nonutility power producers and the continuing trend of expanding access to the power transmission grid. There have been many extensive discussions about the motivation for and consequences of such changes in the electric market, and they will not be repeated here.¹ The focus here is to identify the economic and regulatory principles useful to the state regulators in evaluating individual contracts entered by electric utilities and end-use customers. The discussion is limited to retail electricity rates since wholesale rates are beyond the purview of state regulators.

The Nature of Contract Pricing

As discussed previously, utilities increasingly are supplementing filed tariffs with negotiated contracts as a part of their overall competitive strategy. A central question is to identify the basic approaches applicable in evaluating the practice of contract pricing when viewed in the general framework of price discrimination. Other price discrimination issues arise when considering peak-load pricing, cost allocation among customer classes, and differential prices for firm and interruptible service. However, these price discrimination issues refer to the provision of *different* services with the basis for discrimination being differences in end use, energy requirement, and load characteristics. Contract pricing is often price discrimination applied to essentially identical services with the basis being the customer's ability to switch to other fuels or self-generate. In other words, contract pricing is often discrimination that is value-based rather than cost-based.

¹ See, for example, U.S. Congress, Office of Technology Assessment, *Electric Power Wheeling and Dealing: Technological Considerations for Increasing Competition*, OTA-E-409 (Washington, DC: U.S. Government Printing Office, May 1989); and U.S. Federal Energy Regulatory Commission, Office of Economic Policy, *Regulating Independent Power Producers: A Policy Analysis* (Washington, DC: Federal Energy Regulatory Commission, 1987).

One reason contract pricing is important for electric utilities is the growing number of fuel-switching and supplier-switching (noncore) customers so that, for many customers, there are full or partial alternatives to the electric service provided by the regulated utility. For example, a retail customer can switch fuels or install its own generation facility.² As a result of the ability to switch fuels, bypass or the threat of bypass becomes a powerful tool available to these customers in negotiating contracts under terms more favorable than those in the filed tariffs.³ For large users at the generation level, the overall trend toward increasing competition in the electricity market is likely to continue, and the use of contract pricing will likely increase.

A second reason for the importance of contract pricing is the presence of a declining but still substantial number of core or captive customers for whom alternate sources are not feasible. In fact, the existence of core customers is the fundamental reason for a monopoly utility and the present form of public utility regulation; if all customers had the ability to switch energy suppliers, electricity could be deregulated and market forces alone could determine price and service conditions. But, for a large number of customers (primarily residential and small business customers), it is generally uneconomical to switch fuels, self-generate, or have two or more suppliers providing electricity competitively.⁴ So long as these core customers exist and are

² For an analysis of the decision to co-generate or self-generate electricity, see Kenneth Rose and John F. McDonald, "Economics of Electricity Self-Generation by Industrial Firms," *The Energy Journal* 12, no. 2 (1991): 47-66.

³ The possibility of bypass is not limited to the electric industry; the natural gas and the telecommunication industries, for example, have experienced more bypass than the electric industry. For discussions of bypass in the natural gas industry, see, for example, Daniel J. Duann et al., *Direct Gas Purchases by Gas Distribution Companies: Supply Reliability and Cost Implications* (Columbus, Ohio: The National Regulatory Research Institute, December 1989), and Robert E. Burns et al., *State Gas Transportation Policies: An Evaluation of Approaches* (Columbus, Ohio: The National Regulatory Research Institute, January 1989).

⁴ Though some researchers argue that electricity can be competitively provided at the distribution level, it is generally agreed that competitive supply of electricity at the distribution level is not an effective or economical arrangement for most residential and small business customers. A favorable view of competition at the distribution level, see Walter J. Primeaux, "Total Deregulation of Electric Utilities: A Viable
(continued...)

potentially affected by contracts, some protection must be afforded them. For instance, if the contract price for a noncore customer is decided solely on market conditions, and a significantly discounted rate is set, either core customers will have to share some of the burden or the utility's shareholders will have to pick up the full cost of such a discount. Therefore, the operation of market forces (competitive considerations) need not be the only criterion in evaluating the desirability of any contract between a utility and its customers.

A third reason for the importance of contract pricing is the rigidity of utilities' capital investments. A utility's total capacity and energy demand as well as its customer mix are likely to change over time; a core customer may become a noncore customer, and a noncore customer may return to the utility system if economical outside power becomes unavailable. A utility's capital plant (generating stations, transmission lines, and distribution lines) generally has a long economic life, few alternative uses, a large unit size, and is immobile. Moreover, at any point in time, the utility's available capacity mix may not be optimal for its customers' energy and demand requirements. In the past, cost consequences of over- and undercapacity, even over an extended period of time, were shared by all customers. As the electricity market becomes more competitive, noncore customers may no longer be willing to share the costs of over- and undercapacity, and may decide to leave the system. In this instance, core customers are likely to bear most, if not all, of the consequences.

These three reasons—competition from alternative sources of supply, a utility's obligation to its core customers, and the immobility of a utility's capital investment—make contract pricing a difficult issue to resolve. Furthermore, the interests of core customers, noncore customers, and the utility must be considered simultaneously. In

⁴ (...continued)

Policy Choice," in Robert W. Poole, Jr., ed. *Unnatural Monopolies: The Case for Deregulating Public Utilities*, (Lexington, Massachusetts: Lexington Books, 1985), 121-146. Several other services and facilities such as local loop in telephone, gas distribution networks, and water mains also exhibit the characteristics of a local monopoly. For a discussion of this, see Douglas N. Jones, "Regulatory Concepts, Propositions, and Doctrines: Casualties and Survivors," *Journal of Economic Issues* 22, no. 4 (December 1988): 1089-1108.

the following sections, a review of selected orders and rulings issued by state public service commissions will be provided first, followed by some regulatory principles and criteria.

Selected Cases of Electricity Contract Pricing

The purpose in reviewing these commission orders and rulings is not to provide generalized results but to offer some illustrative examples of the uses of contract pricing. Some of these orders were entered several years ago and, therefore, may not be reflective of current conditions or policy. Nevertheless, they are discussed to provide a diversified and representative description of recent contract pricing activity in electricity. While most results of the nationwide survey conducted by The National Regulatory Research Institute on electric utility contract pricing practices are presented in Chapter 3, the orders and contracts discussed in this section are taken from materials provided in response to the survey. Categorization of the cases presented below is based on the main purpose evidenced for offering the contract. However, because in several instances a contract may be intended to achieve more than one objective, the classifications should not be viewed as being mutually exclusive as a contract may serve multiple purposes and, thus, fit into more than one category.

Economic Development Rates

In some states, economic development rates are one component of a comprehensive incentive package to attract new firms to a particular locality or to discourage existing firms from closing a plant and moving production to another area. Table 2-1, below, lists the main arguments that have been used by supporters and opponents of economic development rates. Two examples of economic development rates for electricity follow the table.

The basic argument in favor of economic development rates is based on the presumption that lower electricity prices have a decisive effect in persuading firms to

Table 2-1

ARGUMENTS FOR AND AGAINST ECONOMIC DEVELOPMENT RATES (EDRs)

FOR	AGAINST
EDRs are needed for states to compete for new industry.	Promoting economic activity falls outside the purview of public utility regulation.
Some states require utility regulators to promote economic growth.	EDRs are ineffective in promoting economic growth.
EDRs are not unduly discriminatory as long as discounts do not reduce rates below marginal costs.	EDRs discriminate against ineligible firms and place efficient firms at a disadvantage compared with firms eligible for the rate discount.
EDRs can benefit the utility and all of its customers.	Regulators can best promote economic activity by adhering to traditional rate-of-return principles.
EDRs, by creating a more diversified regional economic base, can reduce the severity of cyclical economic downturns.	EDRs produce revenue losses that drive up electricity rates to ineligible customers.

Source: Authors' construct.

locate or expand operations in an area, or in dissuading firms from closing, reducing operations at existing facilities, or relocating elsewhere. The extent to which the price of electricity really is a factor is not clear.⁵ Electricity is one input in the production process, and because it affects a firm's total cost its price can influence decisions such as what and how much to produce, and how and where (in multiplant firms) to produce the chosen output. Whether the price of electricity is decisive in making these decisions depends on such variables as the portion of the firm's total cost

⁵ Further discussion of the efficacy of economic development rates may be found later in this chapter.

accounted for by electricity, the firm's ability to shift between electricity and other factors of production, the firm's ability to reallocate production among facilities with different electricity costs, and the elasticity of demand for the firm's output. If economic development rates are offered, however, a good case can be made for doing so through contracts rather than through a tariff that might attract "free riders"—customers who benefit from discounts but are only doing what they would have done in any event.

Arkansas Power & Light Company⁶

On January 16, 1990, Arkansas Power & Light Company (AP&L) filed with the Arkansas Public Service Commission a proposed agreement between itself and TREFIL ARBED Arkansas, Inc. (ARBED). The agreement provided for a reduced rate for electric service for five years to induce ARBED to construct and operate a steel tire cord production facility near Pine Bluff, Arkansas. AP&L said this agreement would recover all incremental costs and contribute to fixed costs, would not require AP&L to construct additional generation facilities to provide service to ARBED, and would provide long-term benefits to all existing customers.

The Commission approved the agreement as proposed except that it revised the method of splitting revenues in excess of incremental costs between ratepayers and shareholders. The Commission determined that revenues collected through this agreement were similar to what would be collected under AP&L's standard Economic Development Rate Rider, M37. Therefore, the proposed agreement on the whole was found not to affect other ratepayers adversely. The Commission ordered that revenues in excess of incremental costs be shared between AP&L and ratepayers using what was called a "Percentage of Standard Rate Split" method, which specified that revenues in excess of incremental cost be split based on the percentage of revenue collected under the special rate and revenue collectible under the standard

⁶ Arkansas Public Service Commission, The Agreement for Electric Service Between Arkansas Power and Light Company and TREFIL ARBED Arkansas, Inc., Docket No. 90-005-TF, Order No. 4 (1990).

rate. For example, if revenue under the special rate was less than what would have been collected under the standard rate, AP&L would receive less than 50 percent of the excess over incremental cost. By adopting this method, AP&L was given an incentive to negotiate the highest rate possible when competitive conditions precluded charging the standard rate.

Otter Tail Power Company⁷

On January 9, 1990, and on a subsequent date, Otter Tail Power Company (Otter Tail) filed for approval by the North Dakota Public Service Commission an experimental rate and pricing mechanism to attract new businesses locating in Otter Tail's service area, and applicable to existing businesses expanding their operations within its service area. The Commission denied Otter Tail's application on October 2, 1990 but directed that Otter Tail might file a revised tariff containing certain modifications outlined in the Order.

The Commission found the proposed economic development rate was not unjustly discriminatory, but that the negotiating discretion requested by the utility was unnecessarily discriminatory for the purpose of encouraging economic development. It also found that state law required that rural cooperative service areas be protected from intrusion by public utilities, which certain intervenors successfully claimed Otter Tail's proposed economic development rate would fail to do. As for the guidelines for an acceptable revised tariff, the Commission required no discount for demand and customer charges; any discount should be applied to energy charge only, and the portion of discount should be reduced over the five-year period. Such discounts would be available for five years and apply only to load above a customer's existing load with a minimum load size equal to that required under the existing Large General Service tariff.

⁷ North Dakota Public Service Commission, Otter Tail Power Company Experimental Rates Approval, Case No. PU-401-90-14 (1990).

Incentive or Load-Retention Rates

Incentive or load-retention rates are offered to customers with the ability to obtain electricity from other suppliers (including self-generation) or to switch fuel types (for example, to natural gas). Two such contracts are discussed below.

Gulf Power Company⁸

On May 1, 1987, Gulf Power Company (Gulf) filed a petition with the Florida Public Service Commission requesting approval of a proposed agreement between itself and Air Products and Chemicals, Inc. (Air Products). The proposed agreement called for Air Products to delay construction of cogeneration or self-generation facilities for at least ten years in exchange for a credit of \$2.75 a kilowatt of on-peak demand per month for all kilowatts in excess of 5,000 and less than 15,500. Gulf was seeking to recover these credits (estimated to be around \$346,500 a year) through either the conservation cost recovery clause or the fuel adjustment clause. On May 5, 1988, the Commission approved the agreement with some modifications regarding fuel cost savings.

Gulf argued that the special contract was necessary to retain Air Products' load and that, by retaining it, other ratepayers could have substantial savings. First, it would keep the benefit of Air Products' contribution to fixed capital costs and operating and maintenance costs from being lost completely by other ratepayers. Second, the proposed discount would expire after 1997. At that time, Air Products could construct its generation facility, allowing Gulf to defer or reduce capacity additions between 1997 and 2002. Third, by selling more electricity, Gulf could purchase more coal in the spot market at a rate lower than the contract price of coal, lowering systemwide average fuel cost to other ratepayers.

⁸ Florida Public Service Commission, Request for Approval of Special Rate Agreement Between Gulf Power Company and Air Products and Chemicals, Order No. 19613 (1988).

The Commission disagreed with Gulf's analysis of savings in plant deferral and the contribution to fixed cost. Furthermore, it found that the fuel cost savings alleged by Gulf could be realized only if the price differential between spot and contract coal prices increased 35 to 50 percent over the next five years; this was viewed as being quite speculative. The Commission did conclude, however, that other ratepayers could benefit if fuel charges to Air Products were higher than Gulf's cost of spot coal.

The Commission approved a cost recovery mechanism for the amount of the discount applied to Air Products' energy use. The fuel cost saving was defined as the difference between the fuel charge to Air Products and Gulf's own spot cost of coal. Gulf could recover the discount plus administrative costs no greater than the discount from the fuel cost savings. Any additional fuel cost savings would be passed through to ratepayers, but Gulf's shareholders would absorb any revenue shortfall if the discount exceeded the fuel cost savings.

Detroit Edison Company⁹

On January 13, 1987, the Detroit Edison Company (Edison) filed an application with the Michigan Public Service Commission to offer a discount rate (Rider R5.1) to its primary and bulk power service customers who intended to install cogeneration facilities on their premises in exchange for a postponement of installing cogeneration capacity. The Michigan Commission denied the application on April 26, 1988.

By offering a discount rate to potential cogenerators, Edison claimed it could delay the construction of cogeneration facilities until it needed additional capacity; it could also retain potential cogenerators who would then contribute to system capacity costs, alleviating the need for future rate increases. Finally, the discount rate would provide potential cogenerators an opportunity to make capital investments other than in cogeneration facilities.

⁹ Michigan Public Service Commission, Application of The Detroit Edison Company for Authority to Amend Its Schedule of Electric Rates to Include An Experimental On-site Cogeneration Alternative, Rider No. R5.1., Case No. U-8656 (1988).

The Commission denied Rider No. R5.1. primarily on the grounds that balancing the effects of on-site cogeneration against the effects of Rider R5.1 did not warrant approving a proposal that curtailed cogeneration in the manner proposed. The rejection may have reflected more the Commission's inclination towards promoting—or at least not stifling—cogeneration as an efficient means of energy usage and development rather than the merits of the proposed rider.

Interruptible Rates

Interruptible rates, as noted in Table 1-1, offer electricity at a discount from the standard tariff to customers willing to have their supply curtailed on short notice by the utility. Interruptible rates may be offered as part of a load management program for peak shaving when a utility faces supply constraints as evidenced by a low reserve margin. Interruptible rates may also be offered as part of a demand-side management program to reduce the need for future construction, or they may be offered as a means of providing a discount to customers and retaining their load when the utility is not facing a supply constraint and there is little likelihood of interruption. Two examples of interruptible rates follow.

Arizona Public Service Company¹⁰

On September 19, 1990, Arizona Public Service Company (APS) filed with the Arizona Corporation Commission an electric service agreement it entered into with a pet food manufacturing plant in Flagstaff, Arizona owned by Ralston Purina Company (Purina). Under this agreement, Purina would receive a fixed credit (\$5,800 a month) on its electricity bill in exchange for allowing its power (up to 2,500 kilowatts) to be interrupted on thirty-minute notice. The initial term of the agreement was for one year, with indefinite continuation.

¹⁰ Arizona Corporation Commission, Arizona Public Service Company, Application for Approval of An Electric Service Agreement with Ralston Purina Company, Docket No. U-1345-90-263, Decision No. 57119 (1990).

APS stated the agreement would allow it to avoid 0.5 megawatts of future reserve additions, and would improve its chances of retaining a customer which it otherwise might lose due to the competitive disadvantage claimed by Purina. The Commission approved this agreement based primarily on the likelihood that the Purina operation might discontinue unless it received the discount. However, after considering possible changes in business conditions and power supply availability in the future, the Commission ordered that the agreement be limited to three years unless APS requested an extension. It furthermore stated that the rate charged might be adjusted in future general rate proceedings.

This case reflects a notable but not uncommon phenomenon: a rate discount, which at a first might be viewed as justified by providing lower quality service, but which might be actually intended for load retention. This might explain why certain utilities with substantial reserve margins and therefore appearing not to need to offer interruptible service are doing it anyway.

Utah Power & Light Company¹¹

On February 21, 1989, Utah Power & Light Company (Utah Power) and Basic Manufacturing and Technologies of Utah, Inc. (BMT) filed with the Public Service Commission of Utah a joint application for approval of an electric supply agreement entered into between Utah Power and BMT. The agreement would allow Utah Power to interrupt up to 90,000 kilowatts of BMT's electric service for noneconomic (system integrity) and economic (lower generation cost) purposes. In exchange, BMT would receive discounts on both its demand and energy charges. The agreement also called for Utah Power to provide 20,000 kilowatts of firm backup service for times when BMT's own generator was out of service and purchase any surplus power generated by BMT. Utah Power stated it would collect its incremental cost of service (excluding the embedded cost of generation capacity) and some contribution to fixed

¹¹ Public Service Commission of Utah, Application of Utah Power & Light Company for Approval of an Agreement Between Utah Power & Light Company and Basic Manufacturing and Technologies of Utah, Inc., Docket No. 89-035-03 (1989).

costs. BMT argued that approving the agreement was essential to its decision to expand and modernize its plant.

The Commission concluded that until it had an opportunity to do a more thorough analysis a rebuttable presumption could be made that the agreement was in the public interest and, therefore, would not be altered on a prospective basis absent clear and convincing evidence to the contrary.¹² Nevertheless, the Commission affirmed that the rate for interruptible service should exceed actual incremental cost and contribute to fixed costs; furthermore, future analysis of the agreement would not be limited by the rebuttable presumption, and both embedded and incremental cost studies were to be filed in any such analysis. While this case addressed directly the issue of interruptible service, it may also be viewed as implementing an incentive rate aimed at expanding load.

Rates for Conservation and Other Purposes

Sometimes discount rates are given to reward or encourage consumption patterns that benefit the utility by altering its load shape, allowing it to make more efficient use of its plant. One such contract is discussed below.

Public Service Company of New Hampshire¹³

On July 31, 1985, Public Service Company of New Hampshire (PSNH) filed a petition with the Public Utilities Commission of New Hampshire to enter into a special contract with Catholic Medical Center (CMC). This contract called for PSNH to meter separately CMC's off-peak electric service for megatherm requirements (off-peak electricity for space and water heating purposes) and fix the rate for this service for five years subject only to certain prespecified cost variations.

¹² Utah Power was acquired by PacifiCorp in 1990. The more thorough analysis could take place during the first rate case to be filed after the acquisition.

¹³ Public Utilities Commission of New Hampshire, Public Service Company of New Hampshire, DE 85-285, Order No. 18149 (1986).

PSNH stated that CMC's usage was unique because of the installation of several 11,000-gallon storage tanks which allowed CMC to manage its space and water heating requirements. PSNH also stated that revenues derived through the special contract would cover the cost of service and would not differ significantly from those derived under the regular tariff. PSNH also indicated that without the cost stability provided by a special contract, CMC would switch to natural gas for space and water heating energy and that the loss of CMC would have an adverse effect on PSNH and its remaining ratepayers.

The Commission approved the special contract on February 28, 1986 finding that CMC's unique storage capabilities allowed it to take advantage of off-peak generation. In addition, a special circumstance not covered under the existing tariff—the credible threat of natural gas as an alternative energy source and the potentially adverse effect on PSNH and its ratepayers of such a switch—did exist. It also found that the special rate would yield revenues similar to those under the prevailing tariff. The Commission was, however, less certain as to whether the special rate would be cost-based over its five-year life absent substantive adjudicative determinations which would form the basis of future rates. In addressing the issue of future uncertainty, the Commission specifically indicated that PSNH's shareholders would bear the risk of revenue shortfall within this five-year period. Once again, although efficient use of existing utility plant was a major consideration in allowing the special rate, potential competition from natural gas suppliers was also a factor.

Pricing Mechanisms in Contracts

As part of the response to the survey on electric utility contract pricing conducted for this study and described in more detail in the next chapter, the authors received approximately thirty contracts from commission staff respondents. Some of these contracts and related commission orders are described in other sections of this chapter; this section contains a description of the pricing mechanisms found in certain of the contracts. A word of caution, similar to that stated at the beginning of the previous section, is in order here also. Many states did not send contracts and most

of those provided are for interruptible service; because the number of contracts furnished by the respondents is small, the authors cannot claim either that the sample provided or that the subsample described here is representative of national electric utility contracting practices. The authors feel, however, that some descriptions of pricing mechanisms found in contracts that were sent may prove useful.

The respondents provided a variety of contracts including agreements covering economic development rates, incentive rates, firm power service, and interruptible service. This section covers each of these beginning with two examples of firm power service; in these examples, the rates charged are taken directly from filed rate schedules or tariffs.

Firm Power Rates

The first example is a special contract between the Appalachian Power Company and the Town of Ceredo, West Virginia to provide power for ten years to operate flood pumping stations. The rate consisted of an energy charge of \$.00655 per kilowatt-hour plus a fuel recovery factor of \$.01902 per kilowatt-hour. The fuel recovery factor was based on the utility's general service rate schedule while the energy charge was also the utility's base rate.¹⁴

The second example is a contract between Missouri Public Service and John Knox Village in Lee's Summit, Missouri to provide power to a retirement village for ten years. The rates charged were based on approved rate schedules which were made a part of the contract with a minimum monthly bill to be no less than \$10,000.¹⁵

¹⁴ Special Contract between Appalachian Power Company and the Town of Ceredo, West Virginia, February 9, 1989.

¹⁵ Missouri Public Service, Contract for Electric Service with John Knox Village, March 26, 1990.

Economic Development Rates

An example of an economic development rate is found in an agreement between Centel Corporation of Kansas (Centel) and Airco Industrial Gases (Airco). Airco intended to expand some of its helium operations at an existing facility, creating over forty new jobs as a result of the expansion. Centel's regular industrial rate included a customer charge of \$45 per meter per month. The regular rate also included demand and energy charges. During the winter (November through June), the demand charge was \$8.22 per month per kilowatt over ten; during the summer (July through October), it was \$8.86 per month per kilowatt over ten. The energy charge was 3.52 cents per kilowatt-hour year-round.

Centel offered a special industrial rate for Airco that included a customer charge of \$90 per meter per month, a winter demand charge of \$6.58 per month for all kilowatts, and a summer demand charge of \$7.09 per month for all kilowatts—these were 80 percent of the regular industrial demand charge. Under the special rate, the energy charge was to be based on load factor and, like the standard energy charge, was the same year-round. Load factor ranges, applicable energy charges, and percentage of the regular energy charge were:

<u>load factor (%)</u>	<u>energy charge per kWh</u>	<u>% of regular</u>
≥ 95	2.59 cents	74
90 to 94	2.65 cents	75
85 to 89	2.72 cents	77
80 to 84	2.80 cents	80
< 80	3.31 cents	94

For both the regular and special rates, the minimum charge consisted of the demand charge.¹⁶

Another example came from Idaho. As part of an economic incentives program implemented by the State, Idaho Power offered a special contract rate, including a discount from filed tariff charges, to Micron Technology (Micron) which

¹⁶ Centel Electric-Kansas, Large Industrial Electric Service Agreement with Airco Industrial Gases, November 20, 1989. This special rate schedule is Rate 89-SISA while the regular schedule is Rate 88-IS.

planned to expand a computer chip manufacturing facility, creating 1,000 new jobs in Boise, Idaho. The utility offered a discount on energy charges (to be applied only to Micron's new facilities) that would run from March 31, 1989 to March 30, 1994, after which Micron would pay regular tariff rates.¹⁷

For the first year of the contract (1989), the discount from the tariff energy rate was to be 6.03 mills per kilowatt-hour. The tariff rate was 27.8 mills per kilowatt-hour and the contract rate was to be 21.77 mills. The discount was to decrease and the contract energy rate per kilowatt-hour was then to increase in successive years: to 22.976 mills in 1990, to 24.182 mills in 1991, to 25.388 mills in 1992, and to 26.594 mills in 1993.

Another discounted rate designed to help an industrial customer expand operations is from New Hampshire. It was offered by Public Service Company of New Hampshire (PSNH) to Jarl Extrusions, Inc. (Jarl) which intended to open an aluminum extrusion facility and told PSNH that a lower rate was required in order that the plant to be located in New Hampshire rather than in Lawrence, Massachusetts or elsewhere. PSNH proposed a Development Incentive Rate Contract agreement that would charge Jarl under an existing tariff less a discount that was to be calculated by using the following formula:

$$\text{Percentage Discount} = 100 \times (1 - B/A).$$

In the above formula, A is PSNH's tariff rate in cents per kilowatt-hour in effect during the time of the contract and B represents the largest of the following:

- 1) a benchmark price in cents per kWh intended to reflect what Jarl's power costs would be in Lawrence, Massachusetts;
- 2) the actual rate in cents per kWh charged customers in Lawrence, Massachusetts on January 1 of each year of the contract; or

¹⁷ Electric Service Agreement between Idaho Power Company and Micron Technology, Inc., January 27, 1989. See also the Idaho Commission order approving the agreement. Idaho Public Utilities Commission, In the Matter of the Application of Idaho Power Company for Approval of an Electric Service Agreement between Idaho Power Company and Micron Technology, Inc., Case No. IPC-E-89-5, Order No. 22599, June 23, 1989.

3) short-term marginal costs in cents per kWh.

The agreement was to last for five years, 1987 to 1992, after which Jarl would pay the then-applicable tariff rate.¹⁸ The price was set initially at 6.31 cents per kilowatt-hour for 1987 and was to be increased gradually each year to 8.11 cents per kilowatt-hour for 1992.

Incentive or Load-Retention Rates

An example of a contract for load retention was negotiated between Pacific Gas and Electric (PG&E) and Arco Oil and Gas Company (Arco) as a result of Arco's plans to bypass the utility by generating its own power at two sites. The contract was to be in effect for ten years initially and could then be renewed for five-year intervals. The contract rate included both a floor and a ceiling: the ceiling would be the applicable tariff rate;¹⁹ the floor was based on two of PG&E's filed rates, its system average incremental energy rate and its cogeneration gas rate; floor revenue was to be calculated using the following formula:

$$\text{Floor Revenue} = \text{kWh} \times \{ [(\text{IER} \times \text{CGR}) / 100,000] + \$0.009 \}.$$

In the above formula, the following definitions apply:

kWh is energy used by Arco during each six-month period, January through June and July through December;

IER is PG&E's seasonal average incremental energy rate on the first day of the six-month period; and

CGR is PG&E's cogeneration gas rate on the first day of the period.

An example of an incentive rate for cogeneration deferral was offered by Kansas Gas and Electric (KG&E) to Boeing Military Airplanes (Boeing) which was

¹⁸ Special Contract-Electricity, Contract No. NHPUC-51, Public Service Company of New Hampshire with Jarl Extrusions, Inc., February 25, 1987.

¹⁹ Electric Service Agreement between Arco Oil and Gas Company and Pacific Gas and Electric Company, March 25, 1987.

considering constructing its own generating facilities. Monthly rates were to consist of a base rate, an adjustment to the base rate related to changes in the utility's energy cost adjustment clause, and any adjustment that might result from ongoing regulatory proceedings. Base rates were specified in the contract as \$979,444 for monthly usage level up to 22,777,777 kilowatt-hours. Energy usage in excess of this level was to be charged at \$.043 per kilowatt-hour. The calculations involving the energy adjustment clause were intended to result in Boeing paying all fuel and purchased power costs incurred by KG&E.²⁰

Interruptible Rates

An example of an interruptible rate is found in a special contract rate offered by Portland General Electric Company to Boise Cascade Corporation. While the charges for firm service were taken from the approved tariff, interruptible service included discounts from the tariff rates. The reduction in the demand charge was to be \$1.32 per kilowatt per month and the energy charge was to be discounted by \$.051142 per kilowatt-hour. Adjustments would be made to the energy charge discount to reflect any changes in the ratio of interruptible rates to overall rates, but the discount would be capped at \$.051142 per kilowatt-hour. These rates went into effect in February 1986 for a period of ten years.²¹

Another example of an interruptible rate is Kansas Power and Light's offer of incentive credits to customers taking interruptible service. Customers are served under the Large Power Contract Service rate schedule (LP) and credits for interruptible service are then applied to each bill. Under the standard LP tariff, capacity charges were

²⁰ Cogeneration Deferral Rate Agreement for Electric Service by and between Kansas Gas and Electric Company and Boeing Military Airplanes, May 31, 1989.

²¹ Portland General Electric Company, Schedule 99 Contract Rates, Original Sheet No. 99-2 (Advice No. 90-9, Issued February 4, 1991).

\$4.45 per kVA for the first 200 kVA capacity,
\$4.25 per kVA for the next 400 kVA, and
\$4.05 per kVA for additional capacity.

Also, standard energy charges under the LP tariff were:

\$.03726 per kWh for the first 50 kWh per kVA capacity,
\$.03206 per kWh for the next 100 kWh per kVA capacity,
\$.02886 per kWh for the next 250 kWh per kVA capacity, and
\$.02666 per kWh for additional kWh per kVA.

The incentive credit for interruptible service which was to be applied to the monthly bill was \$4.00 per kilovolt ampere of interruptible load. The customer would receive this credit only if its highest capacity for the month was equal to or greater than the amount of load which had been classified as interruptible.²²

Regulatory Principles of Contract Pricing of Electricity

Based on the discussion of the selected cases of contract pricing of electricity in the previous section, several regulatory principles have been used to assess the desirability of contract pricing. These principles are derived from public service commissions' experience with contract pricing and the literature on public utility pricing generally and price discrimination specifically.²³ There are numerous principles of tariff setting and those identified here are not exhaustive.²⁴ In general the same principles may be used to assess contract pricing generally and individual contracts specifically. Although utility- and customer-specific conditions are important in assessing individual contracts, principles that regulators may wish to consider

²² Kansas Power and Light Company, Large Power Interruptible Service Agreement with Enron Gas Processing Company, July 12, 1990. The same incentive was included in a contract between Kansas Power and Light and the Board of Regents of the State of Kansas, which was amended on September 27, 1990.

²³ See, for example, "An Investigation Into The Implementation of Economic Development Rates by Electric and Gas Utilities," Kentucky Public Service Commission, Administrative Case No. 327 (1990).

²⁴ James C. Bonbright, *Principles of Public Utility Rates*, (New York: Columbia University Press, 1961), Chapters 3-8.

include the following: recovering variable and customer-specific fixed cost, considering both current and projected capacity and load, providing for future regulatory oversight, and considering other regulatory policy goals.

Recovering Variable and Customer-Specific Fixed Cost

Embedded cost-based rates have been the most widely used standard in setting tariffs. Such rates may be considered just and reasonable, but they rarely convey price signals conducive to efficient generation and consumption of electricity. If economic efficiency is a goal of pricing policy, rates based on the opportunity or marginal cost are better signals to producers and consumers than rates based on embedded or historical costs. By setting prices based on current market conditions that reflect opportunity cost, contract pricing may correct distorted signals resulting from embedded cost-based pricing. Contract pricing with rates reflecting the market value of electric service to noncore customers may, in fact, encourage efficient electricity generation and consumption.

Equity considerations require that revenue collected under contracts should, at a minimum, recover all variable and customer-specific fixed costs over the life of the contract. Revenue in excess of direct fixed and variable costs will contribute to the utility's common costs which otherwise would be shared by other ratepayers and shareholders. If another producer can supply power at rates such that the utility cannot recover the short-run incremental cost of service (energy and customer-specific administrative costs but not cost of sunk plant) it should not try to retain that customer's load. To do so ultimately would burden other ratepayers, shareholders, or both.

Considering Both Current and Projected Capacity and Load

Rates should both ensure efficient use of current plant and manage future capacity expansion. Therefore, current and projected capacity reserves and the configuration of current plant (base, load-following, and peaking capacity) and load

patterns are important factors in determining whether and what type of discount is justified. For example, a utility with excess capacity off-peak and low current reserve margins on-peak would be justified in offering both load retention discounts and interruptible rates, possibly to the same customers even though the two might seem inconsistent. It is important, however, that a utility offering a number of discounts for various purposes be able to demonstrate that the program as a whole results in both short-run and long-run efficiencies.²⁵

Serving customers at contract rates that recover only variable costs and customer-specific fixed costs implies that new capacity is not required to serve those customers as no contribution to common costs is recovered. It may be desirable, therefore, to ensure that discounts can be phased out or eliminated if the utility no longer has adequate capacity to meet projected load growth. This may be accomplished by controlling the terms of contracts. Otherwise, additional capacity may be needed, the utility may need to obtain supplies from outside sources, and core customers may have to absorb all or part of the additional capacity cost.

Considering Other Regulatory Policy Goals

Contract pricing should not be viewed as an isolated decision. Rather, it should be viewed as part of broader issues such as electricity policy, energy policy, or economic development policy. As indicated above, the main reason for the Michigan Public Service Commission's 1987 rejection of Detroit Edison's proposed discount rate for customers with cogeneration potential was the Commission's policy objective of promoting cogeneration. This illustrates the fact that other objectives may conflict with contract pricing. Some balancing or choice may be required.

²⁵ Contracts for load retention or interruptible rates may be part of a demand-side management (DSM) program and, as such, should be considered as part of a broad framework of options. See Narayan S. Rau et al., *Methods to Quantify Energy Savings from Demand-Side Management Programs: A Technical View*, (Columbus, Ohio: The National Regulatory Research Institute, October 1991). Some aspects of interruptible rates are also considered in Narayan S. Rau and Youssef Hegazy, *Reliability Differentiated Pricing of Electricity Service*, (Columbus, Ohio: The National Regulatory Research Institute, March 1990).

Overall policy considerations are especially important in the case of economic development rates. Incentives other than a reduced price of electricity may be more effective in simultaneously promoting economic development and inducing efficient energy consumption. One such incentive might be a lump-sum payment (most efficient if made from public funds) to customers who stay or locate within the service territory. Such actions might obtain the desired effect without distorting price signals so that efficient production and consumption of electricity can be promoted.

Since potential beneficiaries of special rates have an obvious self interest in claiming that electricity prices are crucial in their decision, regulators should be cautious. For most firms, with the exception of those that are highly electricity intensive, electricity prices rarely determine location or other important decisions. Rather, industrial location decisions are influenced primarily by proximity to markets, materials, transportation facilities, and the availability of a suitable labor force. In order of importance for making such decisions, reduced electricity prices in most circumstances would likely be far down the list. For most location decisions, electricity rates would be considered only when choosing among locations meeting other, more crucial criteria. Discounted electricity rates may be like tax abatements and other fiscal inducements by states and local governments, which economists have generally concluded have little, if any, net effect on interstate or intercity location decisions.²⁶ Such inducements, therefore, may represent no more than wasted governmental efforts, since firms that locate in a particular area would most likely have done so without inducements. Moreover, offering such inducements generally becomes a "zero-sum" game in which states and cities vie among themselves for industries.

²⁶ For more information on this topic see Roger W. Schmenner, *Making Business Location Decisions*, (Englewood Cliffs, New Jersey: Prentice-Hall, 1982); William Pollard and Vivian Witkind Davis, "New Rates Designed to Encourage Economic Development and Load Retention," *NRRI Quarterly Bulletin* 8, no. 2 (April 1987): 227-240; Kenneth W. Costello, "Incentive Rates or Market Rates: A Rose by Any Other Name," *Electricity Journal* 2, no. 7 (August/September 1989): 42-51; and Dennis L. Sweatman and Larry J. Mraz, "Economic Development-Incentive Utility Rate Policies Implemented by State Utility Commissions," *NRRI Quarterly Bulletin* 10, no. 3 (June 1989): 231-248.

Economic development rates are generally available only to large firms while most employment growth in a state or local area stems from expanding small existing businesses. Regional economic health depends on creating an attractive overall business climate rather than incentive packages offered only to large firms. It is doubtful, therefore, that offering electricity price discounts to a small group of firms for a short period of time—five years or less—will have a significant effect on regional economic conditions whether the objective is promoting long-term economic growth or moderating local cyclical downturns—which are likely to depend on national conditions more than local electricity rates. In addition, to the extent that core customers fund discounts to participating customers, economic development rates may represent a tax that depresses other spending.

CHAPTER 3

CONTRACT PRICING OF ELECTRICITY: SURVEY RESULTS ON CURRENT PRACTICE AND POLICY

This chapter covers the extent to which electric utilities are engaged in contracts with customers and commission policies on approving and overseeing those contracts. The main purpose here is to report the results of the 1991 NRRI survey dealing with these topics. The NRRI sent questionnaires to the public utility commissions in forty-seven states and the District of Columbia. Responses were received during the course of 1991 from forty-six states and the District of Columbia.¹ The discussion in this chapter summarizes the main findings of the survey. The survey instrument can be found in Appendix B.

The discussion below takes the following form. The degree of electric utilities' involvement in contracts, as reported by the commission staff respondents, is considered first. Commission policies on contracts, including preapproval and oversight, are covered next. The discussion then turns to three types of rates that might be available through contracts or tariffs and that were given special emphasis in the survey. These are economic development rates, incentive rates, and interruptible rates.² Economic development rates and incentive rates were chosen because of their increasing prominence in recent years. Interruptible service is a longstanding practice, although some concerns have been expressed that interruptible service actually may be discounted firm service due to infrequent interruptions. The extent to which the utilities are offering these three rates and commission preferences for offering the

¹ Survey forms were not sent to the Nebraska, New Jersey, and North Carolina Commissions. The Nebraska Commission does not regulate investor-owned electric utilities. Staff at the New Jersey and North Carolina Commissions informed the NRRI that utilities in those states do not use contracts and that any rates of the types being examined were available through tariffs and not through contracts. One commission did not respond to the survey.

² To provide a basis for this discussion and uniformity for the survey results, the NRRI included definitions of these three rates, as well as contract pricing generally, on the survey form. These definitions are noted in the course of this chapter's description of the survey results.

services in contracts or tariffs are considered in separate sections for each of the three rates. An examination of whether the method of service (contract or tariff) is as important or more important than the type of service being offered in achieving the intended benefits of the three rates follows. The final section of the chapter summarizes the major survey findings.

Extent of Electric Utility Contracting

Part A of the survey, as shown in Appendix B, dealt with contract pricing generally. On the survey form the authors defined contract pricing as an arrangement by which the utility offers normally regulated services for purchase on a contract basis. The utility and the individual customer negotiate a price and the terms and conditions under which the service will be provided outside of the normal rate hearing. There are several indications from the responses to the NRRI survey that electric utility contracting is fairly widespread, although not present in every state. These are described below.

Table 3-1 shows thirty-three commissions that said electric utilities have applied to provide service on a contract basis. Commissions in the twenty-nine states listed in Table 3-2 have approved hundreds of utility applications to provide service through contracts. Four commissions are listed in Table 3-1, but not in Table 3-2. These four, Missouri, Montana, West Virginia, and Wyoming, do not usually preapprove contracts. Rejection of applications appears to be rare. As reported in Table 3-3 only six commissions have rejected fifteen applications. However, some commissions such as those in Idaho, Kansas, and Ohio responded that utility applications were modified instead of rejected.

The Kentucky Commission, which rejected ten of the fifteen contract applications shown in Table 3-3, generally acted because the utilities could not adequately support their arguments for the discounted rates they wanted to offer. In the view of the Commission, the costs would outweigh any benefits to be obtained from the discounts. The California Commission rejected a contract because it did not feel that the bypass of the contract was intended to prevent was a credible threat. Similarly, the Missouri Commission rejected a contract because the utility had not convinced regulators that the preferential rate was justified. The Commission was not

TABLE 3-1

COMMISSIONS WHERE ELECTRIC UTILITIES HAVE APPLIED
TO PROVIDE SERVICE ON A CONTRACT BASIS

Alaska	Missouri
Arizona	Montana
Arkansas	New Hampshire
California	New York
Colorado	North Dakota
Connecticut	Ohio
Delaware	Oklahoma
Florida	Oregon
Hawaii	Pennsylvania
Idaho	Rhode Island
Illinois	South Dakota
Indiana	Texas
Kansas	Utah
Kentucky	Washington
Maryland	West Virginia
Michigan	Wyoming
Mississippi	

Source: Question 1 from the 1991 NRRI survey of commission policies toward contracts for electric service. See Appendix B.

TABLE 3-2
 NUMBER OF ELECTRIC UTILITY APPLICATIONS
 TO PROVIDE SERVICE THROUGH CONTRACTS
 APPROVED BY COMMISSIONS

Commission	Number of Applications Approved
Alaska	3
Arizona	16
Arkansas	15
California	18
Colorado	2
Connecticut	10
Delaware	1
Florida	2
Hawaii	3
Idaho	7
Illinois	8
Indiana	1
Kansas	20
Kentucky	100
Maryland	10-20
Michigan	14
Mississippi	69
New Hampshire	2
New York	2
North Dakota	6
Ohio	500
Oklahoma	37
Oregon	20
Pennsylvania	Several
Rhode Island	1
South Dakota	3
Texas	23
Utah	12
Washington	2

Source: Question 4 from the 1991 NRRI survey of commission policies toward contracts for electric service. See Appendix B.

TABLE 3-3
 COMMISSIONS THAT HAVE REJECTED
 ELECTRIC UTILITY APPLICATIONS
 TO PROVIDE SERVICE THROUGH CONTRACTS

Commission	Number of Applications Rejected
Arizona	1
California	1
Florida	1
Kentucky	10
Maryland	1
Missouri	1

Source: Question 4b from the 1991 NRRI survey of commission policies toward contracts for electric service. See Appendix B.

persuaded that the loss of the particular customer was imminent nor that the loss would be harmful if it were to occur.³ The Arizona Commission rejected a contract because of a conflict of interest. Table 3-4 shows the sizable number of electric utilities and customers involved in contract service, by state. Over 100 utilities are serving over 300 customers in thirty states.

On the basis of Tables 3-2 and 3-4, a few observations can be made about the states in which there has been the most electric utility contracting activity. First, Ohio, Mississippi, Oklahoma, Kansas, California, Arizona, and Arkansas are most active. Kentucky also appears to have a fair amount of activity, judging from the number of utility applications that the Commission has approved (100) and rejected (ten). In Ohio, the Commission has approved 500 applications and eight utilities are serving over fifty customers. In Mississippi, the Commission has approved sixty-nine applications and one utility is serving sixty-six customers. The Oklahoma Commission has approved thirty-seven applications and fourteen utilities are serving thirty-six

³ See Missouri Public Service Company, ER-90-101.

TABLE 3-4

NUMBER OF ELECTRIC UTILITIES AND CUSTOMERS
INVOLVED IN CONTRACT SERVICE, BY STATE

State	Number of Electric Utilities & Number of Customers Involved
Alaska	2 utilities, 3 customers
Arizona	6 utilities, 16 customers
Arkansas	4 utilities, 15 customers
California	4 utilities, 17 customers
Colorado	1 utility, 2 customers
Connecticut	2 utilities, 11 customers
Delaware	1 utility, 1 customer
Florida	1 utility, 2 customers
Idaho	2 utilities, 7 customers
Illinois	7 utilities
Indiana	1 utility, 1 customer
Kansas	6 utilities, 17 customers
Maryland	4-5 utilities, 10-15 customers
Michigan	4 utilities, 14 customers
Mississippi	1 utility, 66 customers
Missouri	4 utilities, 6 customers
Montana	1 utility, 16 customers
Nevada	1 utility, 1 customer
New York	2 utilities, 2 customers
North Dakota	1 utility, 4 customers
Ohio	8 utilities, 50+ customers
Oklahoma	14 utilities, 36 customers
Oregon	2 utilities, 12 customers
Pennsylvania	6 utilities, 10+ customers
Rhode Island	1 utility, 1 customer
South Dakota	3 utilities, 3 customers
Texas	7 utilities
Utah	1 utility, 11 customers
Washington	2 utilities, 2 customers
West Virginia	2 utilities, 11 customers

Source: Question 5 from the 1991 NRRI survey of commission policies toward contracts for electric service. See Appendix B.

customers. Similar figures for the other states are: Kansas-twenty applications approved, six utilities serving seventeen customers; California-eighteen applications approved, four utilities serving seventeen customers; Arizona-sixteen applications approved, six utilities serving sixteen customers; Arkansas-fifteen applications approved, four utilities serving fifteen customers. Maryland—ten to twenty applications approved, four or five utilities serving ten to fifteen customers; and Michigan—fourteen applications approved, four utilities serving fourteen customers are also active states. While the lists in Tables 3-2 and 3-4 include most states and all parts of the United States, the most active states appear to be in the West, South, and Midwest.

The authors asked staff members whether the projected benefits of the contracted services for the utility, the customer, the ratepayer, the local economy and/or the state have been realized. As shown in Table 3-5, slightly more than half of the responding commissions, twenty-five, feel the contract services have resulted in the intended good. The Arkansas staff, for example, mentioned that some local economies have benefitted from new industries locating in those areas. In Delaware, revenues are flowed back into base costs, lowering revenue requirements. In Idaho, customers' businesses have remained open and jobs have been retained. Load retention, increased revenues, no fuel switching, business growth, and contribution to utility embedded costs are other benefits of contracts that respondents said had been realized.

A question about the eligibility requirements for services provided through contracts resulted in various responses from the staff members. Some, such as Arizona, Florida, Idaho, Illinois, Kentucky, Michigan, and Utah said that there were no standard requirements or that requirements varied by customer. Other respondents mentioned load requirements. For example, the special industrial contract policy in New Hampshire requires new customers to have loads of 300 kilowatts and existing customers to expand their loads by that same amount. Interruptible load programs in New Hampshire have a minimum requirement of 100 kilowatts and must be cost effective. In Washington, one utility's contract service requires a load of greater than 45 megawatts while another utility's service

TABLE 3-5

COMMISSIONS RESPONDING THAT
THE PROJECTED BENEFITS OF THE CONTRACTED SERVICES
HAVE BEEN REALIZED

Alaska	Nevada
Arizona	New Hampshire
Arkansas	New York
California	North Dakota
Connecticut	Ohio
Delaware	Oklahoma
Hawaii	Oregon
Idaho	Pennsylvania
Illinois	Rhode Island
Kansas	South Dakota
Maryland	Texas
Michigan	West Virginia
Mississippi	

Source: Question 9 from the 1991 NRRI survey of commission policies toward contracts for electric service. See Appendix B.

requirement is 25 megawatts. In Delaware, the requirement is 10 megawatts of additional power. The customers of one Montana utility must enter into a contract with the utility if their loads are greater than 5 megawatts.

The Alaska Administrative Code specifies that contracts are not to grant the customer any unreasonable preference or advantage, or subject the customer to an unreasonable prejudice or disadvantage.⁴ The contract is compared with comparable service terms and conditions offered to the public to make this determination. The Ohio Commission has developed some informal guidelines that the staff applies to contracts. For economic development contracts, the customers must be new to the utility. Current customers would qualify if they have expanded their operations as a result of new or increased business. For incentive rates, the customer must be able to switch economically to other sources of power. The customer must provide proof

⁴ See the Alaska Administrative Code at 3 AAC 48.390(c).

of its intention to make this switch if the incentive rate is not offered. For interruptible rates, the customer's demand that is subject to the interruption must be large enough to benefit the utility.

Commission Policies on Contracts: Preapproval

Part A of the survey (see Appendix B) also dealt with commission policies on contracts including the preapproval procedures discussed in this section and the policies on contract operations discussed in the next section. The NRRI asked the staff members several questions about their commission's contract preapproval processes. Questions covered topics such as whether the commissions must preapprove the contracts, what actions (such as holding hearings) might the commissions take in the course of preapproval, and what the nature of the process (a generic policy or an ad hoc case-by-case approach) is. The responses are presented in several tables below.

The overall impression is that the commissions are fairly active in considering contract service and rates. Table 3-6 shows that most commissions, twenty-six, must preapprove contracts. About half, twenty-three listed in Table 3-7, hold open hearings on the proposed contract service. The Utah Commission conducts closed proceedings. Staff at the majority of commissions perform an analysis of the proposed contract service. Thirty-one commissions responded that such studies are done. These are listed in Table 3-8. The case-by-case approach is favored by commissions over the generic approach, as shown in Table 3-9, where twenty-six commissions have an ad hoc case-by-case policy while six have a generic policy.

Some comparison between the results in Tables 3-6 through 3-9 and those in Table 3-1 is useful. Table 3-1 shows the thirty-three commissions responding that electric utilities have applied to provide service on a contract basis. Connecticut, Idaho, Missouri, Montana, Utah, West Virginia, and Wyoming do not have to preapprove the contracts while Connecticut, Hawaii, Montana, New York, North Dakota, Ohio, Texas, Utah (which holds closed hearings), West Virginia, and Wyoming do not hold open hearings. Staff at two of the commissions where electric

TABLE 3-6

COMMISSIONS THAT MUST PREAPPROVE CONTRACTS

Alaska	Michigan
Arizona	Mississippi
Arkansas	New Hampshire
California	New York
Colorado	North Dakota
Delaware	Ohio
Florida	Oklahoma
Hawaii	Oregon
Illinois	Pennsylvania
Indiana	Rhode Island
Kansas	South Dakota
Kentucky	Texas
Maryland	Washington

Source: Question 1a from the 1991 NRRI survey of commission policies toward contracts for electric service. See Appendix B.

TABLE 3-7

COMMISSIONS THAT HOLD OPEN HEARINGS
ON PROPOSED CONTRACT SERVICE

Alaska	Maryland
Arizona	Michigan
Arkansas	Mississippi
California	Missouri
Colorado	New Hampshire
Delaware	Oklahoma
Florida	Oregon
Idaho	Pennsylvania
Illinois	Rhode Island
Indiana	South Dakota
Kansas	Washington
Kentucky	

Source: Question 1b from the 1991 NRRI survey of commission policies toward contracts for electric service. See Appendix B.

TABLE 3-8

COMMISSIONS WHERE STAFF ANALYZES
PROPOSED CONTRACT SERVICE

Alaska	Missouri
Arizona	Montana
Arkansas	New Hampshire
California	New York
Colorado	North Dakota
Delaware	Ohio
Florida	Oklahoma
Hawaii	Oregon
Idaho	Pennsylvania
Illinois	Rhode Island
Indiana	South Dakota
Kansas	Texas
Kentucky	Utah
Maryland	Washington
Michigan	West Virginia
Mississippi	

Source: Question 1c from the 1991 NRRI survey of commission policies toward contracts for electric service. See Appendix B.

TABLE 3-9
COMMISSIONS WITH GENERIC AND AD HOC
POLICIES ON CONTRACT SERVICE

Generic Policy	Ad Hoc, Case-by-Case Policy	
Idaho	Alaska	Maryland
Oregon	Arizona	Michigan
Pennsylvania	Arkansas	Mississippi
Texas	California	Missouri
Washington	Colorado	Montana
West Virginia	Connecticut	New Hampshire
	Delaware	New York
	Florida	North Dakota
	Hawaii	Ohio
	Illinois	Oklahoma
	Indiana	Rhode Island
	Kansas	South Dakota
	Kentucky	Utah
(N=6)	(N=26)	

Source: Question 2 from the 1991 NRRI survey of commission policies toward contracts for electric service. See Appendix B.

utilities have applied to provide service on a contract basis—Connecticut and Wyoming—reported that they do not analyze the service when proposed. Of the thirty-three commissions listed in Table 3-1, only the Wyoming Commission is not listed in Table 3-9 as pursuing either a generic or ad hoc policy. Utilities in Wyoming can provide service through contracts and the Commission reviews the contracts in rate case proceedings along with the other parts of the utility's business operations. The Commission, as noted above, does not preapprove the contracts.

The authors asked the staff members about the information the utilities must submit along with the proposed contract. Responses varied from "no particular requirements" and "whatever the commission or staff needed or wanted," to specific requirements. Justification for the proposed agreement, including the purpose of the

contract and proof that the incentives are needed to retain the customer on the utility's system, is one type of information required by commissions. Other types of documentation that commissions want utilities to submit include marginal-cost data, comparative costs and rates, market analysis, engineering studies, rate and revenue impact analyses, demand data, numbers of customers involved, effect on other customers, and proof that the agreement does not discriminate against other similarly situated customers.

The NRRI asked about the types of criteria that commissions use in evaluating proposed contract rates. Ten criteria were listed on the questionnaire, including traditional concerns such as just and reasonable rates and newer issues such as bypass or economic development. In addition to these criteria, the others listed included undue discrimination between customer classes, undue discrimination among customers in the same class, load retention, antitrust/predatory pricing, other anticompetitive effects, price floor at marginal cost, and revenue losses occasioned by lower rates. Respondents could also describe other criteria that their commissions might use. The responses are shown in Tables 3-10 and 3-11.

Table 3-10 shows that the commissions are using a mixture of traditional and newer concerns in evaluating proposed contract rates. Just and reasonable rates is the criterion used by more commissions (twenty-eight) than any other in considering the contract rates. Various respondents offering additional explanation about just and reasonable rates commented that this requirement usually means that the rates must cover the cost of the service. Load retention and undue discrimination between classes are also considered by a majority of responding commissions. Twenty-six consider load retention and twenty-five discrimination between classes. Fewer commissions, although still almost half of the respondents, use undue discrimination among customers within the same class, economic development, price floor at marginal cost, and revenue losses occasioned by lower rates as criteria. About one quarter of the commissions use other anticompetitive effects and economic versus noneconomic bypass. Eight consider antitrust/predatory pricing.

Six commissions are listed in Table 3-11 as using other criteria to evaluate proposed contract rates. These criteria include the costs and benefits of the contracts,

TABLE 3-10

COMMISSIONS USING VARIOUS CRITERIA
TO EVALUATE PROPOSED CONTRACT RATES

Criterion	Commissions Using the Criterion
Just and Reasonable Rates	Alaska, Arkansas, California, Colorado, Connecticut, Delaware, Hawaii, Idaho, Illinois, Indiana, Kansas, Kentucky, Maryland, Michigan, Mississippi, Missouri, Montana, New Hampshire, New York, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Dakota, Utah, Washington (N=28)
Undue Discrimination Between Customer Classes	Alaska, Arkansas, Connecticut, Delaware, Hawaii, Idaho, Illinois, Indiana, Kansas, Kentucky, Maryland, Michigan, Mississippi, Missouri, Montana, New York, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Dakota, Utah, Washington (N=25)
Undue Discrimination Among Customers in the Same Class	Alaska, Arizona, Arkansas, Delaware, Hawaii, Illinois, Indiana, Kansas, Kentucky, Michigan, Mississippi, Missouri, Montana, New York, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, South Dakota, Utah, Washington (N=22)
Load Retention	Arizona, Arkansas, California, Colorado, Delaware, Florida, Hawaii, Idaho, Illinois, Indiana, Kansas, Kentucky, Maryland, Mississippi, Missouri, Montana, New York, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Dakota, Utah, Washington (N=26)
Economic Development	Arizona, Arkansas, Delaware, Idaho, Illinois, Indiana, Kansas, Kentucky, Mississippi, Missouri, Montana, New York, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Dakota, Utah (N=20)

TABLE 3-10--Continued

Criterion	Commissions Using the Criterion
Antitrust/Predatory Pricing	Hawaii, Kansas, Mississippi, Missouri, North Dakota, Ohio, Oklahoma, Rhode Island (N=8)
Other Anticompetitive Effects	Arizona, Hawaii, Idaho, Illinois, Kansas, New Hampshire, North Dakota, Ohio, Oklahoma, South Dakota, Utah, Washington (N=12)
Economic v. Noneconomic Bypass	Arizona, California, Hawaii, Illinois, Kansas, Maryland, Mississippi, Montana, North Dakota, Oklahoma, Utah (N=11)
Price Floor at Marginal Cost	Arizona, Arkansas, California, Colorado, Hawaii, Idaho, Illinois, Indiana, Kansas, Mississippi, Missouri, Montana, New Hampshire, New York, North Dakota, Ohio, Oregon, Rhode Island, South Dakota, Utah (N=20)
Revenue Losses Occasioned by Lower Rates	Arizona, California, Colorado, Florida, Hawaii, Illinois, Indiana, Kansas, Kentucky, Maryland, Missouri, Montana, New York, North Dakota, Ohio, Oregon, Rhode Island, South Dakota, Utah, Washington (N=20)

Source: Question 3 from the 1991 NRRI survey of commission policies toward contracts for electric service. See Appendix B.

TABLE 3-11
OTHER CRITERIA USED BY COMMISSIONS
TO EVALUATE PROPOSED CONTRACT RATES

Commission	Criteria Used by the Commission
Arizona	Cost-benefit analysis
Colorado	Annual costs of contract to ratepayers
Idaho	Special load characteristics
Illinois	Impact on least cost planning, duration of contract
North Dakota	Case-by-case basis
Ohio	Term (length) of contract, negotiation process, cost justification, type of incentive (direct contributions, energy/demand discounts, percentage of bill), benefits to the utility, customer, and ratepayers, and potential benefits to society

Source: Question 3 from the 1991 NRRI survey of commission policies toward contracts for electric service. See Appendix B.

the effect on least-cost planning, the duration of the contract, the contract negotiations, the incentives incorporated in the agreement, and the benefits of the contract to ratepayers, to the utility, and to society.

In response to a question about the benefits (to ratepayers, to stockholders, to the utilities involved, to the local economy, and/or to the state) expressed by commissions in approving the proposed contracts, staff members mentioned a variety of benefits. Many are similar to the benefits listed above in discussing the question of whether the projected benefits have been realized. They include retaining load, using excess capacity or surplus energy, spreading fixed costs over more customers, increasing or retaining revenues, economic development and creating or retaining jobs, using facilities more efficiently, demand-side management, fairness to other ratepayers and to customers with unique situations, and lowering peak demand.

Commission Policies on Contracts: Contract Operations

The authors included several questions covering commission policies on the operation of the contracts in Part A of the survey. The questions considered here initially dealt with the availability of the contracts themselves to the public and the availability of the contracted services to other customers. Tables 3-12 and 3-13 show the staff responses to these questions. As shown in Table 3-12, twenty-five commissions said that contracts between electric utilities and their customers are in the public domain. In some instances, such as in Florida and Illinois, the analysis leading up to the final agreement may be confidential even though the contract itself is public. In California, the contracts are confidential before they are approved by the Commission. After approval, the rate terms are public.

TABLE 3-12

COMMISSIONS WHERE ELECTRIC UTILITY/CUSTOMER CONTRACTS ARE IN THE PUBLIC DOMAIN

Alaska	Missouri
Arizona	Montana
Arkansas	New Hampshire
California	New York
Delaware	North Dakota
Florida	Ohio
Hawaii	Oklahoma
Idaho	Oregon
Illinois	Rhode Island
Kansas	Texas
Kentucky	Washington
Maryland	West Virginia
Michigan	

Source: Question 6 from the 1991 NRRI survey of commission policies toward contracts for electric service. See Appendix B.

TABLE 3-13

COMMISSION POLICIES ON INFORMING OTHER CUSTOMERS
OF SERVICES PROVIDED THROUGH CONTRACTS

Commission	Other Customers Are Made Aware of the Services	Other Customers Can Subscribe to the Services	Commission Has Ordered Utilities to Publicize the Services
Alaska	Y	Y	N
Arizona	Y	N	N
Arkansas	N	N	N
California	Y	Y	Y
Colorado	N	N	N
Delaware	Y	Y	N
Florida	Y	N	N
Hawaii	Y	Y	N
Idaho	Y	N	N
Illinois	Y	Y	Y
Indiana	Y	--	--
Kansas	Y	N	N
Kentucky	Y	Y	N
Maryland	Y	N	N
Michigan	--	--	N
Mississippi	Y	Y	N
Missouri	N	--	N
Montana	Y	Y	Y
Nevada	N	--	N
New Hampshire	Y	Y	--
New York	Y	Y	N
North Dakota	N	Y	N
Ohio	Y	N	N
Oklahoma	Y	Y	N
Oregon	Y	Y	Y
Pennsylvania	Y	Y	Y
Rhode Island	N	Y	N
South Dakota	--	Y	N
Texas	Y	--	N
Utah	Y	Y	N
Washington	Y	Y	Y
West Virginia	Y	Y	N
	(Y=24 N=6)	(Y=19 N=8)	(Y=6 N=24)

Source: Question 8 from the 1991 NRRI survey of commission policies toward contracts for electric service. See Appendix B.

As shown, about half the responding commissions allow public access to the contracts. The first column in Table 3-13 below shows that at an almost equal number of commissions, twenty-four, other customers are made aware of the contract services. There is substantial overlap between the lists in Table 3-12 and the first column in Table 3-13 as twenty of the twenty-five agencies responding that contracts are in the public domain said that other customers are made aware of the contract services. The second column of Table 3-13 shows that at a slightly smaller number of commissions, nineteen, other customers actually can subscribe to the contract services. The third column of Table 3-13 shows that only six commissions have ordered utilities to publicize the contract services. In one of those six, Oregon, contract service must be made available to other customers receiving "like and contemporaneous service under substantially similar circumstances." In Washington, utilities publicize the contract services in the same manner as other services. The standard notification procedure for tariffs is used with notices posted at utility customer service offices.

The NRRI asked the staff members about the oversight procedures used by their commissions to monitor contract service. The staff were asked first whether their commissions have in place any oversight mechanisms specifically for contract service. Table 3-14 shows the ten commissions that said that they do have such oversight. The Arkansas Commission explained its oversight consists of review and approval or disapproval of all special contracts, which must be filed with the Commission.

TABLE 3-14

COMMISSIONS WITH OVERSIGHT MECHANISMS
SPECIFICALLY FOR CONTRACT SERVICE

Arkansas	Idaho
California	Kentucky
Colorado	Ohio
Connecticut	Oklahoma
Delaware	Pennsylvania

Source: Question 10 from the 1991 NRRI survey of commission policies toward contracts for electric service. See Appendix B.

Table 3-15 shows the commissions' responses to a question about when the contracts would be reviewed. Rate case review appears to be the preferred setting for reviewing electric utility contracts. Twenty commissions review contracts at the next rate case while twelve use special hearings and procedures for oversight. Respondents provided some variety in their answers. For example, the California Commission, which is not listed in Table 3-15, reviews contracts as part of the reasonableness review of its energy-cost-adjustment-clause process. Two commissions listed in the rate case column of the table, North Dakota and Ohio, also said review was not necessarily restricted to rate cases. Five commissions, Delaware, Kentucky, Missouri, Oklahoma, and Oregon, said that they review at the next rate case and also use special hearings and procedures. These five are considered below first.

The Delaware and Oklahoma Commissions use special procedures when necessary. The Kentucky Commission's special procedures involve utilities that have negotiated economic development contracts. Those utilities must file an annual report with the Commission describing total jobs, capital investment, and amounts of energy used as a result of the special discount rates. The Oregon Commission staff reviews a proposed contract and makes a recommendation to the Commission. The Commission either can allow or not allow the agreement to take effect, but the contract may be challenged in a subsequent rate case. The utility still may be bound by the contract even if the Commission imputes different terms when setting overall rates. In Missouri, rate considerations are usually treated in the next general rate case. Exceptions to this general policy may be made for contract service, however.

Other staff members noting the use of special procedures often mentioned the submittal of cost data by the utility and staff analysis of the contract when describing the oversight processes used by their commissions. The Illinois, Colorado, and Arkansas Commissions are examples. In one case in New York, staff recommended that a proposed contract be approved for one year after considering sales to the customer, revenue to the utility, average revenue in cents per kilowatt-hour, marginal cost, and the contribution to common costs. These data were analyzed under the

TABLE 3-15

OCCASIONS FOR COMMISSION REVIEW OF CONTRACT SERVICE

Commission Review at Next Rate Case	Commission Uses Special Hearings & Procedures
Alaska Arizona Connecticut Delaware Hawaii Indiana Kansas Kentucky Missouri Montana North Dakota Ohio Oklahoma Oregon Pennsylvania South Dakota Texas Utah Washington West Virginia	Arkansas Colorado Delaware Idaho Illinois Kentucky Mississippi Missouri New York Oklahoma Oregon Rhode Island
(N=20)	(N=12)

Source: Question 10a from the 1991 NRRI survey of commission policies toward contracts for electric service. See Appendix B.

proposed contract and under the tariff with no contract.⁵ Other commissions using special procedures include Rhode Island which only takes such action if the Commission or staff decide that it is necessary. In Idaho, special contracts must be approved by the Commission once they have been agreed upon. The Commission does not wait for the next rate case.

Economic Development Rates

Having considered contract service in general, the discussion now turns to the three types of rates, services, or both mentioned at the beginning of the chapter that might be available through contracts or tariffs. The authors included several questions on each of these rates. Economic development rates, covered in Part B of the survey, are discussed first. Economic development rates are defined in the survey as rates offered by a utility to encourage industry to locate in a state or to promote expansion of facilities or increased production by existing industries.

The NRRI began this part of the survey with a question about the presence and format of the economic development rates. Staff members were asked whether their commissions have approved any economic development rates for electric utilities and whether such service is being provided through contracts, tariffs or both. Tables 3-16 and 3-17 show the responses to these questions. As can be seen, many commissions (twenty-eight) have approved economic development rates.

Tariffs appear to be favored over contracts for offering this rate although most commissions that have approved economic development rates have allowed such rates in contracts. Six commissions have approved the rates in contracts, twelve have approved them in tariffs, and ten have approved them in both. Summing the first and third columns of Table 3-17 shows that sixteen of the twenty-eight commissions approving economic development rates allow contracts to be used.

⁵ Case 28689: Request for Approval of an Energy Purchase Agreement Pursuant to Section 66-c of the Public Service Law: Rochester Gas and Electric Corporation and Eastman Kodak Company--Contract No. 86; Memorandum from Rates and Valuation Section of the Power Division to the Commission, March 28, 1989.

TABLE 3-16
COMMISSIONS THAT HAVE APPROVED
ECONOMIC DEVELOPMENT RATES FOR ELECTRIC UTILITIES

Arizona	Missouri
Arkansas	Montana
California	New Hampshire
Connecticut	New Mexico
Georgia	New York
Illinois	North Dakota
Indiana	Ohio
Kansas	Oklahoma
Kentucky	Oregon
Louisiana	Pennsylvania
Maryland	South Dakota
Michigan	Texas
Minnesota	West Virginia
Mississippi	Wyoming

Source: Question 11 from the 1991 NRRI survey of commission policies toward contracts for electric service. See Appendix B.

TABLE 3-17

COMMISSION APPROVED ELECTRIC UTILITY
ECONOMIC DEVELOPMENT RATES
AVAILABLE THROUGH
CONTRACTS, TARIFFS, OR BOTH

Economic Development Rates Available in Contracts	Economic Development Rates Available in Tariffs	Economic Development Rates Available in Both Contracts and Tariffs
Kentucky Mississippi New Hampshire North Dakota Oklahoma Oregon	California Connecticut Georgia Indiana Louisiana Maryland Michigan Minnesota New Mexico New York South Dakota Texas	Arizona Arkansas Illinois Kansas Missouri Montana Ohio Pennsylvania West Virginia Wyoming
(N=6)	(N=12)	(N=10)

Source: Question 11a from the 1991 NRRI survey of commission policies toward contracts for electric service. See Appendix B.

In response to a question about any commission preference for contracts over tariffs or vice versa for providing economic development rates, the eight commissions listed in Table 3-18 responded that tariffs were preferred. Reasons given for this preference included setting terms of service and pricing in advance, making the rates available to all customers who qualify, and avoiding discrimination. The Kentucky Commission, on the other hand, has issued an order providing for the use of special contracts in implementing economic development rates.⁶ The Commission's previous policy had mandated the use of tariffs in providing economic development rates as there were concerns about potential discrimination against similarly situated customers who would not receive the discounted rate. However, the regulators then decided that customers do not require identical incentives to locate facilities in the state and that some customers would do so even in the absence of incentives. The provision of discounted rates to such customers through tariffs created "free riders" on the utility's system and forced other ratepayers to subsidize those customers. Under the tariff arrangement, utilities were unable to identify the free riders and to determine the

TABLE 3-18
 COMMISSIONS PREFERRING TARIFFS
 OVER CONTRACTS FOR PROVIDING
 ELECTRIC UTILITY ECONOMIC DEVELOPMENT RATES

California Connecticut Georgia Indiana	Minnesota New Mexico South Dakota Texas
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Source: Question 11b from the 1991 NRRI survey of commission policies toward contracts for electric service. See Appendix B.

⁶ In the Matter of an Investigation into the Implementation of Economic Development Rates by Electric and Gas Utilities, Administrative Case No. 327, September 1990.

minimum discount that would be necessary to provide incentives to customers to expand or locate facilities. Thus, the Commission decided that economic development rates should be offered through special contracts to avoid free riders and allow utilities flexibility to negotiate. The Commission felt this flexibility should allow for a more limited number of special rates and less revenue lost from the discounts. Kentucky was the only commission responding that contracts are preferred.

The Oregon Commission response to the question of any preference for contracts or tariffs was somewhat unique. The Commission has not shown any preference, however contracts are treated as tariffs. When the utility applies to provide service through a contract, the Commission requires the company to identify a separate customer class. The distinction must be reasonable and any similar customer that may apply for the service at a later date should be eligible for it.

The NRRI asked staff members whether their commissions have rejected any proposed electric utility economic development rates. Eight commissions, listed in Table 3-19, have turned down proposed rates. In addition to these eight, other commissions responded that they may have ordered a utility to modify its proposed rate or that they had set a different rate than that which the utility requested. Connecticut is an example of the former and Montana is an example of the latter. In Ohio, Commission staff inform the utility about the terms of the proposed rate that the Commission is not likely to approve. The utility will then either change or withdraw the application.

TABLE 3-19

COMMISSIONS THAT HAVE REJECTED
PROPOSED ELECTRIC UTILITY ECONOMIC DEVELOPMENT RATES

Arizona	New York
Kentucky	North Dakota
Minnesota	Oklahoma
New Mexico	South Dakota

Source: Question 11c from the 1991 NRRI survey of commission policies toward contracts for electric service. See Appendix B.

The criteria that the commissions use in evaluating and then approving or rejecting the economic development rates was another topic covered in the survey. Respondents mentioned such standards as recovering the cost of the service, contributing to common costs, recovering marginal opportunity costs, increasing sales in off-peak periods, providing incentives for industrial development or expansion in the area, benefitting other rate classes, and not harming the public interest or being discriminatory. Some staff members also noted that their commissions had approved the economic development rates for a limited time. Other respondents listed the criteria set forth above in Table 3-10.

In responding to a question about the eligibility requirements for customers to meet to qualify for economic development rates, staff members listed a variety of requirements. These include new or additional demand of a certain amount (500 kilowatts in more than one instance; 100 kilowatts, 200 kilowatts, and 300 kilowatts were also mentioned). In one Arkansas tariff, for example, the requirement was a minimum new load of 500 kilowatts or an addition of 500 kilowatts over a base period demand (calculated from the eight nonsummer monthly demands during the most recent twelve consecutive months). Other requirements listed by the staff include the service being offered to new customers or being offered to a limited number of customers or for a limited time. Creation of jobs, expansion of facilities, and proof that the rate will influence economic development were also mentioned by the staff.

The NRRI asked staff members whether the projected benefits of the economic development rates (for the utilities, the customers, the ratepayers, the local economy and/or the state, and so on) have been realized. Most staff members answering this question responded positively, as shown in Table 3-20. Fourteen commissions feel that the benefits have been realized, two said they had not, and nine believed that it is too early to tell. Indications of success mentioned by staff included attracting or retaining load, increasing sales and revenues for utilities, creating new industrial facilities, new jobs, expanded business operations, and helping firms remain in the area. The Oregon Commission responded positively for one economic development rate contract and negatively for another. In the first instance, a discount offered for

TABLE 3-20

COMMISSION RESPONSES ON WHETHER
THE PROJECTED BENEFITS OF ELECTRIC UTILITY
ECONOMIC DEVELOPMENT RATES HAVE BEEN REALIZED

Projected Benefits Have Been Realized	Projected Benefits Have Not Been Realized	Too Early to Tell
Arizona	California	Arkansas
Connecticut	Oregon	Georgia
Illinois		Kentucky
Kansas		Louisiana
Michigan		Minnesota
Mississippi		Missouri
New Mexico		New Hampshire
New York		North Dakota
Ohio		Wyoming
Oklahoma		
Oregon		
Pennsylvania		
Texas		
West Virginia		
(N=14)	(N=2)	(N=9)

Source: Question 11e from the 1991 NRRI survey of commission policies toward contracts for electric service. See Appendix B.

increased energy usage resulting from new projects at an existing plant had been utilized. In the other case, however, no service had been provided under the contract, which was intended to attract a new customer, because the customer had not developed the site.

The final question considered in this discussion of economic development rates is whether the contracts, tariffs, or both incorporating these rates are in the public domain. Staff members at twenty-six commissions, listed in Table 3-21, said the contracts, tariffs, or both are public. Only two of the commissions (Mississippi and Pennsylvania) that have approved economic development rates, shown in Table 3-16, said that the contracts or tariffs are not public.

TABLE 3-21
 COMMISSIONS WHERE THE CONTRACTS AND/OR TARIFFS
 INCORPORATING THE ELECTRIC UTILITY
 ECONOMIC DEVELOPMENT RATES
 ARE PUBLIC

Arizona Arkansas California Connecticut Georgia Illinois Indiana Kansas Kentucky Louisiana Maryland Michigan Minnesota	Missouri Montana New Hampshire New Mexico New York North Dakota Ohio Oklahoma Oregon South Dakota Texas West Virginia Wyoming
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Source: Question 14 from the 1991 NRRI survey of commission policies toward contracts for electric service. See Appendix B.

Incentive or Load-Retention Rates

Part C of the survey covered incentive rates, also referred to as load retention rates. These are the second type of rate given special consideration in the survey. Incentive rates are rates offered by a utility to increase or retain sales to price-sensitive customers, retain and attract customers with fuel-switching capabilities to the utility's system, or both. The staff members were asked whether their commissions have approved any incentive rates for electric utilities and whether that service, if approved, is being provided through contracts, tariffs, or both. As shown in Table 3-22, most of the responding commissions, twenty-five, have approved incentive rates. This is a slightly smaller number than the twenty-eight listed in Table 3-16 that have approved economic development rates.

TABLE 3-22

COMMISSIONS THAT HAVE APPROVED INCENTIVE RATES FOR ELECTRIC UTILITIES

Alaska	Montana
Arizona	New Hampshire
Arkansas	New Mexico
California	New York
Connecticut	Ohio
Idaho	Oklahoma
Illinois	Oregon
Indiana	Pennsylvania
Iowa	South Dakota
Kansas	Texas
Louisiana	Utah
Minnesota	Washington
Mississippi	

Source: Question 15 from the 1991 NRRI survey of commission policies toward contracts for electric service. See Appendix B.

As with economic development rates, tariffs appear to be favored over contracts for offering incentives. Table 3-23 shows seven commissions having approved incentive rates in contracts, ten having approved the rates in tariffs, and eight having approved them in both contracts and tariffs. Although, as with economic development rates, summing the numbers of commissions in the "contracts" (first) and "both contracts and tariffs" (third) columns of the table, reveals that a majority of commissions that have approved incentive rates have allowed them to be offered in contracts (fifteen of the twenty-five).

TABLE 3-23
 COMMISSION APPROVED ELECTRIC UTILITY
 INCENTIVE RATES AVAILABLE THROUGH
 CONTRACTS, TARIFFS, OR BOTH

Incentive Rates Available in Contracts	Incentive Rates Available in Tariffs	Incentive Rates Available in Both
Arizona	Alaska	Connecticut
California	Arkansas	Illinois
Idaho	Indiana	Kansas
Mississippi	Iowa	Minnesota
New Hampshire	Louisiana	Montana
Oregon	New Mexico	Ohio
Utah	New York	Oklahoma
	South Dakota	Pennsylvania
	Texas	
	Washington	
(N=7)	(N=10)	(N=8)

Source: Question 15a from the 1991 NRRI survey of commission policies toward contracts for electric service. See Appendix B.

The NRRI asked the staff members whether their commissions have shown any preference for contracts or tariffs in the provision of incentive rates. Table 3-24 shows that in the view of the staff more commissions have shown a preference for tariffs. Seven commissions prefer tariffs while only three prefer contracts. One of the three favoring contracts is Kentucky, the only commission with a similar preference for economic development rates. Others preferring contracts are California and Minnesota. In California, incentive rates are used by utilities to retain customers with the ability to self-generate. The Commission prefers contracts because these can be tailored to meet the needs of each case. Minnesota state law allows utilities to offer an incentive rate in a tariffed "competitive rate schedule."⁷ The Commission requires utilities to offer the service by contract and to submit each agreement to it for approval.

TABLE 3-24

COMMISSION PREFERENCES FOR
CONTRACTS OR TARIFFS FOR PROVIDING
ELECTRIC UTILITY INCENTIVE RATES

Commissions Preferring Contracts for Incentive Rates	Commissions Preferring Tariffs for Incentive Rates
California Kentucky Minnesota	Connecticut Iowa Montana New Mexico Oregon South Dakota Washington
(N=3)	(N=7)

Source: Question 15b from the 1991 NRRI survey of commission policies toward contracts for electric service. See Appendix B.

⁷ Minnesota Statutes, section 216B.162: Competitive Rates for Electric Utilities, as modified by the 76th Legislature, 1990 Regular Session, March 29, 1990.

One commission favoring tariffs for incentive rates is Montana, which feels that the adjudicatory process of notice and comment for tariffs serves the public interest better by allowing other parties to intervene. The Oregon Commission prefers tariffs when several customers are eligible for the incentive. Offering broader or equal access to the services was also expressed as an advantage of tariffs by staffs from the New Mexico and South Dakota Commissions. In Iowa, state law requires the use of tariffs if a utility wants to offer discounted rates.⁸

The NRRI asked the staff members if their commissions have rejected any proposed electric utility incentive rates. As with economic development rates, a comparatively small number of commissions have turned down the proposed incentives. Table 3-25 lists the seven commissions that have. Other commissions, such as those in Arizona, Ohio and Oklahoma, noted that applications had been withdrawn or modified by the utility instead of being rejected by the commission.

In describing the criteria that their commissions use in evaluating and approving or rejecting the incentive rates, the staff members mentioned discrimination, potential benefits or harm to other ratepayers, potential loss of revenue to the utility, contribution to common costs, the possibility of load loss, the fuel switching capability of the customer, and the length of time the rates will be offered. Some respondents

TABLE 3-25

COMMISSIONS THAT HAVE REJECTED
PROPOSED ELECTRIC UTILITY INCENTIVE RATES

Alaska	South Dakota
California	Texas
Connecticut	Washington
Michigan	

Source: Question 15c from the 1991 NRRI survey of commission policies toward contracts for electric service. See Appendix B.

⁸ See IAC Chapter 20 at 199--20.14(3) Flexible Rates; Tariff Requirements (1/11/89).

mentioned the criteria listed in Table 3-10. Some noted that the rate must be greater than marginal costs. For example, the Montana Commission in discussing a utility's proposed incentive rate to serve additional industrial load with surplus energy stated its belief that the rate should recover the utility's marginal opportunity costs. In the view of the Commission, the utility was foregoing the opportunity to reduce its system lambda costs or to sell power off-system at the margin when it decided to serve the additional industrial load.⁹

Other examples can be mentioned. In Iowa, state law requires any utility offering discounted rates to make the offer to all directly competing customers in the same service territory. Direct competitors are those which make the same end product or offer the same service to the same group of customers. The utility must perform a cost-benefit analysis and any discount offered must affect significantly the customer's decision to stay on the utility's system or increase consumption.¹⁰ In Illinois, a potential customer for a cogeneration rate must prove that it has cogeneration capability. In addition, the utility's short-run marginal cost must be less than the customer's cogeneration costs.

The eligibility requirements for customers to qualify for the incentive rates was another topic covered in the survey. Several respondents noted that these requirements varied from case to case. Others listed such requirements as the customer having a viable alternative to the tariffed rate such as self-generation or closing its operations. In Oregon, for example, the requirements include demonstrated cogeneration alternative with the cost of the alternative justifying the contract rate being offered by the utility, the demonstrated ability to move production outside of the state, and the demonstrated economic viability of the agreement between the utility and the customer. In Ohio, the customer must be able to make an economic

⁹ See In the Matter of the Application of Montana Power Company to Restructure Electrical Rates, Docket Nos. 87.4.21 et al., Orders 5340c (August 8, 1988) and 5340d (October 27, 1988).

¹⁰ See IAC Chapter 20 at 199--20.14(2) Flexible Rates; General Criteria (1/11/89).

switch to another power source and demonstrate its intention to make that change if the incentive is not offered.

Other requirements include demand levels such as a level greater than 1,000 kilowatts (in the case of a California rate) or peak demand of at least 2,500 kilowatts (in the case of an Arkansas rate). The previous year's consumption level is important in the case of a program in Alaska. In Minnesota, one utility has a minimum connected load of 10 megawatts as its requirement while another has a 750-kilowatt requirement. One New York utility has an economic revitalization incentive program offering rate reductions to industrial customers to help them become competitive in their existing or alternative markets. Each customer must submit a productivity plan to the utility describing how it intends to become competitive. The customer must have a demand of at least 500 kilowatts and employ a plurality of the full-time work force in the locality in which its operation is based.

The authors asked the staff members whether the projected benefits of the incentive rates (for the utilities, the customers, the ratepayers, the local economy and/or the state, and so on) have been realized. As can be seen in Table 3-26, the staff overwhelmingly feel that the incentives have been successful. Twenty-one commissions responded that the benefits have been realized while only three felt it was too soon to tell or that the benefits have not been achieved. This result is much more emphatic than the results from the similar question on economic development rates shown in Table 3-20. In that table, fourteen commissions said that benefits had been realized, two said they had not been realized, and nine said it was too early to tell. The benefits from incentive rates are perhaps more easily measured and more quickly obtained than those from economic development rates. Load retention, for example, occurs more quickly than job creation or facility expansion.

Those claiming that the benefits have been attained mentioned such results as the sale of surplus energy and capacity, load retention, load management (peak reduction and load leveling), lower fuel costs, and increased production at an industrial facility. Load or customer retention was the benefit mentioned by the respondents most often. The majority of staff providing further comments (ten of sixteen) noted this particular benefit. The Oregon Commission staff feels that other

TABLE 3-26

COMMISSION RESPONSES ON WHETHER
THE PROJECTED BENEFITS OF ELECTRIC UTILITY
INCENTIVE RATES HAVE BEEN REALIZED

Projected Benefits Have Been Realized	Projected Benefits Have Not Been Realized/ Too Early to Tell
Alaska Arizona Arkansas California Connecticut Idaho Indiana Iowa Kansas Louisiana Minnesota	Mississippi New Mexico Ohio Oklahoma Oregon Pennsylvania South Dakota Texas Utah Washington
(N=21)	(N=3)

Source: Question 15e from the 1991 NRRI survey of commission policies toward contracts for electric service. See Appendix B.

ratepayers benefit from contracts because the agreements maximize the revenues collected from the participating customers. Staff, however, is not able to check that the contract revenues are indeed maximized. In California, benefits have been realized but in some instances revenues have not covered marginal costs. Other ratepayers have thus subsidized the contract customers on occasion. In other instances, however, the revenues have been greater than marginal costs and all customers have benefitted.

The three commissions that said benefits had not been achieved or that it was too soon are New Hampshire, New Mexico (which also said that there had been some

benefits), and New York. In New Hampshire, the customer broke the contract by switching to gas without notifying the utility. In New Mexico, there has been some load retention but incentives were not provided soon enough in some instances to retain the customers. Economic downturn was also a complication. In New York, one utility has an hourly rate reflecting the actual marginal cost of energy. This rate is experimental and has not been offered long enough to determine its effectiveness.

The authors asked the staff members whether the contracts, tariffs, or both incorporating the incentive rates are public. As with economic development rates, the vast majority of commissions that have approved incentive rates allow public access. Twenty-one commissions listed in Table 3-27 said that the contracts and tariffs are public. Only four of the commissions listed in Table 3-22 that have approved incentive rates said that the contracts or tariffs are not public. These are California, Mississippi, Pennsylvania, and Utah. In Mississippi, the incentives are provided through contracts which, unlike tariffs, are not public records. In New Mexico, which is listed in Table 3-27, tariffs are public records. Contracts for load retention, however, would be confidential.

TABLE 3-27

COMMISSIONS WHERE THE CONTRACTS AND/OR TARIFFS
INCORPORATING THE ELECTRIC UTILITY
INCENTIVE RATES ARE PUBLIC

Alaska	Montana
Arizona	New Hampshire
Arkansas	New Mexico
Connecticut	New York
Idaho	Ohio
Illinois	Oklahoma
Indiana	Oregon
Iowa	South Dakota
Kansas	Texas
Louisiana	Washington
Minnesota	

Source: Question 18 from the 1991 NRRI survey of commission policies toward contracts for electric service. See Appendix B.

Comparison with Previous Survey Results

Two other studies on commission adoption of economic development and incentive rates have been published in the *NRRI Quarterly Bulletin*. These are mentioned briefly here to provide the reader with some other survey findings on the extent of and the reasons for commission adoption of such rates. The previous studies found the same motivations for offering the rates as the current study. Load retention and attraction of industry to an area were prominently mentioned. Like the current effort, the previous research found the rates to be widespread but not present in every state.

The first study, conducted in 1987 by the NRRI, considered economic development and incentive rates together.¹¹ The authors defined economic development rates as those "intended to encourage industry to locate in a state or promote production by existing industry." Incentive rates were defined as rates "aimed at increasing or retaining sales to price-sensitive customers and/or retaining and attracting customers with fuel switching capabilities." The authors found that as of February 1987 ten commissions had approved economic development rates, six had approved incentive rates, and ten had approved a mixture of the two. Thirty-eight commissions responded to this survey. The respondents mentioned such purposes for the rates as encouraging industry to locate in the state (twenty-one respondents), promoting greater production by existing industry (nineteen respondents), increasing utility sales to customers with high elasticity of demand (sixteen respondents), and retaining sales to customers that might otherwise switch to another fuel (twenty-two respondents).

The second study was conducted in 1988 by staff from the Illinois Commerce Commission and also considered economic development and incentive rates together.¹²

¹¹ See William Pollard and Vivian Witkind Davis, "NRRI Report: New Rates Designed to Encourage Economic Development and Load Retention," *NRRI Quarterly Bulletin* 8 (April 1987):227-240.

¹² See Dennis L. Sweatman and Larry J. Mraz, "Economic Development-Incentive Utility Rate Policies Implemented by State Utility Commissions," *NRRI Quarterly Bulletin* 10 (June 1989):231-248.

The authors defined economic development rates as "discounts, offered by utilities in the form of riders or special contracts, which are applied to an electric or gas customer's new, incremental, or entire load." The authors found that utilities in thirty-six states were offering economic development/incentive rates through tariffs or special contracts approved by the state utility commissions. In twenty-one states, the purpose of the rates was to discourage customer switching to alternative fuels. In twenty-one states also, discounts were intended to attract new industry to the state or utility service area. In fourteen states, expansion of existing industry was the motivation behind the discount rates. In the same number of states, discounts were offered to reduce excess capacity while in five states the discounts were dependent upon job creation.

Interruptible Rates

The third and final type of rate that the authors asked about in the survey (see Part D in Appendix B) was interruptible rates, defined on the form as rates, lower than those for firm service, offered by a utility to a customer willing to have its service interrupted if necessary by the utility. As with the two types of rates considered above, the NRRI asked the staff members whether their commissions have approved any interruptible rates for electric utilities and whether that service, if approved, is being provided through contracts, tariffs, or both. As Table 3-28 shows, the vast majority of commissions have approved interruptible rates. Forty-five commissions are listed.

Table 3-29 shows tariffs to be favored over contracts for providing interruptible service. Six commissions have approved interruptible rates in contracts, seventeen have approved the rates in tariffs, and twenty-two have approved them in both. The preference for tariffs appears to be greater here than in the case of economic development rates or incentive rates. Still, a majority of the commissions approving interruptible rates have approved the use of contracts. Summing the first and third

TABLE 3-28

COMMISSIONS THAT HAVE APPROVED
INTERRUPTIBLE RATES FOR ELECTRIC UTILITIES

Alabama	Mississippi
Alaska	Missouri
Arizona	Montana
Arkansas	Nevada
California	New Hampshire
Colorado	New Mexico
Connecticut	New York
Delaware	North Dakota
District of Columbia	Ohio
Florida	Oklahoma
Georgia	Oregon
Hawaii	Pennsylvania
Idaho	Rhode Island
Illinois	South Carolina
Indiana	South Dakota
Iowa	Texas
Kansas	Utah
Kentucky	Vermont
Louisiana	Virginia
Maryland	Washington
Massachusetts	West Virginia
Michigan	Wisconsin
Minnesota	

Source: Question 19 from the 1991 NRRI survey of commission policies toward contracts for electric service. See Appendix B.

TABLE 3-29

COMMISSION APPROVED ELECTRIC UTILITY
INTERRUPTIBLE RATES AVAILABLE THROUGH
CONTRACTS, TARIFFS, OR BOTH

Interruptible Rates Available in Contracts	Interruptible Rates Available in Tariffs	Interruptible Rates Available in Both Contracts and Tariffs
Arizona	California	Alabama
Mississippi	Connecticut	Alaska
Oregon	Delaware	Arkansas
Rhode Island	District of Columbia	Colorado
Utah	Florida	Hawaii
Vermont	Georgia	Idaho
	Illinois	Kansas
	Indiana	Kentucky
	Iowa	Maryland
	Louisiana	Massachusetts
	Minnesota	Michigan
	New Mexico	Missouri
	South Carolina	Montana
	Texas	Nevada
	Virginia	New Hampshire
	Washington	New York
	Wisconsin	North Dakota
		Ohio
		Oklahoma
		Pennsylvania
		South Dakota
		West Virginia
(N=6)	(N=17)	(N=22)

Source: Question 19a from the 1991 NRRI survey of commission policies toward contracts for electric service. See Appendix B.

columns of Table 3-29 shows that twenty-eight of the forty-five commissions allow contracts to be used.¹³

Reinforcing the point just made about commission choice of tariffs for interruptible rates are the results from a question about any commission preference for contracts over tariffs or vice versa for providing interruptible service. As shown in Table 3-30, staff at sixteen commissions feel that their agencies prefer tariffs while only five commissions prefer contracts. The Idaho Commission, listed in both columns, wants utilities to use contracts for large customers but tariffs for small customers. The policy of the North Dakota Commission, also listed in both columns, is for tariffed rates with contracted service conditions. Another commission listed in the contract column include California whose staff proposed to the Commission a bidding process followed by contracts. In Rhode Island, contracts are the choice because they permit different levels of interruptibility (in terms of number of megawatt, number of hours, notice requirements, and so on) to be arranged. In Utah, contracts are used because there is insufficient power available for a tariffed service.

Reasons given by staff for preferring tariffs include availability of service to all similarly situated or qualified customers, avoidance of preference or discrimination, specification of terms and conditions, comparability of service, a general preference for tariffed rates over individual contracts, and the reduced possibility of disputes. In Oregon, where the Commission has no major preference in the view of the staff, contracts are considered tariffs.

The NRRI asked the staff members if their commissions had rejected any proposed electric utility interruptible rates. Only two commissions, Georgia and Massachusetts, have done so. This total is several fewer than the seven commissions

¹³ The preference for tariffs overall, but especially in the case of interruptible rates, becomes clearer if one sums the totals of the second and third columns (tariff and contract/tariff columns) of the three tables. For Table 3-17, sixteen of the twenty-eight commissions listed had approved the use of contracts for economic development rates, but twenty-two of the twenty-eight had approved the use of tariffs. For Table 3-23, fifteen of the twenty-five commissions listed had approved the use of contracts for incentive rates, but eighteen had approved the use of tariffs. For Table 3-29, twenty-eight of the forty-five commissions had approved the use of contracts for interruptible rates, but thirty-nine had approved the use of tariffs.

TABLE 3-30

COMMISSION PREFERENCES FOR
CONTRACTS OR TARIFFS FOR PROVIDING
ELECTRIC UTILITY INTERRUPTIBLE RATES

Commissions Preferring Contracts for Interruptible Rates	Commissions Preferring Tariffs for Interruptible Rates
California Idaho North Dakota Rhode Island Utah	Connecticut Delaware Florida Georgia Idaho Illinois Iowa Michigan Minnesota Montana Nevada New York North Dakota Virginia Washington Wisconsin
(N=5)	(N=16)

Source: Question 19b from the 1991 NRRI survey of commission policies toward contracts for electric service. See Appendix B.

that have turned down proposed incentive rates or the eight commissions that have rejected proposed economic development rates (see Tables 3-19 and 3-25). As with incentive rates and economic development rates, several staff members said that proposals had been withdrawn by the utility or modified by the utility or by the commission instead of being rejected by their commissions. Those making this point include staff from Connecticut, Kansas, Montana, Ohio, Oklahoma, and South Dakota.

Rate case litigation of the rates and conditions of service was mentioned by the Wisconsin respondent.

The very small number of commissions rejecting interruptible rates may reflect the less controversial nature of such rates as compared with incentive or economic development rates. The latter types may be openly discriminatory (that is, discrimination allowed in order to achieve some higher goal such as creation of jobs or continued contribution of a large customer to a utility's fixed costs) while interruptible rates may appear, on their face, not to be special treatment of a particular customer. The customer may pay less but it is supposed to receive a lesser quality of service. Whether interruptible service is in fact discounted firm service because of rare interruptions is an issue that is addressed next.

The authors asked the staff members about the nature of the interruptible services and how often service was expected to be interrupted. Part of the purpose of this question was to see if any staff would indicate that rare interruptions were turning interruptible service into discounted firm service. Very few respondents said that customers had never been interrupted and none expressed any belief or offered any evidence that interruptible customers were receiving unfair discounts. As noted in Chapter 2, however, interruptible rates may be used primarily as an incentive rate for purposes of load retention instead of providing lower quality service. The discussion of the Arizona Public Service Company and Utah Power & Light rates in that chapter makes this point. Other agreements provided by survey respondents also show that interruptible rates are used for the less traditional purposes of load retention or to attract a new customer to the utility. In Alaska, the Kodiak Electric Association (KEA) agreed in 1988 to provide surplus nonfirm power to the Kodiak Island Borough School District for its heating system. According to the agreement, ". . .the heating system needs of the School are not now served by KEA and would not be served by KEA under conditions other than those set out in this Agreement. . ." A November 1989 agreement between Kansas City Power & Light Company and a large industrial customer specified that the utility would provide service for ten years. During this period, the customer agreed not to generate its own power or to take service from any other supplier.

Many staff answered with details of the arrangements, indicating various conditions under which customers could be or had been interrupted. These generally included maximum number of interruptions in a set time (such as daily or annually), maximum length of an interruption, maximum amount of time that the customer can be interrupted in a set time (such as daily or annually), and notice requirements. Many respondents noted that the conditions varied by customer or by tariff.

Some examples of staff responses follow. In Arkansas, electric utilities and cooperatives offer a wide variety of interruptible services. Services provided include irrigation control under which the utility can interrupt power to the water pumping unit, and air conditioning and water heating service for residential and small commercial customers. In Alabama, customers can be interrupted no more than twice a day for a maximum of eight hours a day, forty hours a week, and 600 hours a year. The California staff also noted limits on the level of interruption that can occur. For one utility those limits are an average of fifteen interruptions totaling 180 hours in a year where the customer's demand is greater than 500 kilowatts. For customers whose demand is larger than 4,000 kilowatts, the limits are twenty-five interruptions totaling 300 hours. For one utility in Kansas, interruptions are limited to twenty-five times a year, eight hours a day, with one interruption a day. Curtailments can not exceed 120 hours a year. For another utility, the tariff specifies limits of 150 hours in a month and 400 hours in a year.

Other examples include Massachusetts where interruptions vary depending on the rate. Maximum interruptions in a year may total twenty, forty, or sixty with thirty minutes' notice given to the customer. In Colorado, there were fifteen capacity interruptions and sixty-five energy interruptions in 1989. In Delaware, there were interruptions over eight days in 1988, five days in 1989, and two days in 1990. Interruptions averaged four to eight hours. In the District of Columbia, the utility can interrupt fifteen times a year. In Missouri, the customer pays the firm service rate and then receives a discount for that portion of service that is interrupted. In West Virginia, interruptions usually occur when the utility's spinning reserves are below acceptable levels. In Wisconsin, utilities cannot interrupt for economy reasons other than to displace high-cost energy. Some tariffs have provisions permitting the

customer to buy out of the interruption if the utility could purchase energy, albeit at a higher price.

In responding to a question about the criteria their commissions use in evaluating and approving or rejecting the interruptible rates, staff members mentioned the purpose of the rate, benefits to the customer and other ratepayers, current or future cost savings resulting from the interruption, reasonableness of the rates, the cost or cost effectiveness of the service, the cost of peak capacity, cost of capacity needed to meet that customer's load, contribution of the rates to the utility's fixed costs, coverage by the rates of the marginal costs of the service, and the load management method involved. Other criteria mentioned included revenue lost by providing the service, avoided costs, avoided capacity, availability of back-up power for the customer, customer power usage, cost-benefit analysis, and the criteria listed in Table 3-10.

Eligibility requirements for customers to qualify for the interruptible rates were also covered in the survey. Some respondents noted that the requirements varied by tariff and by utility. In Ohio, the requirement is that the customer's demand to be interrupted must be large enough to benefit the utility's operations. In Oklahoma and Vermont, the customer simply must be able to be interrupted. Some staff mentioned that customers can be interrupted after being given a certain amount of advanced notice. For one Arkansas utility, some customers can be interrupted after being given thirty minutes' notice while other customers are given one hour's notice. In Alabama, the customer can be interrupted after being given as little as fifteen minutes' notice if there is a system emergency.

Many respondents mentioned minimum amounts of power consumption that would be interruptible as an eligibility requirement. A few examples illustrate this point. In Alabama (in addition to the fifteen minutes' advanced notice in time of emergency stipulation), customers must have a minimum load of 5 megawatts. One Connecticut utility has a requirement that the customer must have 250 kilowatts of consumption that would be interruptible. For another utility in the same state, the requirement is 300 kilowatts. Two Iowa utilities have requirements of 200 kilowatts and 1,000 kilowatts. A third Iowa utility requires the customer to have a demand of

1,000 kilowatts or more and be willing to have a large part of its load interrupted. In Kansas, the load curtailment capability is 500 kilowatts. In Wisconsin, one utility has a requirement of 50 kilowatts although most are around 500 kilowatts. The minimum for two utilities in Missouri is 500 kilowatts while the requirement for a third utility in that state is 10,000 kilowatts.

The authors asked staff members whether the projected benefits of the interruptible rates have been realized. As Table 3-31 shows, the commissions overwhelmingly feel that the interruptible rates have been successful. Staff at thirty-five commissions said that the benefits have been realized while only four commissions responded that the benefits have not been attained. Those four commissions are the District of Columbia (listed also under realized benefits because high cost generation has been avoided when the utility interrupted), Kentucky, Mississippi, and Nevada. In the District, the full benefits were not attained because the utility did not interrupt customers during the 1990 peak period. In Mississippi, the customer had not been served at the time of the survey. In Nevada, the interruptible program was still being developed.

Staff responding that the interruptible rates have been successful mentioned the following types of benefits that have resulted from them: the programs have supported the electric utility system when demand exceeded supply, the interruptions saved the utilities money in procuring emergency power, the utility had saved customer money by controlling peak load or reducing peaks, and customers who might have bypassed the utility, were retained on the utility system. Other benefits mentioned include deferring capacity construction, a lower capacity need resulting in a lower rate base and lower costs for customers, a lower need for peaking capacity, greater utility flexibility in the control of system load, benefits to the customers receiving the discounts from firm service rates, uninterrupted residential service, avoided brownouts, use by utilities of interruptible load to meet spinning reserve requirements, additional revenues for the utilities, additional jobs for the local economy, and less load being carried during times of system stress.

TABLE 3-32

COMMISSIONS WHERE THE CONTRACTS AND/OR TARIFFS
INCORPORATING THE ELECTRIC UTILITY
INTERRUPTIBLE RATES ARE PUBLIC

Alabama	Michigan
Alaska	Minnesota
Arizona	Missouri
Arkansas	Montana
California	Nevada
Colorado	New Hampshire
Connecticut	New Mexico
Delaware	New York
District of Columbia	North Dakota
Florida	Ohio
Georgia	Oklahoma
Hawaii	Oregon
Idaho	Rhode Island
Illinois	South Carolina
Indiana	South Dakota
Iowa	Texas
Kansas	Vermont
Kentucky	Virginia
Louisiana	Washington
Maryland	West Virginia
Massachusetts	Wisconsin

Source: Question 22 from the 1991 NRRI survey of commission policies toward contracts for electric service. See Appendix B.

the rates are provided through contracts which are protected by the state's privacy act and thus are not public record.

Perceived Benefits, Method of Service, and Type of Rate

The question of whether projected benefits have been realized (discussed at various points in Chapter 3 for the three types of rates) raises an interesting related

issue of whether the method of offering the service (contract or tariff) is as important or more important as the type of service being offered in achieving the intended benefits or at least in the commission evaluations of whether the rates have been successful in achieving their projected benefits. The authors decided to consider this issue in light of this research effort's objective of comparing tariffed rates with contract rates and in light of the commissions' preferences for tariffs mentioned in this chapter.

The data presented in Table 3-33 provide some insights into this question. As can be seen, economic development rates have a lower perceived level of success in achieving their goals than the other two rates regardless of whether the rates are offered in contracts, tariffs, or both.

Table 3-33 shows that 42.85 percent of the respondent commissions that have approved economic development rates in contracts feel that those rates have realized their projected benefits. Twice as many of the respondent commissions that have approved incentive rates (85.7 percent) or interruptible rates (83.3 percent) in contracts said that those rates have achieved their benefits. With respect to commission approved economic development rates in tariffs, a larger proportion of the commissions, 55.6 percent, felt that the tariffed rates had attained their goals than felt that the contract rates had. This larger percentage for tariffed economic development rates is still lower than the 81.8 percent of commissions that said tariffed incentive rates had realized their benefits and 92.3 percent of commissions that said tariffed interruptible rates had achieved their benefits. For commissions approving rates in both contracts and tariffs, the economic development rates again have a lower perceived level of success. As shown, 66.7 percent of the commissions approving the economic development rates in both forms believe that the projected benefits have been achieved. All of the commissions approving incentive rates in both contracts and tariffs and 90 percent of the commissions approving interruptible rates in both formats felt that benefits had been achieved.

The relationship between incentive and interruptible rates is not quite as clear cut as that between these two and economic development rates. On the one hand, larger percentages of commissions approving incentive rates in contracts alone and

TABLE 3-33

COMPARISON OF REPORTED BENEFIT REALIZATION WITH
METHOD BY WHICH SERVICE OFFERED FOR
THREE TYPES OF RATES

Method of Service	Reported Benefit Realization								
	Economic Development Rates		Incentive Rates		Interruptible Rates				
Contracts	3	Realized	42.85%	6	Realized	85.70%	5	Realized	83.30%
	3	Too early	42.85	1	Not realized/ Too early	14.30	1	Not realized	16.70
	<u>1</u>	Not realized	<u>14.30</u>	—			—		
Total	7		100%	7		100%	6		100%
Tariffs	5	Realized	55.60%	9	Realized	81.80%	12	Realized	92.30%
	3	Too early	33.30	2	Not realized/ Too early	18.20	1	Not realized	7.70
	<u>1</u>	Not realized	<u>11.10</u>	—			—		
Total	9		100%	11		100%	13		100%
Both	6	Realized	66.70%	6	Realized	100.00%	18	Realized	90.00%
	<u>3</u>	Too early	<u>33.30</u>	—			<u>2</u>	Not realized	<u>10.00</u>
Total	9		100%	6		100%	20		100%

Source: Authors' calculations from data in Questions 11a, 11e, 15a, 15e, 19a, and 19f from the 1991 NRRI survey.

contracts and tariffs together responded that those rates had realized their potential benefits than was true of commissions approving interruptible rates in both categories. On the other hand, more of the commissions approving interruptible rates in tariffs felt those rates had achieved their benefits than was true of the incentive rates. In addition, the percentage of commissions that had approved interruptible rates in both contracts and tariffs and that felt that the rates had been successful was lower than the percentage of commissions feeling that the incentive rates in both contracts and tariffs had been successful (100 percent for the incentives versus 90 percent for the interruptible). The numbers of commissions involved, however, favor the interruptible rates. Eighteen commissions approving interruptible rates in both contracts and tariffs felt that those rates had succeeded. Six commissions approving incentive rates in both contracts and tariffs felt that those rates had succeeded.

Within each rate type, the results are also a little mixed when comparing the perceived success of contract rates with the perceived success of tariffed rates. There is a clear trend in economic development rates as tariffed rates are felt to be more successful when compared with contract rates. For incentive rates, contracts are felt to be slightly more successful in achieving potential benefits although all of the commissions that have approved both contracts and tariffs (and that answered the question) felt that the benefits had been realized. For interruptible rates, tariffed rates are believed to have had more success in attaining benefits.

In considering the importance of the type of rate and the method by which the rate is offered, the results presented here suggest that both method and rate type are crucial. Tariffs were felt to be successful in achieving potential benefits across all three categories of rates, and more successful than contracts in two of the three. In one of the two rates where tariffs were judged more successful than contracts--economic development rates--the type of service appears to be more important than the method. As noted, economic development rates had a lower perceived success across all three categories of methods. For incentive and interruptible rates, the method appears to be more important. Contracts are considered more successful for incentive rates and tariffs for interruptible rates. In short, the results presented here point to the necessity of commissions pursuing a

flexible policy, allowing contracts at certain times for certain services and tariffs for others.

Summary

Responses to the survey were received during the course of 1991 from forty-six states and the District of Columbia. Thirty-three of the forty-seven responding commissions said that electric utilities have applied to provide service on a contract basis. Commissions in twenty-nine states have approved hundreds of utility applications while only six commissions have rejected a total of fifteen applications. According to data supplied by the respondents, over one hundred utilities are providing contract service to over three hundred customers in thirty states. Most of the respondents (twenty-five) feel that the contract services have achieved the intended benefits. Eligibility requirements for the services vary. Some respondents said that there were no standard requirements while others mentioned load requirements.

With respect to commission policies on *preapproval of contracts*, twenty-six commissions must preapprove contracts. Twenty-three hold open hearings on proposed contract service. One conducts closed proceedings. Staff at thirty-one commissions analyze proposed contracts. Twenty-six commissions have an ad hoc case-by-case policy while six have a generic policy. Commission requirements for information that the utilities must submit along with the proposed contracts vary. Some have no particular requirements while others have very specific requirements such as justification for the agreement or cost data.

In terms of *criteria used* by the regulators to evaluate proposed service, the standard of just and reasonable rates is used by more commissions (twenty-eight) than any other. Load retention and undue discrimination between customer classes are also considered by a majority of the responding commissions. Twenty-six consider load retention and twenty-five discrimination between classes. Fewer commissions use undue discrimination among customers within the same class, economic development, price floor at marginal cost, and revenue losses occasioned by lower rates as criteria.

About one quarter of the commissions use other anticompetitive effects and economic versus noneconomic bypass. Eight consider antitrust/predatory pricing.

Commission policies with respect to *contract operations* were also considered. Twenty-five commissions said that contracts between utilities and their customers are public. Twenty-four said that other customers are made aware of contract services. Nineteen said that other customers can actually subscribe to the contract services, but only six have ordered the utilities to publicize the contract services. Ten commissions have oversight mechanisms specifically for contract service. Rate case review is the preferred setting for review of contracts. Twenty commissions review contracts at the next rate case while twelve use special hearings and procedures for oversight.

Three *types of rates* that could be offered through contracts were given special consideration in the survey. The first of these is *economic development rates*. Twenty-eight commissions have approved economic development rates. Tariffs seem to be preferred over contracts for offering these rates. Twelve commissions have approved the rates in tariffs, six in contracts, and ten in both. Eight commissions said that tariffs were preferred for this service while only one said that contracts were. Eight commissions have rejected proposed economic development rates. Fourteen commissions said that the projected benefits of these rates have been realized, two said that the benefits had not been, and nine said that it was too soon to tell. Twenty-six commissions said that the contracts and/or tariffs incorporating the economic development rates are public.

The second type of rate considered was *incentive or load retention rates*. Twenty-five commissions have approved incentive rates. Tariffs again seem to be preferred as ten have approved the rates in tariffs, seven in contracts, and eight in both. Seven commissions said that their preference was for tariffs, while three said contracts. Seven commissions have rejected proposed incentive rates. Twenty-one commissions feel that the benefits of the rates have been achieved while only three said that benefits had not been realized or that it was too early to tell. Twenty-one commissions said that the contracts or tariffs with incentive rates are public documents.

Interruptible rates were the third type considered in the survey. These rates are very widespread. Forty-five commissions have approved interruptible rates. Tariffs are the clear favorite as seventeen commissions have approved the rates in tariffs, six in contracts, and twenty-two in both. Staff at sixteen commissions said that their agencies prefer tariffs while only five commissions said that they preferred contracts. Only two commissions have rejected proposed interruptible rates. Commissions feel overwhelmingly that the interruptible rates have achieved their projected benefits. Thirty-five commissions said that the benefits had been realized while only four said that the benefits had not been. Forty-two commissions said that the contracts or tariffs with the interruptible rates are public.

The authors discussed the question of whether the *method* of offering the service (contract or tariff) is as important or more important than the *type of service* being offered in achieving the intended benefits or at least in commission evaluations of whether intended benefits have been achieved. This issue was considered for economic development, incentive, and interruptible rates. The findings suggest that both the method and the type of service are important. Tariffs were judged to be successful in achieving intended benefits by a majority of those responding to those questions for all three rate types. Tariffs were thought to be more successful than contracts in achieving the goals of economic development rates and interruptible rates. Contracts were felt to be more successful for incentive rates. Economic development rates, however, were thought to be less successful in goal achievement than incentive and interruptible rates across all three methods of offering the service (contracts, tariffs, or both). Thus, method appears to be more important for incentive and interruptible rates (contracts for incentives and tariffs for interruptible) while type of service being offered is more important for economic development rates.

A few overall observations about the findings of the electric survey can be made. First, utilities are active in offering contract service. Most commissions reported that at least one electric utility had applied to provide such service. Commissions, on the other hand, tend to prefer tariffs for offering the services. While commissions also feel that the rates are achieving their intended benefits, tariffs had a higher perceived success level than contracts. The commissions' preference for

tariffs and use of rate case review as a major oversight vehicle seems to reflect caution, administrative ease, and a desire to stay with what has worked in the past (tariffs reviewed in rate cases).

CHAPTER 4

CONTRACT PRICING OF TELEPHONE SERVICE

Although contracts for telecommunications services tend to be unique and are often proprietary, some generalizations may be made. For one, the contracting customers tend to be large and sophisticated users of telecommunications services and equipment including large commercial and industrial facilities, hospitals, universities, and governmental agencies and units. For another, services provided typically include Centrex-type services, toll switching, and private line communications. Contracts providing these services on more favorable terms than tariffs for the same services are most likely to be offered if the utility is faced with what it considers to be viable competition from alternate providers.

Thirty-seven of the forty-four commissions that responded to the telephone survey indicated contracting within their jurisdictions. From survey responses and anecdotal evidence, it appears that the trend toward the use of contracts is growing due to competitive and technological factors. Because these contracts are likely to become more important over time, regulators may wish to consider options for handling them and their place in an overall regulatory strategy.

Evidence of a Revised Regulatory Bargain

The use of contract pricing per se is not confined to any particular regulatory model. Contracts may be used under traditional regulation, flexible or incentive regulation, or social contract regulation. In the telephone industry, the ability of local exchange companies (LECs) to offer contracts without prior approval subject only to cursory ex post review does represent a loosening of regulation, or at least a shift of focus. This is consistent with the recent trend away from the full or tight regulation assumed in the traditional model¹ under which almost all customers were served

¹ See William D. Thompson and Raymond A. Nuñez, "The Status of State Telephone Regulatory Reform: A Fifty State Review," *NRRI Quarterly Bulletin* 12, no. 1, (March 1991): 33-40.

under tariffs and contracts were reserved for special cases under the presumption that there must be a finding that a particular customer could not be served appropriately under any existing tariff. A less restrictive regulatory model is a flexible approach in which most customers are served under tariffs but some leeway is allowed so that, when necessary, a customer may be served under a contract which may become an individual-case-basis tariff or a customer-specific offering.²

In a third regulatory model, limited regulation, the market is divided into three segments: a competitive segment which is detariffed and thus not subject to price regulation, a mixed or partially competitive segment in which individual customers may be served under tariffs or contracts as appropriate, and a monopoly segment served under tariffs with more or less traditional regulatory pricing schemes. A variation on the third model is modified deregulation in which noncompetitive services are offered under cost-of-service-based rates and other services are offered at market-based rates which reflect the oligopolistic structure of individual markets; pricing of many services in the oligopolistic markets would be free of regulation, and contracts would probably be the norm. Regulation would be concerned mainly with quality and availability of service and preventing the utility from engaging in anticompetitive behavior.³

One way to consider the situation described above is to divide services into four categories, listed in terms of the intensity of regulation imposed on them from most to least regulated. This categorization is shown below in Table 4-1.

² Whether a contract becomes an ICB or a CSO depends on whether statutes or commission rules require that all regulated services be provided under tariffs. Without such rules, informational filings may be all that is required by with the commission.

³ For a discussion of alternate regulatory regimes see Mary D. Hall, "Telecommunications Policy for the Future: A Model State Plan," *Public Utilities Fortnightly* 115, no. 1 (January 10, 1985): 15-19. For a discussion of and plea for flexible pricing see Calvin S. Monson, "Pricing Flexibility and the Public Interest," *Public Utilities Fortnightly* 124, no. 3 (August 3, 1989): 18-23.

Table 4-1

TELEPHONE SERVICE CATEGORIES AND REGULATORY REGIMES

Category	Definition	Regulatory Treatment
Basic monopoly services	Services offered by a local exchange company such as access lines and switched local service that are not considered discretionary or competitive.	Subject to full rate regulation and tariffed. Little, if any, pricing flexibility would be allowed.
Discretionary monopoly services	Optional or enhanced services that are considered neither competitive nor basic or essential.	Allowed (possibly limited) pricing flexibility. Offered under tariffs and otherwise subject to full regulation.
Detariffed services	Optional or enhanced services that have viable competitive alternatives available but for which the public interest is not best served by deregulation.	Exempted from tariffs. The LEC would have nearly complete pricing flexibility. Investment, expenses, and revenues given "above the line" treatment (considered in rate cases).
Deregulated services	Optional or enhanced services with viable competitive alternatives available and for which the public interest is best served if they are exempt from regulation.	Deregulated. The LEC would have complete pricing flexibility and the investment, expenses, and revenues given "below the line" treatment (not considered in rate cases).

Source: Authors' construct.

Detariffing

Detariffing is a form of relaxed or minimal regulatory oversight that allows the utility greater pricing flexibility, shortens its response time in competitive situations, and may be appropriate if the prices of an existing regulated service cannot be adjusted quickly enough through the tariffing process to respond to competition and maintain an adequate level of customers, usage, and revenues. Detariffing also may be appropriate for competitive services which are so individualized that each customer truly is its own class, or for new services based on evolving technology for which markets are not well developed or defined. Protection against cross-subsidization and predatory pricing may be provided by establishing price limits on detariffed services—with a cap set by competitive market prices and a floor generally set at some version of incremental cost—and by establishing accounting procedures which accurately assign costs and revenues to detariffed and fully regulated services (admittedly, a difficult task). Detariffed services are otherwise subject to full regulation with service quality standards and complaint proceedings available to customers that feel mistreated.

In setting price limits on detariffed services, the presumption must be that competition will hold down prices. Consequently, price ceilings per se are not required where viable competition exists. To prevent cross-subsidization, predatory pricing, or both, regulators must set a floor on the prices of flexibly regulated or detariffed services; the floor need not always include common costs but it should include direct fixed and variable costs. Although prices that recover less than fully distributed costs risk the appearance of cross-subsidization of detariffed services by tariffed services,⁴ using fully distributed cost as a floor may—depending on the cost allocation used—create opportunities for uneconomic bypass as competitors undercut the LEC's prices.

⁴ The appearance of cross-subsidization is deceptive. Cross-subsidies cannot be inferred from FDC analysis. Nevertheless, participants in the regulatory process have a tendency to base claims of cross-subsidies and inequitable treatment on evidence derived from FDC studies.

Deregulation

Deregulation is letting go entirely of regulatory control over pricing. Additionally, expenses, revenues, and investment in deregulated services are not considered when making pricing decisions for regulated services. Deregulation may be appropriate for highly competitive services and for new and emerging services that are not part of the utility's core business. For a mixed regime of regulated and deregulated services to be workable, effective mechanisms must be in place to separate the expenses of deregulated services from those on the regulated side, and regulatory oversight of anticompetitive behavior by the LEC might be necessary.

Although market and technological factors may lead to some services being detariffed or deregulated, commissions should retain the authority to reimpose regulation if the public interest warrants. The crucial choice facing commissions is the correct degree of regulatory oversight for various services. To allow market forces to determine outcomes for selected segments during turbulent times—with changing technology, new and emerging services, and new firms entering markets—is not an abdication of regulatory responsibility or authority.

The option of detariffing or deregulating a service offering should not be undertaken unless the viability of competition has been confirmed. Although there is no doubt that competition is real in many segments of the telecommunications market, it may vary within and across jurisdictions and by segments. Regulators should not allow the LECs to use the specter of competition as a lever for obtaining blanket detariffing or deregulation of potentially lucrative services. Moreover, if minimal regulation results in poor performance in terms of service quality, system upgrading, prices, and profits or if technology stabilizes, competitors drop out, and services now considered optional become essential, reimposition of regulation on previously detariffed or deregulated services may be called for.⁵

⁵ Sources of information in this area include: Jane L. Racster, ed., *Issues in Regulating Imperfectly Competitive Telecommunications Markets*, (Columbus, Ohio: The National Regulatory Research Institute, November 1986); Alfred E. Kahn and William B. Shew, "Current Issues in Telecommunications Regulation: Pricing," *Yale Journal on* (continued...)

Effects of Contract Pricing of Telephone Service

The ability of LECs to offer telephone service under contracts at rates lower than those contained in the regular tariffs affects the company, its customers (both those who receive the discounts and possibly those who do not), its competitors, and regulators. Each of these will be considered in turn.

On Local Exchange Carriers

When individual customers are served through contracts there are a number of effects to consider. The LEC has an incentive to offer contract service under two conditions. First, by offering contract services (presumably at some discount from tariff rates) customers may be kept on the network. This prevents profit erosion (as contrasted with continuing to offer service only under tariffs and suffering a loss of customers and their associated revenues) so long as the contract price is sufficient to cover the incremental cost of serving the individual customer and it makes some contribution to common or overhead costs. When the LEC has in place switching and transport capacity that can serve customers attracted to the system, contracts for special services may be profit enhancing if priced appropriately. Contracts also tend to create an ongoing relationship between the LEC and its customers and may create barriers to rivals. Also, since contracts typically run three or more years, the utility can plan more efficiently and need not be concerned that customers will defect at any time. On the other hand, as noted above, the transactions costs associated with

⁵ (...continued)

Regulation 4, no. 2 (Spring 1987): 191-256; Howard P. Marvel, *Organization and Competition in Telecommunications: An Idiosyncratic View*, (Columbus, Ohio: The National Regulatory Research Institute, November 1987); John S. Horning, et al., *Evaluating Competitiveness of Telecommunications Markets: A Guide for Regulators*, (Columbus, Ohio: The National Regulatory Research Institute, January 1988); William G. Shepherd and Robert J. Graniere, *Dominance, Non-Dominance, and Contestability in a Telecommunications Market: A Critical Assessment*, (Columbus, Ohio: The National Regulatory Research Institute, March 1990); and Alfred E. Kahn, "Deregulation: Looking Backward and Looking Forward," *Yale Journal on Regulation* 7, no. 2 (Summer 1990): 325-54.

marketing, negotiating, and administering individual contracts are likely to be higher than the costs associated with providing equivalent service under tariffs.

On Core or Captive Customers⁶

Core or captive customers are those without any viable alternate source of the service provided by the utility. To the extent that contracts keep customers on the system who would otherwise leave and contract pricing covers some of the overhead or common costs of the system, captive customers benefit. They are harmed to the extent that their rates are raised to recover implicit revenue shortfalls resulting from contracts rates below tariff rates (though not as much as they would be if the contract customers left the system). They may also be harmed in the long run if regulators force the utility and its stockholders to cover any revenue shortfall.

On Customers with Competitive Alternatives

Those customers with competitive alternatives clearly benefit from the existence of contract pricing. They can use their position to bargain for price concessions or can opt for the alternative supplier if the utility's offer is not acceptable. Either way, they achieve a cost savings. Another benefit to these customers is that contract rates may be more stable than tariff rates. This feature makes costs more predictable over the life of the contract and allows better capital and operating budget analysis especially where equipment rental is involved. It must be noted, however, that the telecommunications network has certain public good or shared resource characteristics. Even customers with competitive alternatives benefit from and have an interest in the its continued viability and would be harmed if the network were degraded.

⁶ The effect of offering contracts at a discount from tariff rates is developed more fully in Appendix A, below.

On Competitive Providers

Competitive providers will not be able to cream-skim—that is, exploit regulatory pricing anomalies by choosing profitable segments of the market and stealing them from the regulated firm—unless they are truly more efficient than the utility. This will eliminate "uneconomic bypass" in which competitors attract customers by offering prices lower than tariff rates but above the LEC's cost of providing the service. They will have to compete on quality and efficiency and not by exploiting regulatory limits on the LEC. The converse of this is that the LEC must not be allowed to engage in predatory pricing, something which the cost standard for judging contracts is intended to eliminate. LECs will still have considerable market power in some market segments since they have the advantages of incumbency which new entrants lack.⁷

On Regulators

Regulators may need to consider carefully the reasons for emerging competition in markets long considered to be protected by economies of scale and scope. Such competition could be due to changing technology, inefficient operations by LECs, regulatory pricing structures, or a combination of factors. If new entrants are able to provide service more efficiently than existing firms, it might be because existing firms are inefficient due to general organizational slack caused by a lack of historic competition.⁸ Inefficiency might also result from managerial preferences for excessive

⁷ A brief discussion of some of the advantages of incumbency may be found in Appendix A, below.

⁸ See Harvey Leibenstein, "Allocative Inefficiency vs. X-Inefficiency," *American Economic Review* 56, no. 2 (June, 1966): 392-415. In essence, he argues that a lack of competitive pressure leads firms toward non-cost-minimizing behavior or organizational slack. When faced with competition, firms must adapt or risk losing their markets, and the transition is often not easy. One may note the recent histories of AT&T's post-divestiture cost cutting, the airline industry's post-deregulation cost cutting as it evolved from a regulated shared monopoly to a competitive oligopoly, and the auto
(continued...)

salaries or other compensation⁹ or from a bias in favor of capital or rate-base inputs caused by rate of return regulation.¹⁰ If these effects are present, competition is clearly desirable as a means of inducing efficiency.

The emergence of competition might also mean that regulatory pricing schemes are allocating disproportionate shares of common costs to those services under competitive pressure, creating opportunities for entrants to engage in creamskimming. The resulting bypass of the regulated firm would be uneconomic because it is based not on economic efficiencies of the competitor but on regulatory policy.¹¹

⁸ (...continued)

industry's cost cutting in the face of foreign competition as possibly indicating the existence of such slack. X-inefficiency was applied to utilities in Rodney Stevenson, "X-inefficiency and Interfirm Rivalry: Evidence from the Electric Utility Industry," *Land Economics* 58, no. 1 (January 1982): 52-66.

⁹ The theory that managers may have the ability to exploit a monopoly position by providing themselves with excessive emoluments leading to inefficient outcomes (excess cost for a given output) was described in Oliver E. Williamson, "Managerial Discretion and Business Behavior," *American Economic Review* 53, no. 5, (December 1963): 1032-1057. This theory was applied to public utilities in Michael A. Crew and Paul R. Kliendorfer, "Managerial Discretion and Public Utility Regulation," *Southern Economic Journal* 45, no. 4 (January 1979): 696-709.

¹⁰ The bias towards capital (rate-base) inputs was developed in Harvey Averch and Leland Johnson, "Behavior of the Firm Under Regulatory Constraint," *American Economic Review* 52, no. 4 (December 1962): 1052-69. The theory has been refined by many authors; a comprehensive examination of the subject is Elizabeth E. Bailey, *Economic Theory of Regulatory Constraint*, (Lexington, Massachusetts: Lexington Books, D.C. Heath and Company, 1973).

¹¹ Two good sources on creamskimming are Alfred E. Kahn, *The Economics of Regulation, Volume II: Institutional Issues*, (New York: John Wiley, 1971), 221-46, and William A. Brock and David S. Evans, "Creamskimming," in David S. Evans, ed., *Breaking Up Bell: Essays in Industrial Organization and Regulation*, (Amsterdam: North Holland, 1983), 61-94.

Other Effects¹²

If price discrimination tends to offer some customers cost advantages not available to others, disfavored customers may consider themselves harmed. "Secondary line injury" describes the effect of discriminatory prices (contract terms at a discount from tariff rates) on the competitors of favored customers who are unable to obtain discounts and must pay full tariff rates. Complaints of secondary line discrimination *might* be actionable under antitrust law unless the utility can demonstrate that such price discrimination resulted from and was intended by commission policy.¹³ Secondary line price discrimination has not been addressed in this study but might be of some concern.

Another effect is on customers who, though not in direct competition with those receiving favorable treatment, are unable to obtain equivalent treatment either because they lack viable competitive alternatives, complete information, or negotiating skills. This appears to be an abandonment of the principle of equal treatment for

¹² Several papers on these topics may be found in *Proceedings of the Seventh Annual NARUC Biennial Regulatory Information Conference, Volume III: Multi-Utilities*, (Columbus, Ohio: The National Regulatory Research Institute, September 1990). Of specific interest in this volume are Alex Larson and William Kovacic, "Predatory Pricing Safeguards in Telecommunications Regulation: Removing Impediments to Competition," 119-194; John Erik Kingstad, "Undue Discrimination and the Wholesale Theory of Rates," 195-234; Labros E. Pilalis, "Public Utility Services Under Customer-Specific Contracts: Regulatory and Antitrust Issues," 235-67; and Alexander C. Larson, Calvin S. Monson, and Patricia J. Nobles, "Competitive Necessity and Pricing in Telecommunications Regulation," 309-57. The paper by Larson, Monson, and Nobles is also available in *Federal Communications Law Journal* 42, no. 1 (February 1990): 1-49.

¹³ See J. Steven Henderson and Robert E. Burns, *An Economic and Legal Analysis of Undue Price Discrimination*, (Columbus, Ohio: The National Regulatory Research Institute, August 1989), 26-33 and 51-58. Arguing that such actions are possible, they state:

For utility conduct to fall under the state-action exemption, it must be *compelled* by the state agency. Mere acquiescence is not enough. State approval of a utility-proposed tariff alone would not provide antitrust immunity. (at 51, emphasis added).

similarly situated customers unless customers' ability to choose competitive providers or negotiate becomes a central feature defining their situations so that certain customers obtain a form of "most-favored-nation" treatment. There is no indication that the legality of such actions has been challenged to date; this does not mean, however, that a challenge might not be entered in the future.

CHAPTER 5

CONTRACTING FOR TELEPHONE SERVICE: SURVEY RESULTS ON CURRENT PRACTICE AND POLICY

During 1991 The National Regulatory Research Institute surveyed state utility commissions to assess the extent to which telephone utilities and their regulatory commissions deal with contracts for telephone service. The survey was divided into three sections: contract pricing and contract services, economic development rates, and incentive rates. The survey was sent to forty eight states¹ and to the District of Columbia; forty-four responses were received. These responses form the basis for this chapter which summarizes salient findings of the survey including general commission policies and practices with respect to contracts for telephone services. This chapter also offers illustrations, taken from commission responses.² Specific issues of economic development rates and incentive rates, provided through contracts or tariffs as they relate to provision of contracted telephone services, are also briefly discussed. The extent to which telephone companies offer these rates and particular commission views and policies toward contracts or tariffs as instruments for providing these services are discussed in the text and presented in tables and figures. Finally, narrative descriptions of the policies of some commissions, developed from the survey responses and other documents provided, are presented.

Extent of Contracting for Telephone Services

Responses to the survey indicate that most state regulatory commissions have approved applications from telephone companies to provide contract services; as shown in Table 5-1, only seven responding commissions (16 percent) have not received applications for provision of contract services.

¹ Commissions were briefly presurveyed by telephone before sending the survey instrument; surveys were sent to every commission that indicated that contract pricing or special tariff rates were being used.

² A copy of the actual survey instrument may be found in Appendix B.

Even in states that do not approve contracts, there is some oversight exercised. For example, in Colorado interexchange carriers (IXCs) such as AT&T, MCI, and Sprint have authority to offer contract services according to Order C88-1467. Other IXCs operate under similar circumstances but there are no specific orders for LECs. The South Dakota Commission, based upon its interpretation of a statute banning discriminatory pricing, denied a contract pricing application filed by US West.

Commission Policies Regarding Contracts

Twenty two responding commissions (65 percent)³ must preapprove all contract services, but only nine indicated that they hold open hearings on proposed contracts. The survey collected information on commission policies toward individual contracts such as whether commissions have a generic policy statement on contracts for telephone services or handle them on an ad hoc, case-by-case basis. As shown in Table 5-1, twenty-four responding commissions deal with contract pricing applications on an ad hoc basis, ten commissions have a generic policy statement, four use both approaches. Slightly more than three fourths of the responding commissions indicate that they require their staff to analyze proposed contracts.

³ The indicated percentages are relative to the number of answers to individual questions on the survey; although forty four commissions responded to the survey, some did not answer every question.

TABLE 5-1
COMMISSION PROCEDURES FOR CONTRACT PRICING OF TELEPHONE SERVICES

STATE	Telephone Companies Applied to Provide Contract Services (1)‡	Commission Preapproval for Contract Services (1a)	Hearings on Provision of Contract Services (1b)	Commission Staff Performs Analysis of Contracts (1c)	Commission Policy: Generic Statement or Ad Hoc (2)
Alabama	Yes	Yes	Yes, Open	Yes	Ad Hoc
Alaska	No				Generic
Arkansas	No				
California	Yes	Yes	No	Yes	Generic
Colorado	Yes	No	No	No	Generic
Connecticut	Yes	Yes	Yes, Open	Yes	Ad Hoc
Delaware	Yes	Yes	Yes, Open	Yes	Ad Hoc
D. C.	Yes	No	No	Yes	Both
Florida	Yes	No	No		Generic
Georgia	No				
Hawaii	Yes		No	Yes	Ad Hoc
Idaho	Yes	Yes	No	No	Ad Hoc
Illinois	Yes	No	No	Yes	Ad Hoc
Indiana	Yes	No	No	No	Generic
Iowa	Yes				
Kentucky	Yes	Yes	No	No	Ad Hoc
Louisiana	Yes	Yes	No	Yes	Ad Hoc
Maine	Yes	No	No	No	Ad Hoc
Maryland	Yes	Yes	Yes, Open	Yes	Ad Hoc
Massachusetts	Yes	Yes	No		Ad Hoc
Minnesota	Yes	No	No	Yes	Ad Hoc
Mississippi	Yes	No	No	No	Ad Hoc
Missouri	Yes	Yes	Yes, Open	Yes	Generic
Montana	Yes	No	No	Yes	Ad Hoc
Nevada	Yes	Yes	No	Yes	Ad Hoc
New Hampshire	Yes	Yes	No	Yes	Ad Hoc
New Jersey	No				
New Mexico	Yes	Yes	No	Yes	Ad Hoc

‡ Numbers in parentheses correspond to the question number in the 1991 NRRI Survey on State Commission Policies on Telephone Utility Contract Pricing Practices.

TABLE 5-1
COMMISSION PROCEDURES FOR CONTRACT PRICING OF TELEPHONE SERVICES

STATE	Telephone Companies Applied to Provide Contract Services (1)‡	Commission Preapproval for Contract Services (1a)	Hearings on Provision of Contract Services (1b)	Commission Staff Performs Analysis of Contracts (1c)	Commission Policy: Generic Statement or Ad Hoc (2)
New York	Yes	No	No	Yes	Generic
North Carolina	No				
North Dakota	Yes	Yes	No		Ad Hoc
Ohio	Yes	Yes	No	Yes	Both
Oregon	Yes	Yes	Yes, Open	Yes	Generic
Pennsylvania	Yes	No	No	Yes	Ad Hoc
Rhode Island	Yes	Yes	No	Yes	Ad Hoc
South Dakota	Yes				
Tennessee	Yes	Yes	Yes, Open	Yes	Ad Hoc
Texas	Yes	Yes	No	Yes	Both
Utah	Yes	Yes	Yes, Open	Yes	Generic
Virginia	No		No	No	Ad Hoc
Washington	Yes	Yes	Yes, Open	Yes	Generic
West Virginia	No				Ad Hoc
Wisconsin	Yes	No	No	No	Ad Hoc
Wyoming	Yes	Yes	No	Yes	Both

Yes=37, No=7

Yes=22, No=12

No=27, Yes=9

Yes=25, No=8

Generic=10, Ad Hoc=24, Both=4

*In all tables, NI means no information or insufficient information was given to calculate a response to the question.

‡ Numbers in parentheses correspond to the question number in the 1991 NRRI Survey on State Commission Policies on Telephone Utility Contract Pricing Practices.

Criteria Used to Evaluate Proposed Contracts

As shown in Table 5-2, among the criteria considered important by commissions when evaluating proposed contracts are the following: just and reasonable rates (28 commissions), price floor at marginal cost (23 commissions), undue discrimination between customer classes (19 commissions), undue discrimination within a customer class (19 commissions), antitrust/predatory pricing (16 commissions), revenue losses occasioned by lower rates (13 commissions), load retention (11 commissions), economic development (11 commissions), economic versus noneconomic bypass (10 commissions), other anticompetitive practices (7 commissions), and other criteria (6 commissions)—other criteria mentioned include "the extent of competition" (Indiana) and "competitive conditions and the absence of cost shifting" (Massachusetts).

From Table 5-2, the two most prominent criteria appear to be that contract rates be just and reasonable and that pricing not be below marginal cost—or some proxy for it such as long-run incremental cost. An example of this concern may be found in Pennsylvania where the Commission requires a demonstration that customers are actively considering competitive alternatives and contracts are examined to ensure that contracts make a contribution of 10 percent to common overhead.

The District of Columbia Commission requires a price floor above marginal cost. This floor must be greater than the sum of marginal cost and the forgone contribution that would have been received from a PBX customer, for instance. The floor is designed to ensure that there will be no undue discrimination and is determined to be just and reasonable.

The Indiana Commission requires each contract to be priced at least 1 percent above long-run incremental cost. Additionally, in total, all customer-specific contracts must produce revenues at least 10 percent above their long-run incremental costs over a twelve-month period. Furthermore, certain services—especially those associated with access arrangements—bundled in a contract must be priced at tariffed rates. Through this arrangement LECs have the ability to retain customers by using customer-specific contracts, as long as the contract price exceeds the long-run incremental cost.

TABLE 5-2 (Part 1)

CRITERIA USED BY COMMISSIONS TO EVALUATE PROPOSED CONTRACT RATES FOR TELEPHONE SERVICES

STATE	Just and Reasonable rates (3a)‡	Undue Discrimination Between Classes (3b)	Undue Discrimination Within Customer Classes (3c)	Load Retention (3d)	Economic Development (3e)	Antitrust/Predatory Pricing (3f)
Alabama	X	X	X	X	X	X
Alaska	X	X	X			
Arkansas	X	X				
California	X	X				X
Colorado						
Connecticut	X	X	X	X	X	X
Delaware	X	X	X	X	X	X
D. C.	X	X	X	X		
Florida						
Georgia						
Hawaii	X	X	X			
Idaho						
Illinois	X	X	X			
Indiana	X			X	X	
Iowa						
Kentucky						
Louisiana	X		X		X	
Maine				X		
Maryland	X					X
Massachusetts	X					
Minnesota	X	X			X	X
Mississippi					X	X
Missouri	X					X
Montana				X		
Nevada	X	X	X			
New Hampshire	X	X	X	X	X	X
New Jersey						
New Mexico	X					X

‡ Numbers in parentheses correspond to the question number in the 1991 NRRI Survey on State Commission Policies on Telephone Utility Contract Pricing Practices.

TABLE 5-2 (Part 1)

CRITERIA USED BY COMMISSIONS TO EVALUATE PROPOSED CONTRACT RATES FOR TELEPHONE SERVICES

STATE	Just and Reasonable rates (3a)‡	Undue Discrimination Between Classes (3b)	Undue Discrimination Within Customer Classes (3c)	Load Retention (3d)	Economic Development (3e)	Antitrust/Predatory Pricing (3f)
New York	X	X	X			X
North Carolina						
North Dakota		X	X			
Ohio	X			X		
Oregon	X		X	X		
Pennsylvania	X	X	X			X
Rhode Island	X					
South Dakota						
Tennessee	X		X			X
Texas	X	X	X		X	X
Utah	X	X	X	X	X	X
Virginia						
Washington	X	X	X			
West Virginia						
Wisconsin						
Wyoming	X	X	X	X	X	X

Number Indicating Yes 28 19 19 12 11 16

‡ Numbers in parentheses correspond to the question number in the 1991 NRRI Survey on State Commission Policies on Telephone Utility Contract Pricing Practices.

TABLE 5-2 (Part 2)

CRITERIA USED BY COMMISSIONS TO EVALUATE PROPOSED CONTRACT RATES FOR TELEPHONE SERVICES

STATE	Other Anticompetitive Practices (3g)‡	Economic v. Noneconomic Bypass (3h)	Price Floor at Marginal Cost (3i)	Revenue Losses Occasioned by Lower Rates (3j)	Other (3k)
Alabama	X	X	X	X	
Alaska	X		X		
Arkansas				X	
California	X				
Colorado					
Connecticut		X	X	X	
Delaware	X	X	X	X	X
D. C.			X		
Florida					
Georgia					
Hawaii					
Idaho					
Illinois			X	X	
Indiana		X	X	X	X
Iowa					
Kentucky					X
Louisiana					
Maine		X	X		
Maryland			X		
Massachusetts					X
Minnesota			X		
Mississippi		X	X		
Missouri			X		
Montana					
Nevada					
New Hampshire			X	X	
New Jersey					
New Mexico		X	X	X	

‡ Numbers in parentheses correspond to the question number in the 1991 NRRI Survey on State Commission Policies on Telephone Utility Contract Pricing Practices.

TABLE 5-2 (Part 2)

CRITERIA USED BY COMMISSIONS TO EVALUATE PROPOSED CONTRACT RATES FOR TELEPHONE SERVICES

STATE	Other Anticompetitive Practices (3g)‡	Economic v. Noneconomic Bypass (3h)	Price Floor at Marginal Cost (3i)	Revenue Losses Occasioned by Lower Rates (3j)	Other (3k)
New York			X		
North Carolina					
North Dakota			X		
Ohio			X	X	
Oregon			X		
Pennsylvania	X		X	X	
Rhode Island					
South Dakota					
Tennessee		X	X	X	
Texas	X				X
Utah	X	X	X	X	
Virginia					
Washington			X		
West Virginia					X
Wisconsin					
Wyoming		X	X	X	

Number Indicating Yes 7 10 23 13 6

‡ Numbers in parentheses correspond to the question number in the 1991 NRRI Survey on State Commission Policies on Telephone Utility Contract Pricing Practices.

Potential revenue loss occasioned by lower contract rates has not played a significant role in deliberations on customer-specific contracts, but the Commission has stated that shareholders will be at risk for any revenue shortfall if a contract is priced below long-run incremental cost.

Numbers of Customers, Contracts, and Oversight Mechanisms

Tables 5-3 through 5-6 present summary information on the number of customers, contracts, and commission oversight of contract pricing of telephone service in the responding states. We may observe from Table 5-3 that very few contract applications have been rejected; of nearly 2,000 contract applications reported fewer than ten are reported to have been rejected.

The Proprietary Nature of Contracts for Telephone Service

Twenty-four (71 percent) responses indicated that contracts for telephone services are considered confidential or proprietary and are not in the public domain (see Table 5-4). Cost justifications and work sheets submitted by the companies to justify contracts may also be proprietary. Nineteen commissions indicated that other customers were made aware of contract services but only one, Washington, indicated that it required the companies to publicize services offered under contracts. Of the responding commissions, twelve indicated that other customers could subscribe to contracted services (see Table 5-5).

Documentation of Benefits and Review of Contracts

From Table 5-6 it may be determined that eleven responding commissions (38 percent) indicate that benefits of contracts have been documented retrospectively; twenty two commissions indicate that they have specific mechanisms for overseeing contracts; twelve commissions indicate that special proceedings would be used to review contracts, ten commissions indicate that review would be done during rate cases, and three indicate that both special proceedings and rate cases could be used to review contracts.

TABLE 5-3

APPLICATIONS TO PROVIDE CONTRACT TELEPHONE SERVICE

STATE	Number of Contract Applications Approved (4)‡	Number of Special Contracts (4a)	Number of Contract Applications Rejected (4c)
Alabama	2	2	0
Alaska	Numerous	4	NI
Arkansas	0	NI	NI
California	57	1	0
Colorado	0	NI	0
Connecticut	38	38	0
Delaware	0	NI	NI
District of Columbia	Proprietary	Proprietary	NI
Florida	4	NI	NI
Georgia	0	NI	NI
Hawaii	Numerous	Numerous	NI
Idaho	X	1	0
Illinois	30	0	0
Indiana	95	Some	0
Iowa	14	Some	NI
Kentucky	NI	NI	NI
Louisiana	1	1	NI
Maine	3	0	0
Maryland	18	0	0
Massachusetts	NI	0	NI
Minnesota	20	5	0
Mississippi	1	1	NI
Missouri	NI	20	0
Montana	40	0	1
Nevada	13	Some	0
New Hampshire	NI	Some	0
New Jersey	NI	NI	NI
New Mexico	14	0	0
New York	Numerous	Many	0
North Carolina	NI	NI	NI
North Dakota	NI	Some	1
Ohio	189	189	0*
Oregon	241	50+	0
Pennsylvania	5	0	0
Rhode Island	NI	Some	0
South Dakota	NI	NI	NI
Tennessee	2	0	0
Texas	87	0	0
Utah	35	0	3
Virginia	0	NI	0
Washington	1,000	800+	2
West Virginia	NI	NI	NI
Wisconsin	++	0	0
Wyoming	20	5	3

‡ Numbers in parentheses correspond to the question number in the 1991 NRRI Survey on State Commission Policies on Telephone Utility Contract Pricing Practices.

TABLE 5-4
COMPANIES AND CUSTOMERS INVOLVED IN TELEPHONE CONTRACTS

STATE	Number of Companies Involved in Contracts (5)‡	Number of Customers Involved in Contracts (5)	Are Contract Details Open to the Public (6)
Alabama	2	1	No
Alaska	NI	NI	NI
Arkansas	1	2	Yes
California	2	54	Yes
Colorado	NI	NI	NI
Connecticut	1	15	No
Delaware	0	0	NI
District of Columbia	1	NI	No
Florida	NI	NI	Yes
Georgia	NI	NI	NI
Hawaii	1	119	Yes
Idaho	0	0	No
Illinois	NI	NI	No
Indiana	4	71	No
Iowa	NI	NI	NI
Kentucky	2	13	Yes
Louisiana	1	1	Yes
Maine	1	1	No
Maryland	1	18	No
Massachusetts	2	NI	No
Minnesota	1	132	No
Mississippi	1	1	No
Missouri	3	26	No
Montana	1	35	No
Nevada	1	13	No
New Hampshire	1	3	No
New Jersey	NI	NI	NI
New Mexico	NI	5	No
New York	5	<100	No
North Carolina	NI	NI	NI
North Dakota	2	NI	Yes
Ohio	6	189	Yes
Oregon	2	210	Yes
Pennsylvania	1	5	No
Rhode Island	1	5	No
South Dakota	NI	NI	NI
Tennessee	2	NI	No
Texas	2	87	Yes
Utah	1	45	No
Virginia	0	NI	NI
Washington	3	Many	No
West Virginia	NI	NI	NI
Wisconsin	++	++	No
Wyoming	6	NI	No

Yes=10, No=24

‡ Numbers in parentheses correspond to the question number in the 1991 NRRI Survey on State Commission Policies on Telephone Utility Contract Pricing Practices.

TABLE 5-5
CUSTOMER AWARENESS OF TELEPHONE SERVICE CONTRACTS

STATE	Other Customers Made Aware of Contracts (8a)‡	Other Customers Can Subscribe to Services (8a)	Companies Must Publicize Services (8a)	Do Special Contracts Affect Answer to 8a (8b)
Alabama	Yes		No	NI
Alaska	Yes	Yes	No	Yes
Arkansas	No			NI
California	No		No	No
Colorado	NI	NI	NI	NI
Connecticut	Yes	Yes	No	Yes
Delaware	NI	NI	NI	NI
District of Columbia	NI	NI	NI	No
Florida	NI	NI	NI	NI
Georgia	NI	NI	NI	NI
Hawaii	Yes	Yes	No	Yes
Idaho	No	No	No	No
Illinois	No		No	No
Indiana	No		No	No
Iowa	Yes	Yes		NI
Kentucky	No		No	No
Louisiana	No	No	No	NI
Maine	No	No	No	NI
Maryland	No		No	NI
Massachusetts	Yes	Yes	No	No
Minnesota	Yes	Yes	No	No
Mississippi	No	No	No	NI
Missouri	Yes	Yes	No	Yes
Montana	Yes	No	No	NI
Nevada	No		No	No
New Hampshire	No		No	No
New Jersey	NI	NI	NI	NI
New Mexico	Yes	No	No	Yes
New York	Yes	Yes	No	Yes
North Carolina	NI	NI	No	NI
North Dakota	Yes	Yes	No	NI
Ohio	No		No	NI
Oregon	No	Yes	No	Yes
Pennsylvania	No	No	No	Yes
Rhode Island	No		No	Yes
South Dakota	NI	NI	NI	NI
Tennessee	Yes	Yes	No	Yes
Texas	No			No
Utah	Yes	Yes	No	No
Virginia	NI	NI	NI	NI
Washington	Yes	No	Yes	No
West Virginia	NI	NI	NI	NI
Wisconsin	No		No	NI
Wyoming	No		No	No

Yes=15, No=19, NI=10 Yes=12, No=8, NI=10 Yes=1, No=31, NI=9 Yes=10, No=14, NI=20

‡ Numbers in parentheses correspond to the question number in the 1991 NRRI Survey on State Commission Policies on Telephone Utility Contract Pricing Practices.

TABLE 5-6
OVERSIGHT OF CONTRACTS FOR TELEPHONE SERVICES

STATE	Benefits of Contracts Have Been Documented (9)‡	Specific Oversight of Contract Services (10)	Occasion of Contract Review (10a)
Alabama	No	No	Special
Alaska	NI	Yes	Special
Arkansas	NI	No	NI
California	Yes	Yes	NI
Colorado	NI	Yes	NI
Connecticut	Yes	No	Special
Delaware	NI	NI	NI
District of Columbia	Yes	Yes	Both
Florida	NI	Yes	NI
Georgia	NI	No	NI
Hawaii	No	No	Rate
Idaho	No	No	Rate
Illinois	No	Yes	Special
Indiana	No	No	Both
Iowa	NI	No	NI
Kentucky	NI	No	NI
Louisiana	Yes	Yes	Special
Maine	Yes	No	Rate
Maryland	No	No	Rate
Massachusetts	No	Yes	Rate
Minnesota	No	Yes	Special
Mississippi	No	No	NI
Missouri	No	No	Rate
Montana	Yes	No	NI
Nevada	Yes	No	Rate
New Hampshire	No	No	Rate
New Jersey	NI	NI	NI
New Mexico	Yes	No	NI
New York	Yes	Yes	Special
North Carolina	NI	NI	NI
North Dakota	NI	No	NI
Ohio	No	No	Rate
Oregon	No	No	Special
Pennsylvania	Yes	Yes	Special
Rhode Island	No	No	NI
South Dakota	NI	NI	NI
Tennessee	No	No	NI
Texas	No	Yes	Special
Utah	NI	Yes	Special
Virginia	NI	NI	NI
Washington	No	Yes	Rate
West Virginia	NI	NI	NI
Wisconsin	No	Yes	Special
Wyoming	Yes	Yes	Both

Yes=11, No=18, NI=15 Yes=16, No=22, NI=6 Special=12, Rate=10, Both=3, NI=19

‡ Numbers in parentheses correspond to the question number in the 1991 NRRI Survey on State Commission Policies on Telephone Utility Contract Pricing Practices.

Economic Development Rates for Telephone Service

Economic development rates are used to induce businesses to move into a specific service area or to maintain or expand operations in a service area. As shown in Table 5-7 and in Figure 5-1, four responding commissions had approved economic development rates for telephone services.

In Georgia, a business relocating to or commencing operations in a less developed area, or an existing business certifying that it will increase employment in the less developed area by at least ten employees for a consecutive twelve-month period, may qualify for an economic development rate. Missouri requires an average of six calls per access line, and at least two-thirds of the subscribers in a particular exchange must place two or more calls into a targeted economic development exchange area. Florida limits economic development rates to subscribers served by the Lake Mary central office.

One difference between economic development rates for telephone service and for electricity may be noticed in typical findings of government-sponsored economic development agencies: telephone rates and services do not appear to be as significant a factor in economic development as commercial electricity costs—which are in the "top-ten" list of significant factors.⁴ The disparity in relative importance is suggested also by the fact that—as noted in Chapter 3—twenty-eight responding commissions have approved economic development rates for electricity while only four have approved economic development rates for telephone services.

This suggests that telephone rates may not be perceived as equal to electricity rates in strategic importance. This may be due to the ease of connection and the number of possible vendors providing telephone services as opposed to those providing electric services. If the growth of the service sector—and the resulting increase in information transmittal and processing—continues, economic development rates for telephone services may become more common.

⁴ This does not refute the discussion in Chapter 2 concerning the importance of electricity rates in industrial location decisions.

TABLE 5-7
ECONOMIC DEVELOPMENT RATES FOR TELEPHONE SERVICES

STATE	Commission Approved Economic Development Rates (11)‡	How Are Rates Provided: Contract/Tariff/Both (11a)	Is There a Preference for Contracts Over Tariffs (11b)	Has Commission Rejected Proposed Rates (11c)	Have Benefits of Rates Been Realized (11e)	Are Contracts or Tariffs of Public Record (14)
Alabama	No		Yes	No		
Alaska	No			No		
Arkansas	No			No		
California	No			No		
Colorado	No			No		
Connecticut	No			No		
Delaware	No		Yes	No		
D. C.	No					
Florida	Yes	Tariff	Yes	No		Yes
Georgia	Yes	Tariff	No	No	Too Early	Yes
Hawaii	No			No		
Idaho	No			No		
Illinois	NI	NI	NI	NI	NI	NI
Indiana	No			No		
Iowa	No			No		
Kentucky	NI	NI	NI	NI	NI	NI
Louisiana	No			No		
Maine	No			No		
Maryland	No			No		
Massachusetts	No		No	No		
Minnesota	No			No		
Mississippi	No			No		
Missouri	Yes	Tariff		Yes	Too Early	Yes
Montana	No			No		
Nevada	No		No	No		
New Hampshire	No					
New Jersey	No					
New Mexico	No					

‡ Numbers in parentheses correspond to the question number in the 1991 NRRI Survey on State Commission Policies on Telephone Utility Contract Pricing Practices.

TABLE 5-7
ECONOMIC DEVELOPMENT RATES FOR TELEPHONE SERVICES

STATE	Commission Approved Economic Development Rates (11)‡	How Are Rates Provided: Contract/Tariff/Both (11a)	Is There a Preference for Contracts Over Tariffs (11b)	Has Commission Rejected Proposed Rates (11c)	Have Benefits of Rates Been Realized (11e)	Are Contracts or Tariffs of Public Record (14)
New York	No					
North Carolina	No					
North Dakota	No					
Ohio	No					
Oregon	No					
Pennsylvania	No					
Rhode Island	No					
South Dakota	No					
Tennessee	No		No	No		
Texas	No			No		
Utah	No		No			
Virginia	No			No		
Washington	No		Yes	No		
West Virginia	No			No		
Wisconsin	No					
Wyoming	Yes	Both	Yes	No	Too Early	No
	Yes=4, No=38	Tariff=3, Both=1	Yes=5, No=5	Yes=1, No=27	Too Early=3	Yes=3, No=1

‡ Numbers in parentheses correspond to the question number in the 1991 NRRS Survey on State Commission Policies on Telephone Utility Contract Pricing Practices.



Fig. 5-1. Commission approved economic development rates for telephone services.

Source: Table 5-7

Incentive Rates for Telephone Service

Incentive rates are intended to increase or retain sales to price-sensitive customers and/or retain and attract customers with competitive alternatives, especially those that contribute to the LEC's common costs. If the customer were lost to a competitor, its contribution would be borne by the shareholders, reallocated to other customers, or shared by shareholders and other customers. Thus, the loss of such a customer could necessitate an increase in other rates or damage the LEC's financial health, neither of which is desirable.

State policies toward incentive rates for telephone service are summarized in Table 5-8, and Figure 5-2 geographically shows commissions that have approved incentive rates. Among the criteria reported as being used in evaluating proposed incentive rates are 1) the revenue loss if a non-LEC alternative is selected, 2) the threat to universal service, 3) the general benefit to all customers, 4) the overall effect on the public interest, 5) whether the discounted rates exceed incremental costs, 6) possible predatory pricing, and 7) possible cross-subsidization. Most commissions report requiring analysis of projected benefits of incentive rates prior to their approval. Few report documenting benefits retrospectively, although some responses indicate that benefits were observable since customers are either retained or not. Commission concern that customers be retained is evidenced in the following examples.

In California an existing customer would approach the utility and indicate an intention to abandon Centrex for a PBX system unless the utility offers competitive rates. The North Carolina Commission requires the LEC to demonstrate that a reasonable potential exists for uneconomic bypass.⁵ Support for the expectation, the competitive rate, the utility's relevant costs proposed rates are reviewed prior to approval. Most commissions appear to require extensive analysis of projected benefits prior to approval of incentive rates. However, few commissions appear to have assessed benefits retrospectively.

⁵ "Uneconomic bypass" occurs when a customer is lost because a competitor is able to offer a rate below the tariff rate but above the LEC's relevant cost of service.

TABLE 5-8
INCENTIVE RATES FOR TELEPHONE SERVICES

STATE	Have Incentive Rates Been Approved (15)‡	How Are Incentive Rates Being Provided (15a)	Does the Commission Have A Preference (15b)	Have Any Incentive Rate Applications Been Rejected (15c)	Have the Projected Benefits of Incentive Rates Been Measured (15e)	Are Contracts in the Public Domain (18)
Alabama	No	Tariff	Yes	No	No	Yes
Alaska	Yes					
Arkansas	No	Both	No	No	No	Yes
California	Yes					
Colorado	Yes					
Connecticut	Yes	Both		No	Yes	Yes
Delaware	Yes					
D. C.	No					
Florida	Yes					
Georgia	No					
Hawaii	No	Tariff	No	No	No	Yes
Idaho	Yes					
Illinois	Yes	Contract	Yes	No	No	No
Indiana	Yes	Both	No	No	No	Yes
Iowa	No			No		
Kentucky		Contract	No	No	Yes	No
Louisiana	Yes					
Maine	Yes	Tariff	Yes	No	No	Yes
Maryland	Yes	Contract	No	No	No	
Massachusetts	No				No	
Minnesota	Yes	Tariff	No	No	No	Yes
Mississippi	Yes	Both		No		Yes
Missouri	Yes	Both	Yes	No	No	Yes
Montana	No	Contract		Yes	No	No
Nevada	Yes					
New Hampshire	Yes	Both	Yes		No	No
New Jersey	Yes	Both	No	No	Yes	Yes
New Mexico	No					

‡ Numbers in parentheses correspond to the question number in the 1991 NRRI Survey on State Commission Policies on Telephone Utility Contract Pricing Practices.

TABLE 5-8
INCENTIVE RATES FOR TELEPHONE SERVICE

STATE	Have Incentive Rates Been Approved (15)‡	How Are Incentive Rates Being Provided (15a)	Does the Commission Have A Preference (15b)	Have any Incentive Rate Applications Been Rejected (15c)	Have the Projected Benefits of Incentive Rates Been Measured (15e)	Are Contracts in the Public Domain (18)
New York	Yes	Contract	Yes			
North Carolina	Yes	Tariff	Yes	No	Yes	Yes
North Dakota	Yes	Contract	Yes	No		
Ohio	No					
Oregon	Yes	Both	Yes	No	No	Yes
Pennsylvania	Yes	Both		No	Yes	
Rhode Island	Yes					
South Dakota		Tariff	Yes	Yes	Yes	Yes
Tennessee	No			No		
Texas	Yes	Tariff	No	No	No	Yes
Utah	No					
Virginia	Yes	Both	No	Yes	No	No
Washington						
West Virginia						
Wisconsin	Yes	Tariff	Yes	Yes	No	Yes
Wyoming	Yes	Contract	No	No	No	No

Yes=28, No=12

Tariff=8,
 Contract=7,
 Both=10

Yes=11, No=11

Yes=5, No=26

Yes=6, No=17

Yes=16, No=8

‡ Numbers in parentheses correspond to the question number in the 1991 NRRI Survey on State Commission Policies on Telephone Utility Contract Pricing Practices.



Fig. 5-2. Commission approved incentive rates for telephone services.

Source: Table 5-8

Table 5-8 indicates that 32 percent of responding commissions provide incentive rates through tariffs, 28 percent provide them through contracts, and 40 percent provide them through both tariffs and contracts. Half the responding commissions had expressed a preference for contracts or for tariffs for incentive rates and half had not. Three responding commissions have rejected proposed incentive rates and six commissions indicate that projected benefits of the incentive rate proposals have been documented.

Economic Development and Incentive Rates: Comparing Electricity and Telephone

Table 5-9 compares economic development rates and incentive rates for electricity and telephone service. Of responding commissions, only Florida and Missouri report approving economic development rates for both electricity and telephone service. Twelve commissions—Alaska, California, Connecticut, Idaho, Indiana, Minnesota, Mississippi, New York, Oregon, Pennsylvania, South Dakota, and Texas—report approving incentive rates for both electric and telephone service. Seven commissions—Alabama, Delaware, the District of Columbia, Georgia, Hawaii, Massachusetts, and Tennessee—report that they have not approved incentive rates for electricity or for telephone service.

TABLE 5-9
CROSS COMPARISON BETWEEN ECONOMIC DEVELOPMENT AND INCENTIVE
RATES FOR ELECTRIC UTILITIES AND TELEPHONE COMPANIES

STATE	Approved Economic Development Rates for Electric (Table 3-16)	Approved Economic Development Rates for Telephone (Table 5-7)	Approved Incentive Rates for Electric (Table 3-22)	Approved Incentive Rates for Telephone (Table 5-8)
Alabama	No	No	No	No
Alaska	No	No	Yes	Yes
Arkansas	Yes	No	Yes	No
California	Yes	No	Yes	Yes
Colorado	No	No	No	Yes
Connecticut	Yes	No	Yes	Yes
Delaware	No	No	No	No
District of Columbia	No	No	No	No
Florida	No	Yes	No	Yes
Georgia	Yes	Yes	No	No
Hawaii	No	No	No	No
Idaho	No	No	Yes	Yes
Illinois	Yes		Yes	
Indiana	Yes	No	Yes	Yes
Iowa	No	No	Yes	No
Kentucky	Yes		No	
Louisiana	Yes		Yes	
Maine	No	No	No	Yes
Maryland	Yes	No	No	Yes
Massachusetts	No	No	No	No
Minnesota	Yes	No	Yes	Yes
Mississippi	Yes	No	Yes	Yes
Missouri	Yes	Yes	No	Yes
Montana	Yes		Yes	
Nevada	No	No	No	Yes
New Hampshire	Yes		Yes	
New Jersey	No	No	No	Yes
New Mexico	Yes	No	Yes	No
New York	Yes	No	Yes	Yes
North Carolina	No	No	No	Yes
North Dakota	Yes		No	
Ohio	Yes		Yes	
Oregon	Yes	No	Yes	Yes
Pennsylvania	Yes	No	Yes	Yes
Rhode Island	No		No	
South Dakota	Yes	No	Yes	Yes
Tennessee	No	No	No	No
Texas	Yes	No	Yes	Yes
Utah	No	No	Yes	No
Virginia	No		No	
Washington	No	No	Yes	No
West Virginia	Yes	No	No	
Wisconsin	No	No	No	Yes
Wyoming	Yes		No	

Yes=24, No=20

Yes=3, No=31

Yes=22, No=22

Yes=21, No=12

Commission Policies on Contract Pricing of Telephone Services

The following descriptions of commission policies regarding contract pricing of telephone services were selected from commission responses to the NRRI's survey. Responses were selected to illustrate a range of approaches, to include large and small (in terms of population) jurisdictions, and to provide for geographic diversity. Descriptions have been excerpted and paraphrased from survey responses and from orders and other information provided with the responses. Individual contracts for telephone service are not described directly because, as indicated above, they are often proprietary.

Alabama

Telephone companies have applied to provide telephone service on a contract basis. Since the Commission must preapprove contracts, open hearings are held and the staff analyzes the proposed contract. Contracts are handled on a case-by-case basis. The contract is reviewed to determine whether it is necessary and whether it discriminates against other customers. The utility must submit a copy of the contract, detailed cost data, and revenue projections. In evaluating proposed contracts the Commission uses criteria that include just and reasonable rates, undue discrimination between and within customer classes, and load retention. Also considered are economic development, antitrust/predatory pricing, other anticompetitive effects, economic versus noneconomic bypass, price floor at marginal cost, and revenue losses occasioned by lower rates.

Two contract applications have been approved between the federal government and toll carriers, AT&T and U.S. Sprint. The Commission does not encourage telecommunications companies to contract for services; it prefers tariffs because of their easy review and avoidance of discrimination. Contract details are not public, and eligibility is on a case-by-case basis. In general, customers would be made aware of services provided through contracts unless special circumstances apply. The Commission has no specific oversight mechanism for contract service; special hearings would be used. No economic development or incentive rates have been proposed.

Alaska

There have been no applications to provide service on a contract basis; normally contract pricing is not allowed. The Commission does allow "special contracts," but these are fully regulated rates for special services not addressed in standard tariffs; rates may be negotiated but are subject to Commission approval. Such rates are normally not discounted, and could be considered via a rate hearing.

The Commission has a generic policy for dealing with contracts and considers criteria including just and reasonable rates, discrimination between and within customer classes, other anticompetitive effects, and price floor at marginal cost. The new service must be necessary for the public convenience and necessity, and rates must be just and reasonable. Special contracts may not merely be a new form of a standard tariff service.

The application for a special contract is noticed to the public by the Commission, and no changes in the contract are allowed without approval. Special contract rates are part of the public record; if two customers wanted the same special contract rate, it may demonstrate the need for a new tariff offering. Special hearings are used as needed to review special contracts and the Commission may revise rates upward or downward retroactive to the contract's effective date.

No economic development rates have been proposed. The Commission has approved incentive rates and prefers their being provided under tariffs. An example is Alascom, Inc.'s tariff for wholesale interexchange services to other IXCs. This was not called an incentive rate tariff but was designed and evaluated based, in part, on incentive concerns. Incentive rates are very uncommon; a reason based on market conditions, economic analysis, and cost characteristics is required. For example, the Commission approved a wholesale rate stipulated to by the parties without directly stating that it agreed with the underlying theory on incentive rates. Customers must be certified interexchange carriers, and contracts or tariffs are in the public domain. Projected benefits of incentive rates have not been measured because it is too soon to tell the effects.

California

Telephone companies have applied to provide service under contracts which the Commission must preapprove. No hearings are held but the staff analyzes the proposed service. The utility submits a proposal which includes a description of the service, justification of proposed rates including cost and revenue calculations, estimates of the competitor's bid, and a copy of the contract for staff review and analysis. If the proposal is satisfactory, the staff gives the utility permission to file an Advice Letter which is the official filing. The Advice Letter may be protested by interested parties or the Commission may approve it and, thus, the contract.

The Commission adopted a generic policy order for dealing with contracts in Decision 88-09-059 which established procedures and guidelines and states [in part]:

Contracts are to be used only in unusual or exceptional circumstances. The LEC shall have the burden of demonstrating ... such circumstances and the reasons why service cannot be provided as a generally tariffed offering. ... A contract in which parts or all of the services are currently tariffed must be justified in detail...

In evaluating proposed contract rates the Commission uses several criteria. Rates must be just and reasonable and must not create antitrust/predatory pricing concerns. Rates are customer specific and must be above cost, including a return on investment. There must not be undue discrimination between customer classes—if discovered during review, such situations will be challenged.

Other anticompetitive effects are also considered. For example, for Centrex contracts, LECs must offer to provide deaveraged PBX trunk lines under contract. Also, in the case of Centrex versus PBX, the utility must offer PBX trunks under contract at rates determined by the same methodology used to determine Centrex line rates.

Fifty-seven applications for contract service have been approved of which one was a special contract. Service under contracts was approved for Pacific Bell and GTE of California. Typical customers are major corporations and government agencies; almost all contracts were for Centrex service, and Pacific Bell generally would not offer a contract to a customer with less than 100 lines.

Contracts are in the public domain, but other customers are not made aware of services provided through contracts, and utilities generally offer Centrex contracts only when they feel they have to. Typically, an existing Centrex customer would approach

the utility and indicate an intention to abandon Centrex for PBX unless the utility offers competitive rates. In the case of special contracts, usually the customer approaches the utility for special services and the utility suggests a special contract if there is no appropriate current tariff. Special contract rates are based on costs specific to the customer's situation. All contracts require tracking reports after the first six months and annually thereafter. So far, tracking reports indicate that cost estimates were reasonably accurate and, more importantly, no contracts were offered under cost. If the staff discovers any problems in reviewing the tracking reports, special hearings can be called.

No economic development rates or incentive rates have been proposed or approved. The Commission prefers tariffs because contracts require excessive regulatory effort and are slow in delivering the service to the customer.

Colorado

Interexchange carriers have the authority to offer contracts and do not apply to the Commission to provide services under contract. The Commission does not hold hearings, but within fifteen days after the effective contract date the utility provides notice to the Commission staff. All contracts are available to the staff upon request. The utility has the burden of demonstrating all contract rates are reasonable, compensatory, and nondiscriminatory in any action before the Commission. The Commission has a limited oversight mechanism and has adopted a generic policy for dealing with contracts. "Special contracts" are deregulated per statute. No specific economic development or incentive contracts have been proposed.

Connecticut

Telephone companies apply to the Department of Public Utility Control which must preapprove a special tariff associated with the contract. Open hearings are held at the Department's option. Tariff filings that do not alter existing rates or charges may be filed. Such filings must be accompanied by supporting data, sworn testimony on the public benefit of the proposed service, and cost justification for the proposed rate. If necessary, the Department may request additional data.

The Department deals with these filings on a case-by-case basis considering such criteria as just and reasonable rates, undue discrimination between and within customer classes, and load retention. Also considered are economic development, antitrust/predatory pricing, economic versus noneconomic bypass, price floor at

marginal cost, and the revenue loss from lower rates. Approximately thirty-eight special contracts have been approved; many were for dedicated central office switched service (DCOSS).

Benefits to the general ratepayer come from the contribution provided by the continued use of LEC central office equipment to generate revenue. Such service has been provided to federal, state, and local government agencies and to universities, hospitals, and corporations. Details of contracts are not in the public domain and DCOSS viability for a given subscriber is determined by LEC marketing staff.

The Department notifies all interested parties upon receipt of contract service. Customers and the LEC negotiate contract services; other customers can subscribe to them. Customer-specific tariffs are filed with the Department for approval at the onset of service; there is no specific oversight mechanism in place but special hearings and procedures can be used.

No economic development rates have been proposed. Incentive rate proposals have been filed; service is provided through both contracts and tariffs. Among the criteria used by the Department in evaluating incentive rates are the following: revenue loss to LECs if a non-telephone company alternate is instead selected, pressure on revenues and threat to universal service if the rate is rejected, benefit to customer(s), the contribution to overall revenue requirement, and the overall public interest. Projected benefits of incentive rates are measured when the LEC files cost/revenue analysis with its application. There are no specific eligibility requirements for contract service. Incentive rate tariffs are in the public domain; contracts are not.

District of Columbia

Telephone companies have applied for permission to offer service on a contract basis. No prior approval by the Commission is required and no hearings are held, but the staff does analyze proposed contracts. The utility signs a contract with the customer and it becomes effective. The utility files an individual-case-based (ICB) tariff based on the contract and an incremental cost study complying with a cost manual approved by generic order—both the manual and the order are proprietary. The staff and the Office of People's Counsel file comments on the cost study and tariff, and the Commission issues an interim order regarding the contract.

Among the criteria used in evaluating contract rates are: just and reasonable rates, undue discrimination between and within customer classes, load retention (for

Centrex customers), and price floor above marginal cost. For Centrex customers, the price floor must be greater than the sum of marginal cost and the foregone contribution that would have been received from the PBX customer. This floor is intended to insure against undue discrimination and is, therefore, just and reasonable. If the rate is below the floor, an adjustment will be made during the next rate case. To date no adjustments have been made because there has not been a general rate case since the date of the order approving ICB Centrex services.

Customers served under contracts include federal and district government units, hospitals, and corporations. Details of contracts are not in the public domain; the LEC chooses to bid on contracts and public notice is provided when it files cost studies. Projected benefits for each contract are documented in the cost study in terms of contribution made above cost. Commission oversight of contracts is through both the next rate case and special hearings and procedures.

Special contracts have been approved for ISDN service. The Commission has not approved any incentive rates except as indicated above. The Commission has a preference for service being provided under contracts—which become ICB tariffs—because each large customer's rates are based on its unique incremental cost. Some tariffs based on contracts are in the public domain; contracts are not.

Florida

Telephone companies have applied to provide service on a contract basis; the Commission need not preapprove such contracts and does not hold hearings on them. The Commission grants authority for a general contract service arrangement (CSA) by the normal tariff approval process. Specific tariffed services eligible for CSAs must also be preapproved; actual contracts do not require prior approval. Contracts are handled under a generic order. LECs must file quarterly reports providing revenue data.

Four LECs have been granted CSA authority to compete more effectively for private line and Centrex services. Details of individual contracts are not in the public domain. Eligibility requirements for various services are the same as for the tariffed offering. In a competitive market, the LEC will offer a CSA to attract or retain a subscriber; rates are negotiated with individual customers. LECs also have a tariff provision called "special service arrangements" (SSA). Unlike CSAs, SSAs offer services that are not otherwise tariffed, and some services have been provided under SSAs pending approval of the tariff filing.

CSA activity in Florida involves a relatively small percentage of total revenues. Required quarterly reports document the number of new CSAs, CSA rates, corresponding tariff rates, and the difference. Contracts and supporting cost data are made available upon staff request. The goal of CSAs is to retain subscribers if the LEC can contract with them at a rate above incremental cost. If the contract rate is less than the tariffed rate but above incremental cost, revenues obtained through the CSA should provide a contribution to common overhead.

The Commission has approved an experimental economic development rate for the Lake Murray exchange to aid the development of communities surrounding Orlando. It prefers having these services provided under a tariff. Initial reports show customer acceptance of the experimental rates and steady growth in the area. Approximately 1,500 residential and 350 business subscribers are currently being served. Contracts and tariffs are in the public domain.

The Commission has also approved incentives rates for telephone service. This service is provided through both contracts and tariffs. The Commission has authorized CSAs and banded rates on certain custom calling features or "discretionary" offerings which are tariffed. The Commission rejected Southern Bell's proposal for banded rates for its ESSX Service with only the ceiling rate published because "as a matter of public policy, we do not believe that confidential tariff rates for ESSX service are appropriate at this time."⁶ Southern Bell, GTE Florida, United Telephone, and Centel all have banded rate authority on custom calling features. Tariffs for custom calling features are public documents; CSAs are not.

Southern Bell Telephone and Telegraph Company's General Subscriber Service Tariff §A5.7.1.A states:

When economically practicable, customer specific contract service arrangements may be furnished in lieu of existing tariff offerings provided there is reasonable potential for uneconomic bypass of the Company's services.

Tariff §A5.7.1.B states:

Rates, Charges, Terms and additional regulations ... will be developed on an individual case basis, and will include all relevant costs, plus an appropriate level of contribution.

⁶ Florida Public Service Commission, Order No. 20076, Docket No. 880257-TL, September 27, 1988, at 3.

Tariff §A5.7.1.G states:

The subscriber and the Company may elect to enter into an agreement where certain rates and/or charges for contract service arrangements are applicable for a fixed period of time. ... The Florida Public Service Commission will not adjust contract service arrangement rates and/or charges during this period.

During 1990, Southern Bell entered into twenty-seven CSAs. Each was justified as avoiding uneconomic bypass. Length of new contracts in the fourth quarter of 1990 varied between three and five years; total revenues under CSAs were projected to be approximately \$1.86 million a year less than equivalent tariff charges, and over half the annual reduction was attributable to one contract.

In Docket No. 840228-TL (Order No. 13603) dated August 20, 1984, the Commission approved contract service arrangements for private line, special access facilities and WATS access lines. The Commission found that:

... the Company is correct in its assessment of the current need for contract pricing flexibility in the competitive marketplace. However, ... standardization of rates is a goal which should be pursued ... principles of fairness and nondiscriminatory treatment embodied in the tariffing process should not be wholly supplanted through contracts negotiated to meet the exigencies of competition. ... we will, therefore, expect Southern Bell to work toward ultimately developing tariffed rates for large users. ... after sufficient experience has been gained in the competitive market, contractual rates should evolve into a bulk discount or similar offering, to be contained in the Company's tariff.

Idaho

Telephone companies have applied to the Commission to provide service on a contract basis. The Commission must preapprove such contracts but does not hold hearings on them and the staff does not analyze them. Very few regulated services have been offered this way. One example is CENTRON. U.S. West made a case for allowing flexibility on systems over a certain size; after receiving this authority, it was allowed to set rates for individual contracts without review by the Commission. At present, U.S. West's CENTRON service is deregulated; no specific data must be submitted with proposals, and contracts are handled on a case-by-case basis. The Commission has approved one application to provide contract service, and none has been rejected.

Details of contracts between the telephone company and customers are not in the public domain and other customers are not made aware of these services. Services offered under contracts have not become tariffed after sufficient demand has materialized, and projected benefits of the contracted services have not been documented. The Commission does not have any specific oversight mechanism in place for contracts; review would be conducted at the next rate case.

Most companies have a tariff provision allowing "special" contracts without review when a requested service is not currently tariffed or when new facilities would be required. There have been no economic development rates proposed, and the only incentive rates allowed have been the waiving of sign-up fees by GTE of the Northwest and Century Telephone Company for certain optional services during promotional periods.

Indiana

Telephone companies have applied to provide service under contracts. The Commission is not required to preapprove such contracts, no hearings are held, and the staff does not analyze the contracts. LECs can provide certain services under contract to specific customers if contracts follow the guidelines adopted by the Commission in its generic investigation, Cause No. 38561. Such contracts are not subject to preapproval examination by the Commission or its staff; they are simply filed on a confidential basis *after* execution. Similarly, there is no substantive post facto review unless there is a rate case or other investigation pending. The Commission can, however, direct the informal or formal review of any or all filed contracts of any or all telephone utilities at any time.

Data the utility submits along with the proposed contract includes: customer, service, and cost information; a complete copy or substantive summary of the contract; price and terms of payment; foregone revenues because of discounting; potential revenue loss if customer leaves the network; provisions for price "escalation" and stabilization;" existence of competition; party initiating contract negotiations; and motive for such negotiations.

The Commission made a generic policy statement in Cause No. 38561. The statement identified criteria to be used in evaluating proposed contract rates. The first is that rates must be just and reasonable—rates for individual contracts must exceed LRIC by 1 percent and rates from all contract offerings must exceed the total LRICs by at least 10 percent for a given twelve-month period. The second is

economic vs. noneconomic bypass—if LECs are permitted to offer services in response to competition from unregulated vendors, then the LECs and their "monopoly customers" will not suffer from "stranded investment." The third is load retention—to the extent that LECs can provide advanced features that are not generally available through tariffs or customized service solutions through customer-specific contracts. The fourth is price floor at marginal cost—the Commission established standards and guidelines for the relationship between contract prices and costs and for the calculation of LRIC for each LEC contract offering. Additionally, certain services within contracts, especially those associated with access arrangements, must be priced at tariffed rates. The fifth is revenue losses occasioned by lower rates. Specifically, LEC shareholders will be at risk for any shortfall if an LEC prices a contract below LRIC. For other criteria the Commission relied on the definition of "competitive" services—those for which functionally similar services or equipment alternatives are reasonably available from more than one supplier—and on the legislative declaration that "[t]raditional Commission regulatory policies and practices and existing statutes are not designed to deal with the competitive environment."

Ninety-five applications have been approved; an undetermined number were "special contracts." In approving contracts, the Commission emphasized the ability of the LECs to compete with unregulated vendors, LEC flexibility to respond to individual customer needs for "customized" telecommunication services and networks, the assessment that the telecommunications markets for which LEC customer specific offerings are utilized are competitive, and the avoidance of "stranded investment" and benefits to the monopoly ratepayers from not having to absorb the costs of "stranded investment." No proposed contracts have been rejected.

Four companies—Indiana Bell, GTE North, Contel of Indiana, and United Telephone of Indiana— provide service under contracts. There are seventy-one customers, primarily corporate entities, governmental agencies, and educational institutions. Services provided include digital Centrex, E911, high capacity transport (very few), IIN services (Indiana Bell). Details of the contracts are not in the public domain. Services under CSO⁷ contracts can be offered in lieu of standard tariffs where one or more for the following conditions:

The customer has more than 200 lines,

⁷ Customer specific offering.

The requested service is unique or significantly different from existing tariff offerings,

The service is required prior to its general availability,

Special design criteria are used to provide the service, or

The customer requires Enhanced 911 service.

Other customers are not made aware of services provided through contracts. Generally, if an LEC finds itself in a sufficiently competitive situation, it will use the CSO contract approach regular tariffs. The Commission has not made an in-depth examination of the "general availability" issue for CSO contracts or the issue of potential discrimination between customers receiving essentially similar services under CSO contracts. Some services offered under special contracts have not become tariffed after sufficient demand has materialized, and there is no requirement that the LEC offer such services through tariffs if it gains experience with them through CSO contracts. Some services offered under CSO contracts are also offered under tariffs, and the price under the CSO contract will generally be lower than under existing tariffs.

Documentation of projected benefits relies on internal LEC cost studies for each CSO contract, and the Commission does not require any retrospective analysis. Without a specific proceeding such projected benefits are not under regular examination by the Commission. The Commission has no specific oversight mechanism for contract service; review could occur at the next rate case or in special hearings. The Commission will review CSO contracts only if there is a pending rate case or investigation, or if CSO contracts become the subject of a formal or informal inquiry. Since the conclusion of the Commission's generic investigation, no CSO contract has become the subject of such an inquiry. CSO contract materials are proprietary and confidential; release to the public is prohibited.

No economic development rates have been proposed, but the Commission has approved incentive rates for telephone service. This service is provided both under contracts and tariffs, and the Commission has shown no preference for either method. In the uniform, statewide flexible pricing of Indiana Bell's custom calling features, rates can fluctuate between an incremental cost floor and existing tariff rates.

There is no system in place to monitor the benefits of incentive rates; staff resource constraints and the relative amount of revenues involved do not allow follow-

up analyses outside the context of formal proceedings. Eligibility requirements for incentive rates are that the use of certain tariffed LEC services with discount pricing would be of economic benefit to customers with specific usage patterns. Usually there are no size restrictions. Tariffs with discount pricing structures for certain services are in the public domain.

Illinois

Telephone companies have applied to the Commission to provide service on a contract basis. The Commission does not preapprove such contracts and does not hold hearings on them but the staff does perform an analysis of the proposed contract service. The Public Utilities Act provides the rules and regulations applying to contracts and the staff reviews contracts to determine whether or not the language and rates in the contracts are consistent with its requirements. Section 13-509 of this Act states [in part]:

A telecommunications carrier offering or providing competitive telecommunications service may negotiate with customers or prospective customers ... and, in so doing, may offer or agree to provide such service on such terms and for such rates or charges as it deems reasonable, without regard to any tariffs it may have filed with the Commission with respect to such services. ... Upon filing its contract ... [the] carrier shall thereafter provide service according to the terms thereof, unless the Commission finds, after notice and hearing, that ... such contract ... would substantially and adversely affect the financial integrity of the telecommunications carrier or would cause the cross-subsidization of any competitive service by any non-competitive service.

The Commission deals with contracts on a case-by-case basis. In evaluating proposed contract rates the Commission uses several criteria. First, rates must be just and reasonable. Since services offered on a contract basis are competitive, proposed rates can be market-based as long as they are above long-run marginal cost. Second, rates must not create undue discrimination between or within customer classes. Rates are required to cover long-run marginal costs to prevent cross-subsidization of competitive services by noncompetitive services and undue discrimination between customer classes or among customers in the same class. Finally, revenue losses occasioned by lower rates for competitive services cannot be recovered from noncompetitive services.

The Commission has approved approximately thirty contracts per year and has rejected no applications. Illinois Bell and GTE are most prominently involved in

contract service arrangements. Information on customers is proprietary; details of contracts are not in the public domain. Other customers are not made aware of services being provided under contracts, and there are no eligibility requirements to qualify for contracts. Benefits of contracts that have figured in their approval include the facts that:

- Telephone companies have greater pricing flexibility and are able to generate additional demand for the service,
- Customers are better off because they can get the service at competitive rates,
- Contributions made by competitive services help stabilize rates for basic exchange services, and
- Services provided through contracts also help generate employment, attract new customers and retain existing customers in the State.

Services offered through regular or special contracts have to be declared competitive, and tariffs on these services have to be approved by the Commission and be in the public domain before telephone companies can provide the service through regular or special contracts. Documentation of proposed benefits of contract services has not been found necessary because benefits were believed to be evident. The Commission does not have any specific oversight mechanism for contract service, but review would be conducted through special hearings if a contract is determined by staff to be inconsistent with Section 13-509.

The Commission has approved incentive rates for telephone companies and the service is provided under contracts; there are no tariffs for incentive rates as such. If a telephone company wants to increase or retain sales to price-sensitive customers and/or retain and attract customers with competitive alternatives, it can do so through individual contracts which must be consistent with Section 13-509. Incentive rates, negotiated through contracts, should not result in cross-subsidization of competitive by noncompetitive services and should not adversely affect the financial integrity of the company. Projected benefits have not been documented because they were viewed as evident. There are no eligibility requirements and contracts are not in the public domain.

Maine

Telephone companies have applied to provide service under contracts. The Commission need not preapprove such contracts and no hearings are held, but the staff sometimes analyzes them. The company enters into contracts which are reviewed when the company's rates are examined. The company must keep information necessary to show that the contract rates are not below cost.

Contracts are handled on a case-by-case basis. Among the criteria used in evaluating them are load retention, economic versus noneconomic bypass, and price floor at marginal cost. The Commission has approved two or three contracts, none of which were special contracts. For example, New England Telephone Company provides Centrex and intrastate toll service to the State of Maine under contract. Details of the contracts are sometimes proprietary; other customers are not notified of the services provided under contracts and cannot subscribe to them.

Projected benefits of contracts have been documented. For instance, the State of Maine did not buy its own switch but continues to use Centrex. Furthermore, the contract for intrastate toll service allowed the State to reconfigure its private line network so that it has a much greater reliance on switched services.

The Commission has no specific mechanism for overseeing contract services; review would be at the next rate case. No economic development rates have been proposed, but the Commission has approved incentive rates offered under tariffs and has shown a preference for tariffs because State law requires them.

Incentive rates in the form of optional toll calling plans were filed as a result of a stipulation in a rate reduction case; no evaluation criteria were used or established. New England Telephone serves numerous medium and large business toll customers under these rates. Incentive rate tariffs are in the public domain and there are no specific eligibility requirements although the rates benefit only customers with at least a minimum amount of toll usage.

Mississippi

Telephone companies have applied to the Commission to provide service on a contract basis. The Commission does not preapprove the contracts or hold hearings on them and the staff does not analyze them. Cost support is reviewed by the public utilities staff, and contracts for private-line service must be approved by it prior to implementation. The Commission deals with contracts for private-line service on a

case-by-case basis. Among the criteria considered by the Commission in evaluating contracts are economic development, antitrust and predatory pricing, economic versus noneconomic bypass, and price floor at marginal cost. One application for contract service has been approved; it was a "special contract." No contracts have been rejected. In general, contracts are proprietary and not in the public domain.

Contract service arrangements are currently limited to situations in which noneconomic bypass occurs for ESSX, Digital ESSX, CO-LAN, Accupulse, Lightgate, Megalink, Synchronet, and analog private-line services. Other customers are not made aware of contracts, cannot subscribe to them, and the Commission has not ordered companies to publicize the services. Private-line contracts are filed as tariffs and are in the public domain.

Special contracts for unusual, new configurations, or both are designated as "special assemblies." Normally if there is sufficient demand for a specific item, a request is made to tariff the service. Special contract rates would apply if the service falls into one of the categories mentioned above. Projected benefits from contracts have not been documented, and the Commission has no specific oversight mechanism for contract service; oversight could come at the next rate case or through a special proceeding. The public utilities staff meets with a company representative to review cost support for accepted contracts. No economic development rates have been proposed but incentive rates have been approved as discussed above.

Montana

Telephone companies have applied to provide service on a contract basis. The Commission need not preapprove such contracts and no hearings are held, although the staff analyzes proposed contracts. Forbearance is the mechanism used to handle contracts. Requests to provide contract service are handled on a case-by-case basis; the telephone company requests forbearance from regulation in serving a specific customer based on the demonstration that a viable competitor is available. If forbearance is granted, the company is free to contract with the customer on an unregulated basis. The company files a report with the Commission as to whether it was successful in attracting the customer. The usual reason for granting forbearance from regulation is to keep large customers with competitive alternatives on the system.

Approximately twenty to fifty contract proposals have been approved, none of which has been a "special contract." One proposed contract was rejected because it

did not meet the viable competition requirement for forbearance. The main provider of contract service is US West, serving a mix of large commercial customers—for example, a stock brokerage firm and a hospital. Contracts are considered proprietary but other customers who track Commission orders would be able to find out about forbearance. No attempt is made to publicize these contracts and other customers would be handled on a case-by-case basis.

Benefits of forbearance are documented when the company informs the Commission as to whether the customer was retained. There is no specific oversight mechanism for contracts. Economic development rates have not been proposed and no incentive rates, as such, have been approved. As noted above, however, contracting is allowed through forbearance from regulation to attract or maintain customers with competitive alternatives.

Nevada

Telephone companies have applied to the Commission to provide service on a contract basis. The Commission must preapprove such contracts and the staff analyzes them, but no hearings are held. For special contract service, the company submits cost and revenue data for the service; the data are analyzed by the staff to determine whether the service recovers costs and a fair return. If the contract meets this test, the staff recommends approval; if it does not, the staff will request a hearing which would be open to the public. To date, no such hearing has been held.

Special contracts are considered on a case-by-case basis. A number of criteria are used in evaluating proposed contracts. First, rates must be just and reasonable. The service must recover its costs and a fair return. Second, there must not be undue discrimination between and within customer classes. One customer class should not be subsidized or subsidize another and customers under special contract should not be subsidized by customers under tariff.

Approximately thirteen applications, all by Nevada Bell, to provide service under contracts have been approved; all were special contracts. There are no specific eligibility requirements for contract service, but the customer usually has specific requirements which are not tariffed.

Details of contracts are not in the public domain, and other customers are not made aware of services provided under contracts. The contract rate is tariffed for the specific customer but is not available to others. Projected benefits of the contracts

are documented in the sense that contracts are determined to cover costs and a fair return. There is no specific oversight mechanism for contracts; review would be held at the next rate case if a specific problem arises. No such problem has occurred to date. No economic development rates have been proposed, but the Commission has approved incentive rates for telephone service.

The company can apply through General Order 54 (NAC 704.7592 -.7599) for the Commission to determine whether a service is competitive. In making its determination, the Commission may consider such information as alternatives to the service which are available to subscribers, suppliers of the alternatives, the share of the market held by the regulated provider and by alternate suppliers, the ability of the regulated provider to control prices, and the ability of and likelihood that other suppliers will enter the market. Also considered are the effect of detariffing or deregulation on the earnings and revenues of the regulated provider, the essentiality of the service to subscribers, how the regulated provider plans to account for costs and revenues of the service, and whether there are safeguards to ensure that the regulated provider will not impede competition by its control of the local network.

After a Commission finding of competitiveness, the service can be allowed price flexibility, detariffing, or deregulation. Services found to be competitive are detariffed and the companies are free to enter contracts so long as prices are above costs—with long-run incremental cost used as the standard.⁸ Benefits of incentive rates have not been documented; these have been recently approved and will be reviewed in future rate filings. Contracts for detariffed service are not in the public domain.

New Hampshire

Telephone companies have applied to provide service on a contract basis. The commission must preapprove the contracts and the staff analyzes them, but hearings are held only when the parties cannot agree. Along with the proposed contract, the company must file backup or support information on potential competitors, the impact on the marketplace of losing the customer's business, and an incremental cost analysis of the service.

⁸ See Nevada Administrative Code 704.7597, 2(c).

The Commission handles contract proposals on a case-by-case basis although standard criteria are used. Among the criteria used in evaluating contracts are just and reasonable rates, undue discrimination between and within customer classes, load retention—especially the burden that would be placed on other customers if the customer's business was lost, economic development, antitrust and predatory pricing, price floor above incremental cost, and potential revenue loss.

No applications had been rejected. Three applications have been approved for special contracts; these were for New England Bell to offer service to one computer firm and to two governmental bodies. Details of contracts are proprietary; other customers are not made aware of the services, and the Commission has not ordered the companies to publicize them. Commission orders are public, however, so that other customers could find out about the existence of the contracts.

Projected benefits of contracts have not been documented as yet due to resource constraints and priorities. The Commission has no specific oversight mechanism for contracts but may review them in rate cases. There have been no economic development rates proposed, but the Commission has approved incentive rate proposals. These have been offered under both contracts and tariffs, with tariffs being strongly preferred. The incentive tariffs have limited price flexibility to allow competition to be met where appropriate and necessary. Projected benefits of the incentive rates have not been documented and contract details are proprietary.

New York

Telephone companies have applied to provide service on a contract basis. The Commission need not preapprove the contracts and no hearings are held, but the staff analyzes the proposed service. The Commission has approved the policy of individual-case pricing for digital Centrex services, private line, and also special assembly of limited service offerings. This latter category is a unique service offering in a competitive market. The individual offerings are reviewed by staff to insure that they cover incremental costs. The company must submit incremental cost analysis and revenue projections with its proposal.

Numerous contracts have been approved many of which were for special contracts. No proposed contracts have been rejected. The Commission has approved incentive rates for telephone services. These are provided under contracts which the

Commission prefers because of their flexibility and the administrative burden of tariffs. No economic development rates have been proposed for telephone services.

The Commission has issued a generic order concerning contracts for telecommunications services. Among the criteria used by the Commission in evaluating proposed contracts are just and reasonable rates—contracts must cover incremental costs, undue discrimination between and within classes of customers, antitrust/predatory pricing, and price floor at marginal cost. Also, the contract cannot burden regulated services. Among the benefits of contracts that have been expressed by the Commission are that they allow the utilities the flexibility to compete in a competitive marketplace and that they allow utilities to cover their incremental costs plus a contribution.

Five telephone companies (Alltel, Contel, New York Telephone, Ontario Trumansburg Telephone, and Rochester Telephone) serve over 100 customers under contracts. Details of individual contracts are not in the public domain. To be served under a contract, digital Centrex customers must have over 100 lines. Contracts can be used for limited service offerings if the company has fewer than twenty-five of the same type offering—otherwise, the company must file a cost-based tariff. By this route some services offered under contracts may become tariffed if sufficient demand develops. Private-line services can be offered under contract if the company can justify the requirement of pricing flexibility. Other customers are made aware of the services provided through contracts and can subscribe to them, but the Commission has not ordered the companies to publicize the services.

The projected benefits of contracts have been documented in the original Commission order as well as in subsequent rate cases. The Commission has special oversight mechanisms for contracts: the company submits backup cost and revenue data for each digital Centrex case, this is reviewed by the staff for reasonableness and to insure that the revenues cover incremental costs and, in the case of private-line service, there is a contribution to universal service.

North Carolina

No telephone companies have applied to the Commission to provide service on a contract basis. The Commission has not approved any economic development rate for telephone service but has approved incentive rates and has a preference for their being offered under tariffs. The Commission requires that incentive rates or "contract

service arrangements" be filed in a manner similar to special assembly tariffs, which include the customer's name, description of the service, and the rates and charges for the service.

North Carolina general statutes require such rates to be filed, published, posted, and that they be available for public review; the public staff has argued that tariffs are the best means of meeting those requirements. Incentive rates have been approved for Southern Bell Telephone and Telegraph Company. Customers involved include electric utilities, state and local government, universities, financial institutions, manufacturing and commercial firms, and hospitals. Tariffs incorporating the incentive rates are in the public domain.

Among the criteria used in evaluating incentive rates is that the utility must demonstrate that there is a reasonable potential for uneconomic bypass of the utility's service. Support for the expectation, the competitive rate, the utility's relevant costs, and the utility's proposed rates are reviewed prior to approval. The projected benefits of the incentive rates, based on the best information available at the time, are measured prior to their becoming effective. No incentive rate proposals have been rejected.

Ohio

Telephone companies have applied to the Commission to provide service on a contract basis. The Commission must preapprove such contracts and the staff analyzes them although no hearings are held. Approval is on a case-by-case basis. Before commencing service under the contract, the company must await completion of the staff's investigation and the Commission's finding and order approving the contract application. Under the preapproved process, once the company has met the standards, applicable contract applications are approved the day they are filed with the Commission. The company must file supporting cost-of-service data, justification for competitive treatment, if applicable, or reasons for deviations from tariff pricing.

The Commission has a generic policy for dealing with contracts. Rates must be cost-based; price floors, not necessarily at marginal cost, are used. Also, revenue retention is considered in evaluating contracts. When contract rates are lower than tariff rates, the revenues are tracked and reviewed on a case-by-case basis during rate cases.

No economic development or incentive rates have been proposed for telephone services but numerous contracts have been approved for Centrex service. One of the benefits expressed by the Commission in approving them was that the contracts gave the LECs the ability to compete. Some applications have been rejected but most were later resubmitted—with changes suggested by the staff—and approved. Six telephone companies are involved in providing approximately 190 customers Centrex service under contracts; Ohio Bell accounts for about half the total.

There are no specific eligibility requirements to obtain contract service; other customers are not made aware of the services, and the Commission has not ordered the companies to publicize them. A tariff provision allows new or unique configurations to be offered to a single customer as a special assembly. The service would not have to be tariffed and made available to the public until a second customer demanded the same service. Projected benefits have not been documented but are evaluated at the time the LEC files its contract. As noted above, revenues are tracked and contracts reviewed during rate cases but there are no specific mechanisms for overseeing contracts.

Oregon

The Oregon Public Utilities Commission has received applications for telephone services on a contract basis. The Commission is required to preapprove all contracts and holds open hearings on them. Proposed contracts must be accompanied by the following information: underlying costs, expected revenues, costs of competitive alternatives, and reasons for using contracts instead of tariffs.

The Commission has issued a generic policy statement dealing with contract applications and the following criteria are used to evaluate proposed contract rates. First, rates must be just and reasonable; they should cover relevant short- and long-run costs using an incremental cost standard. Second, there must be no undue discrimination within the customer class; similarly situated customers must be offered the same terms and conditions. Finally, load retention is considered; other customers must be better off if the customer is retained rather than risk losing customer if there was no contract.

The Commission has approved 241 applications for contract service of which more than fifty were classified as special contracts. Two telephone companies and 210 customers are involved in contract pricing arrangements. Details of the contracts

negotiated between the telephone company and the customer are in the public domain. The Commission takes no active part in ensuring that other customers are made aware of the contracts. However, other customers can subscribe to services available in contracts and, after sufficient demand has materialized, special contracts may become tariffed. The Commission has not documented the benefits of contracted services nor is there a mechanism in place to do so. Special hearings are used to provide oversight of contracts.

The Commission has not approved economic development rates for telephone services. The Commission has, however, approved incentive rates for telephone companies. These services are provided through both contracts and tariffs. The Commission prefers tariffs to avoid discriminatory propensities, but it has not rejected any proposed incentive rates for telephone companies. The projected benefits of incentive rates have not been measured nor is there a mechanism in place to do so. Contracts and/or tariffs incorporating the incentive rates are in the public domain.

Pennsylvania

The Pennsylvania Public Utilities Commission has received applications for contract services from telephone companies. The Commission is not required to preapprove proposals for contract service but the staff analyzes all such proposals. The Commission reviews contracts and supporting information to ensure that each meets established guidelines and covers all direct costs. The company is required to file a copy of the contract and must submit supporting information showing the revenue and cost effects of the proposed contract and demonstrating that the customer meets customized pricing and design option (CPDO) eligibility criteria.

The Commission deals with all contracts on a case-by-case basis and several criteria are used to evaluate proposed contracts. Rates must be just and reasonable; contracts are examined to ensure that rates cover costs appropriately with at least a 10 percent contribution to common overhead. The contract price floor is established at marginal cost and the ceiling is set at present tariff rates. There must be no undue discrimination between customer classes; contracts are examined to ensure applicable services are not provided at rates which constitute an unlawful deviation from applicable tariffs and that there is neither illegal nor inappropriate cross-subsidization. There must not be undue discrimination among customers in the same class; contracts are examined and compared for consistency with previously approved

contracts. Antitrust/predatory pricing is considered; the Commission allows contract pricing in order to provide a level playing field for local telephone companies and interexchange carriers. The Commission also requires customers to demonstrate that they are considering competitive alternatives. Revenue losses occasioned by lower rates are also considered; generally, the staff is concerned about the effects of the contracts on an annual basis.

The Commission has approved five applications to provide service through contracts, none were special contracts. The Commission has rejected no proposed contracts. One company, The Bell Telephone Company of Pennsylvania (Bell PA), and five customers are involved in contract service arrangements. Bell PA has the ability to enter into contract service arrangements via its customized pricing and design option (CPDO) tariff; details of contracts are filed on a proprietary basis and may not be disclosed. To be eligible for a CPDO, customers must have \$200,000 in annual billable Centrex revenue or the equivalent in dial-tone line or trunk revenue. In addition, they must be considering competitive alternatives and have customized service requirements. Customers are not made aware of services being provided through contracts and the Commission does not order the telephone companies to publicize these services.

Because special contract customers are few in number, if a service which relies on new or unusual service configurations, special contract customers generally bear a greater share of the costs. When demand for new services justifies a general tariff filing, the tariff rate will become effective with the tariff, unless the service is subject to CPDO pricing.

Projected benefits from contract services have been documented and tracking reports for CPDO are filed with the Commission by Bell of Pennsylvania. The reports, among other things, show revenues earned, contribution earned, and cost of services. Reports filed to date indicate continuing contribution in support of residually priced services such as dial-tone line services and continuing or new streams of revenue for the telephone company.

The Commission uses special hearings and procedures as oversight mechanisms for contract service. Each CPDO transaction must be documented and filed with the Commission for review in advance of its effective date. The filing must evidence certain minimum contribution levels and compliance with other tariff eligibility rules. It is also subject to investigation and hearings. Tracking reports must also be filed annually.

The Commission has not approved economic development rates for telephone services but has approved incentive rates. Bell PA's CPDO tariff provides that all applicable terms and conditions for individual CPDO customers will be embodied in a contract to be filed with the Commission. In its Opinion and Order of January 25, 1989, the Commission found that when the contracts entered into by Bell PA are filed with the Commission, they shall constitute the applicable tariff for the customer involved. Consequently, services provided to customers under the CPDO tariff will be tariffed services. To date, all CPDO contracts have become effective.

Rhode Island

The Rhode Island Public Utilities Commission has received applications to provide service on a contract basis. The Commission must preapprove all contracts and the staff analyzes all proposed contract services. The Commission deals with contracts on a case-by-case basis and uses just and reasonable rates as a criterion for evaluating proposed contracts.

Some of the approved contracts are classified as special contracts. One telephone company and five customers are involved in contract arrangements. Details of negotiated contracts are not in the public domain, and customers are not made aware of services provided through contracts. The Commission has not ordered companies to publicize their services. Services offered under special contracts become tariffed after sufficient demand has materialized. Projected benefits of contract services have not been documented and the Commission does not have a specific oversight mechanism.

South Dakota

A telephone company applied for contract pricing permission from the South Dakota Public Utility Commission. Permission was denied based upon interpretation of state statute prohibiting discriminatory pricing. The Commission also has not approved any economic development rates; the Commission has, however, approved incentive rates for telephone services. Incentive rates are provided through tariffs to avoid price discrimination. Consequently, the Commission has rejected incentive rates if individually negotiated because they would violate South Dakota's prohibition on price discrimination. The Commission has studied the benefits of incentive rates and concluded that they have improved retention of customers and increased business

growth. Customers must use 100 or more hours of MTS each month to qualify for incentive rates and incentive rate information is in the public domain.

Tennessee

The Tennessee Public Service Commission has received applications for provision of telephone services on a contract basis. The Commission must approve all contracts and an open hearing is held on each contract prior to approval. The Commission also analyzes the proposed contract prior to approval. The utility must submit relevant cost information and revenue impact studies supporting the proposed contract. The Commission considers criteria including just and reasonable rates, undue discrimination among customers in the same class, antitrust/predatory pricing, economic versus noneconomic bypass, price floor at marginal cost, and revenue losses occasioned by lower rates. Other customers are made aware of services being provided on a contract basis and are permitted to subscribe to them. The Commission does not document projected benefits of contracted services nor do they currently have in place any oversight mechanisms specifically for contract services. The Commission has not entertained any proposals for economic development rates or incentive rates.

Texas

The Texas Public Service Commission has received and approved applications for contract pricing. It is required to preapprove all such contracts although hearings are not generally held unless requested by one of the parties. Commission staff do analyze proposed contracts. The Commission has an administrative review process established that allows contracts to be handled administratively in thirty-five days.

The LEC applying for the contract must provide all supporting cost documentation, customer affidavits, proof of notice, and any other information it may choose to submit. Depending on the service, the Commission handles contracts on both a generic and an ad hoc basis. The Commission considers criteria including just and reasonable rates, undue discrimination between classes, undue discrimination among customers in the same class, economic development, and antitrust/predatory pricing.

The Commission has received approximately eighty-seven applications for contract pricing as of this study. The decision to allow a LEC to provide competitive

services, such as Centrex, under contract is based on minimizing stranded investment costs; if the LEC were not allowed some flexibility in competitive services, the general body of ratepayers would absorb some costs of such stranded investment.

The Commission holds details of contracts open to the public and has established minimum requirements for contracts for Centrex service, high capacity service, and packet switching. Projected benefits of contract services have not been documented. Contract pricing arrangements can be reviewed at any time by the Commission. Incentive rate tariffs for telephone service have been approved through normal rate making procedures; particulars on incentive rates contracts are in the public domain.

Utah

The Utah Division of Public Utilities has received and approved applications for provision of telephone services on a contract basis. The Division must preapprove all contracts and an open hearing is held after the Division analyzes the contract. Each type of contract service is governed by a policy statement from the Division. The Division typically considers the following criteria when analyzing contract rates: just and reasonable rates, undue discrimination between customer classes, undue discrimination among customers in the same class, load retention, economic development, antitrust/predatory pricing, economic versus noneconomic bypass, price floor at marginal cost, and revenue losses occasioned by lower rates.

The Division has approved approximately thirty-five applications for contract rates none of which were special contracts. Details of contracts are confidential although other customers are made aware of services being provided through contracts. Both formal and informal staff evaluations on contract services are conducted. No applications for economic development rates or incentive rates have been received.

Virginia

In 1987 telephone companies applied to have billing and collection services deregulated.⁹ The Commission's decision permitted telephone companies to provide

⁹ Interim Order, Commonwealth of Virginia, Case No. PUC870004, January 28, 1988.

these services to interexchange carriers under negotiated contracts which are treated similarly to tariffs. The Commission later detariffed billing and collection for large telephone companies on an experimental basis.

The Commission has not received any other applications for service to be provided on a contract basis or for proposed economic development rates for telephone service. The Commission has, however, approved incentive rate plans for telephone companies. Incentive rate service is provided through tariffs as well as through the standard ratemaking procedure.

While the Commission has not shown a preference for contracts over tariffs, it has established an Environmental Regulatory Plan¹⁰ for the five largest telephone companies in Virginia. Under this plan, category 1—absolutely competitive—services are detariffed, and rates are frequently contracted matters between the company and the customer. Category 2—potentially competitive—services remain covered by tariffs, but some pricing flexibility is permitted.

When the Commission classifies a service as competitive or potentially competitive, it effectively either accepts or rejects incentive rates for it. Benefits of incentive rates and incentive pricing have not been evaluated; however, the Commission plans an evaluation of incentive rates and pricing in 1992 and data collection is currently under way. The Commission does not specify eligibility requirements for customers to qualify for incentive rates. Incentive rate contracts are not in the public domain, although incentive rate tariffs are.

Washington

Telephone companies have applied to the Washington State Utilities and Transportation Commission to provide services on a contract basis. The Commission staff analyzes the contract service being proposed. Open hearings are held, and the Commission must preapprove all contracts.

Washington law provides the Commission authority to accept and regulate contract pricing. Contracts must disclose essential terms and conditions, although a customer's proprietary information is not required to be disclosed. Contracts are not treated as tariffs. The Commission requires automatic filing of contracts with end

¹⁰ Final Order, Commonwealth of Virginia, Case No. PUC380035, December 15, 1988.

users. The Commission may, however, require, on a case-by-case basis, filing of contracts between telecommunication companies.

Because the Commission has authority to classify services and/or entire companies as competitive, or not, and grant regulatory flexibility based upon its classification, a two-tier system for contracts exists. Contracts for services that are subject to effective competition, and contracts filed by companies that are classified as competitive are subject to a ten-day notification process. Competitive contracts filed by companies with monopoly services must not bundle monopoly and competitive elements and must demonstrate a lack of cross-subsidy. Noncompetitive services may be subject to tariffing unless it is demonstrated that special contracts are necessary because of special customer needs or because the contract is for a new service. Contracts which do not depart from filed tariffs are not filed. The Commission must either accept or deny but cannot suspend contracts.

The utility must submit cost estimates, a description of service, essential terms and conditions, and other information the Commission may require. While the Commission deals with contracts in a case-by-case, basis, the following criteria are generally used in evaluating proposed contracts. First, rates must be just and reasonable; prices must be above long-run incremental or fully distributed cost, whichever is lower. Second, there must be no undue discrimination between customer classes; competitive and noncompetitive services are unbundled so monopoly ratepayers do not cross-subsidize competitive ventures. Third, there must be no undue discrimination among customers in the same class; this is not allowed by rule, although it has never been formally tested. Finally, the price floor is at marginal cost.

The Commission has received in excess of 1,000 applications for contract service, more than 800 of which have been special contracts. Two applications were rejected because they violated the Commission's policies on caller ID and, in addition, insufficient evidence was presented to show that a contract was necessary instead of a tariff.

Details of contracts are not in the public domain, however, other customers can be made aware of services being provided through contracts and may choose to subscribe to them. The Commission has ordered telephone companies to publicize services covered in contracts. Since contract pricing and special contracts are

permitted by statute, not much attention has been given to documenting the benefits of such contracts.

The Commission's requirement to file proposed contracts is the only oversight mechanism designed for contract service. However, statute stipulates that, if, after it has gone into effect, a contract is found to be priced below cost, the Commission may make an appropriate adjustment to the contracting company's revenue requirement in a subsequent proceeding. The Commission has not approved any economic development rates and the concept of incentive rates has not been completely addressed.

Wisconsin

The Public Service Commission of Wisconsin has received applications for contract service. The Commission is not, however, required to preapprove such contracts. Consequently, the Commission does not hold hearings on proposed contracts, and the Commission staff does not analyze their merits.

Companies are authorized to negotiate customer-specific contracts by service category. These include Centrex service, billing and collection services, and so on. The company is then required to file a copy of the contract with the Commission. The Commission has jurisdiction to review contracts on its own motion or in response to customer complaints. If the contract is challenged, the utility must provide a cost basis to demonstrate that price exceeds long-run incremental cost of the service.

The Commission has issued a generic statement which deals with contracts.¹¹ The following criteria are used by the Commission in evaluating contracts: whether substitute services are available, whether the contract is compensatory, and whether the utility would be disadvantaged without the contract tariff. Details of contracts are filed under a statutory provision protecting confidential company information; consequently, other customers are not informed of the provisions of contracts, and the Commission does not require the companies to publicize services.

Projected benefits of contracts have not been documented. The individual contract statute does not provide for review based upon a benefit analysis, but the Commission reserves jurisdiction to review all individual contracts on its own motion or at the request of interested parties. In doing so the Commission may conduct

¹¹ Wisconsin State Statute, Section 196.194.

special hearings and, on occasion, has received testimony regarding a particular utility contract. The Commission has not received application for economic development rates for telephone service but it has received application for incentive rates and such service is provided by tariff, pursuant to statute.

The Commission uses two criteria for evaluating incentive rates. First, the promotional rate must not provide unreasonable preference as compared to other users within the market segment defined by the utility's promotional staff. Also, the promotional rate must exceed the long-run incremental cost of service. Incentive rate contracts are in the public domain and the benefits of incentive rates are often determined during rate hearing to test the prudence of the company's decision to offer the incentive.

Wyoming

The Wyoming Public Service Commission has received applications for provision of telephone service on a contract basis. The Commission is required to preapprove all contracts, but it does not hold hearings on proposed contract service. Analysis is done to examine the relationship between the contract price and the cost to the company of providing the service. In this regard, cost-of-service studies are usually required to be submitted with the contract prior to approval by the Commission. Also, availability of like services from competitors is reviewed, and evidence of discriminatory rates is examined.

The Commission requires the following information to accompany the proposed contract: a cost-of-service study, current annual revenues from the customer, estimated annual revenues under the proposed contract, any minimum revenues under the proposed contract, and the annual revenue impact if the customer was lost and left the network/system.

The Commission has a generic policy statement on contract service. However, contract cases are still handled on a case-by-case basis. A number of criteria are used in evaluating contract rates. Rates must be just and reasonable. Rates must be above cost, and long-run incremental cost is the price floor. Rates must not imply undue discrimination between or within customer classes. Also, the benefit of retaining the customer both to the utility and to the remaining body of ratepayers is considered as is economic development and the potential revenue loss occasioned by lower rates.

The Commission has approved approximately twenty applications for contract service of which five were classified as special contracts. The perceived benefit of contract service to the utility is primarily keeping the customer on the network while the benefit to the ratepayer is that the Commission has the right to examine and account for the contract during the next general rate case. The Commission has rejected three contracts; the primary concerns in the rejections involved contract prices below long-run incremental cost and a lack of sufficient competition to justify a contractual arrangement.

Details of contracts are not in the public domain and other customers are not made aware of services being provided through contracts. The Commission reviews contractual arrangements annually whereupon evidence is examined to verify that a particular contract's conditions, rates, and charges are being implemented. Contracts can be reviewed using special hearings or the next rate case.

The Commission has approved economic development rates for telephone services. These are provided through both contracts and tariffs. Although contracts predominate, the Commission prefers tariffs to alleviate discrimination. No economic development proposal has been rejected to date. In approving economic development rate proposals, the Commission considers the financial viability of both the utility and the customer. Economic development contracts and tariffs are not in the public domain.

The Commission has approved incentive rates through contracts although it has shown no preference for contracts or tariffs. Contracts incorporating incentive rates are not in the public domain. No incentive rate proposals have been rejected.

CHAPTER 6

REGULATORY POLICY CONCERNS REGARDING CONTRACTS

Although there is little doubt that emerging and actual competition has led utilities increasingly to turn to contracts, the practice may create difficulties and concerns as utilities and regulators adjust to new conditions. The difficulties and concerns are related to those mentioned in Chapter 1, mainly how to handle the loss of revenue resulting from contract pricing and how to ensure equitable treatment for the utility and all customers, core and noncore. Specifically, commissions are interested in insulating core customers from adverse effects of contract pricing, in avoiding undue price discrimination, and in avoiding stranded investment in utility plant. They are also concerned about how to handle revenue deficiencies—compared with tariff rates—resulting from negotiated contracts, developing a long-run strategy, and managing regulatory oversight responsibilities. Although some of these overlap, each is discussed below. Some suggestions are made for dealing with them in the remainder of this chapter.

Insulating Core Customers from Adverse Effects

If the only parties affected by contracting were the utilities and customers involved directly, regulators would have little worry. The fact is, however, that contracting has the potential to affect the broad body of core customers, and regulators are concerned with limiting adverse effects on them. There are three somewhat related ways to insulate core customers from the adverse effects of contracting. The first is to ensure that contracts be priced to avoid cross-subsidies. The second is to keep costs from being shifted from the contract customers to the core customers. The third is to limit as much as possible the revenue deficiency to be shifted to the core customers.

One method of ensuring that core customers not subsidize contract customers is to require that all contracts cover at least the avoidable cost and make some

contribution to common costs.¹ Indeed, there is little debate over whether contract pricing should cover such costs. Additionally, many commissions require that contracts cover long-run incremental cost (LRIC). There are, however, several versions of LRIC, and the appropriateness of each depends on the assumptions made in a particular case—specifically the extent to which the service being analyzed requires investment in new facilities and the extent to which there are alternate uses for both new and existing facilities. This may lead to disagreement as to the appropriate cost for a particular situation.

Some of the adverse effect on core customers may reflect a redistribution of costs. If customers served under contracts have traditionally been contributing a proportionally large amount to common costs and their contribution is reduced due to competitive necessity, core customers may ultimately be required to carry a larger proportion of common costs. This shifting of the burden may, in fact, move pricing towards efficiency if historical revenue recovery methods created distorted price signals which competitive pressure tends to eliminate.²

Avoiding Undue Price Discrimination

The concept of undue price discrimination is quite slippery and few real standards exist especially given the latitude afforded utilities operating under the

¹ In the short run, with fixed plant for which there is no alternative use, a case can be made for pricing at or above short-run variable cost or avoidable cost. Pricing at short-run variable cost or avoidable cost does not recover any contribution to common and fixed costs and is not, therefore, a sustainable long-run pricing strategy. Additionally, unless some means is available for recovering common and fixed costs, there will be no incentive to reinvest in services so priced.

² Under revenue requirements regulation, a distorted price signal is created when some prices are set below the efficient level and other prices are raised to compensate. It is possible for a set of prices to give distorted price signals yet be within the bounds of due discrimination and meet the subsidy-free test.

regulatory umbrella.³ Pricing contract services below short-run variable or avoidable cost is generally thought to be undue discrimination. It is assumed that the utility's other customers, its shareholders, or both would prefer that customers not be served at rates below short-run variable or avoidable cost even if it resulted in the loss of those customers' business.

Beyond the clear case of pricing below avoidable cost, there is no clear consensus on the limits of due discrimination, and regulation has traditionally allowed some price discrimination. The use of contracts allows price differentials based on differences in price elasticity caused by the existence of, potential for, or implied threat of competition. This type of intraclass discrimination between similar end users with different competitive alternatives is considered by economists to be third-degree price discrimination of the "reverse no-loser" or "give-in-if-you-must" type.⁴

This form of price discrimination has been defended as furthering a worthy regulatory policy goal of keeping large customers on the system provided they contribute to common costs and other customers do not subsidize them. Care should be taken when using this rationale as it may be used to justify widespread discounting which may reward strategic or opportunistic behavior since true price elasticities are usually unknown.⁵ Such discrimination may be neither efficient nor welfare-maximizing. The utility should be provided with financial incentives to ensure that it negotiates hard to reduce rewards for opportunistic behavior since it is likely to have—or can obtain—better information about a customers' true price elasticity.

³ See J. Stephen Henderson and Robert E. Burns, *An Economic and Legal Analysis of Undue Price Discrimination*, (Columbus, Ohio: The National Regulatory Research Institute, August 1989), 25-33.

⁴ See the brief discussion of price discrimination in Appendix A, below.

⁵ See Alvin Kaufman, *The Bypass of Local Gas Distribution Utilities—How Can You Tell If It Is For Real?*, (Columbus, Ohio: The National Regulatory Research Institute, August 1986), 3.

Avoiding Stranded Investment

Standard arguments in favor of allowing discounts from tariff rates under contracts include avoiding stranded investment and preventing profit erosion. Utilities have large amounts of fixed plant in place; if competition lures major customers from the utility's system, the contribution to common costs which previously had been collected from them must either be reallocated among remaining customers, borne by the utility's shareholders, or shared in some way by remaining customers and shareholders.

If rates charged remaining customers are increased, the utility's competitors will become even more effective, leading more customers to defect from the utility system, creating pressure to raise rates further, and so on. This phenomenon is the so-called death spiral. Eventually, only the truly captive customers will be served by the monopoly, and a two-tier market will have been established. Customers with competitive options will obtain service at competitive rates—either through special contracts with the utility or from its competitors. The remaining customers will have service at comparatively high rates and, at least in telecommunications, possibly without access to the most advanced technology.⁶ Commissions have addressed this concern by generally allowing utilities the pricing flexibility needed to retain customers and avoid stranded investment. Of course, the pricing flexibility is limited by desires to avoid undue price discrimination and insulate core customers.

⁶ Although this may sound like a lapse into post-industrial science fiction, the condition of parts of the social infrastructure makes it possible to believe that some aspects of the death spiral are possible; examples include most local bus lines, passenger rail service, health insurance (which has felt the effect of deaveraging as insurers have switched from community-based rates which spread risks over broad groups to experience-based rates which spread risks over much narrower groups, forcing many small businesses to drop employee coverage), public hospitals, and public education in many areas of the country. See, for example, John P. Fons "The Local Exchange Network in the Information Age—The Need for New Policy," *Public Utilities Fortnightly* 125, no. 2, (January 18, 1990): 20-24. A skeptical analysis of the plausibility of the death spiral in the case of electric utilities may be found in Ross G. Hemphill and Kenneth W. Costello, "An Appraisal of the Death Spiral Hypothesis," *Electric Potential* 3, no. 3, (May-June 1987): 33-40.

Handling Revenue Deficiencies

As noted above, if some customers are offered service at rates less than existing tariffs—which were designed to meet the utility's revenue requirement, the utility will not be able to collect its revenue requirement. One way to meet the revenue requirement would be to raise rates charged other customers to compensate. Commissions generally require, however, that short-run deficiencies resulting from discounts to customers with competitive alternatives be borne by the utility's shareholders rather than by other ratepayers.⁷ This means that discounting below tariff rates for customers with competitive alternatives is not generally allowed to affect rates charged other customers.⁸ The refusal to make other customers responsible for revenue deficiencies is consistent with the doctrine that

The due process clause of the Fourteenth Amendment . . . does not assure to public utilities the right under all circumstances to have a return upon the value of property so used. The use of, or the failure to obtain, patronage, due to competition, does not justify the imposition of charges that are exorbitant and unjust to the public.⁹

In the longer run, however, it may be difficult to insulate core customers completely. For their part, stockholders will resist having the value of their investment diminished; they will seek higher rates of return because a new element of risk is present. Again, there is a form of death spiral at work here: in the short run, it is effectively possible to confiscate or convert some of the investors' wealth to the benefit of the core customers of the utility, but in the longer run investors must believe that they will be treated fairly or they will withdraw their investment by

⁷ In the short run—between rate cases, for instance—rates charged core customers cannot be changed. Until the next rate case, any revenue deficiency resulting from a discounted contract price will be borne by the utility's shareholders. The longer run question of how to handle the deficiency would be determined at the next rate case.

⁸ This statement is based on the responses to the survey instrument.

⁹ *Market Street Railway Company v. Railroad Commission of California*, 324 U.S. 548, at 567 (1945).

refusing to maintain and modernize the system.¹⁰ Some means of apportioning the deficiency between core customers and shareholders may need to be found; arrangements developed for sharing cost savings and profits resulting from incentive regulation schemes might be considered models for such arrangements.

The pessimistic view of the effect of contracts is that they will exacerbate the pressure on utilities to engage in cost shifting in an attempt to recover revenue deficiencies from captive ratepayers. Certainly, regulators have been vigilant for signs of such behavior. A more optimistic view of the effect of an implicit revenue deficiency is that it may provide the stick that prods utilities toward cost containment and operating efficiencies. This ultimately could result in savings for both competitive-sector and captive-sector customers and in stable or increasing profits for the stockholders. If there are, in fact, situations of regulation-induced excess costs—whether of the x-inefficiency or the Averch-Johnson type, competitive pressures in some services may provide positive incentives for cost containment in others.

Developing a Long-Run Strategy

Competitive pressures in electric and telephone service will increase over time. As they do, more large users will find or imagine alternate providers to be a realistic and cost-effective option. Regulators and utilities must plan for a world in which competition is more predominant than today. Regulators especially must be proactive, having policies in place to deal with foreseeable developments such as the spread of contracting to meet competition. It seems reasonable that commissions should have standing procedures and general policies for dealing with contracts (as some explicitly have) with real oversight and review—even given limited resources available to perform such functions. At present, contracts represent a relatively modest portion of sales, but their importance will grow over time, especially in densely populated markets with numerous large customers to attract competitive providers. Therefore, developing a long-run strategy is prudent.

¹⁰ The examples mentioned in footnote 6, above, come to mind as well as the effect of rent control on the availability and quality of rental units.

As noted in Chapter 4, especially in the case of telephone services, detariffing or deregulating competitive services represents one possible response. Whether such an approach would be considered "declaring victory" or "surrendering" depends on one's point of view, and such actions may be beyond the authority of some commissions. If such a step is taken, given the common facilities and costs associated with them the cost allocation and separation process will become even more difficult to ensure that costs on the competitive side are not shifted to the regulated side. It is not evident what mix of structural and nonstructural separations will prove to be optimal.

If competitive services are detariffed or deregulated, assuming that costs of the competitive services can be separated from monopoly expenses, it may be reasonable to apply a somewhat lower rate of return to core, monopoly services when determining revenue requirements. This could be done because monopoly services present less risk than do competitive services and would further insulate captive customers from the effects of contracting.

Once some customers are granted contracts at discount rates, others may seek similar treatment. This might be accomplished by "tariffing-in" contracts¹¹—which may be difficult due to their proprietary and confidential nature—or by allowing each customer to negotiate its best deal with the utility, resulting in the car buyer's dilemma mentioned in Chapter 1. Once again, the problem of disparate treatment of otherwise similar customers comes up and will require addressing at some point.

Managing Oversight Responsibilities

There are many issues confronting commissions determining how and to what extent they will oversee and review the practice of contract pricing. In general,

¹¹ Tariffing-in a contract refers to the practice of creating an "individual case basis" tariff when service must be provided under tariffs. In effect, creating a tariff for individual customers transforms a contract into a tariff affecting one customer. This practice tends to blur the distinction between the contract and tariff approaches.

commissions are guided by the principle that contract pricing must be monitored to ensure that contracts are consistent with overall regulatory principles and social goals. It must be noted that the legislative mandates which condition commission response to competitive pricing vary across states.

For instance, in the case of telephone service, in some states services are under price caps or banded pricing formulas or incentive regulation which tend to give flexibility to the local exchange company in pricing services to meet market conditions. In other states competitive services have been deregulated. In most states the goal appears to be to design regulatory procedures that ensure fair treatment of core customers and allow for continued improvement in the quality of service available to all customers. Several (somewhat overlapping) suggestions may be made.

Provide for Regulatory Oversight

One concern regulators and the public may have regarding contract pricing is the possible erosion of regulatory oversight. This concern is based on the premise that scrutiny applied to contracts is not as strict as that applied to tariffs. One way to alleviate this concern is to review contracts during rate cases and limit their term so that any misallocation of cost among core customers, contract customers, and utility shareholders can be corrected expeditiously.¹² In the case of electric service, another safeguard is to ensure that all contracts include appropriate fuel cost adjustment mechanisms.

¹² Specifying contract terms is a delicate issue that involves balancing two competing considerations: short contract periods reduce incentives the utility and its customers have to contract because the transaction costs of contract negotiation and the immobility of certain investments required on the part of customers; long contract periods may preclude (or dilute) regulatory authority to set just and reasonable rates in the event of significant cost and market changes. Contract terms of three to five years are common and time will tell whether this term length adequately balances customer needs and preserves regulatory oversight.

Ensure that Contracts Meet an Appropriate-Cost Test

States have been fairly consistent in ensuring that costs be defined appropriately to include all costs associated with the contract service including marketing and administration expenses, and that, if possible, some contribution toward common costs be collected. The appropriate-cost test may depend on whether the service is new or existing and the extent to which current investment would be stranded if the customer is lost. The cost analysis conducted seems to consider most often and use as a benchmark information about whether traditional regulatory cost allocation and revenue recovery methods are creating opportunities for uneconomic bypass.

Encourage Competition, Where Feasible, and Discourage Anticompetitive Behavior

State commissions uniformly recognize that competition is important. Competitive pressure has the potential to force utilities to control costs, improve service, and upgrade technology. However, such anticompetitive strategies as predatory pricing, price squeezes, and limit pricing have consistently been disallowed by the commissions.¹³ If viable competitors can serve customers more efficiently, they should be allowed to do so. Utilities should be encouraged to compete but discouraged from merely "defending their turf" when alternate providers are more efficient.¹⁴

¹³ A brief discussion of predatory pricing and limit pricing may be found in Appendix A, below.

¹⁴ For example, given their historical dominance and bottleneck positions at the local switch, LECs may be in an advantageous position. Their prices become the mark new entrants must better to attract customers, and they may be able to affect the costs and quality of their rivals' services. LECs should be encouraged to compete vigorously, especially by becoming more efficient, but should not be allowed to drive competitors out of business. LECs may meet competitive prices but may not undercut them unless they can do so while meeting an appropriate cost test.

Protect Core Customers

Determine the extent of competitive pressures cited as the reason for contract pricing. Ensure that contracts entailing discount rates be entered into only with good justification because—ignoring potential cost saving measures resulting from competitive pressures—revenue deficiencies caused by discount rates under contracts cannot permanently and totally be borne by the stockholders. Be watchful for attempts to shift costs to core customers. Institute ex post review of contracts and cost studies to determine whether, in fact, contract costs and revenues are meeting projections and whether cost includes all appropriate costs including marketing and administrative expenses associated with the contracts. Reserve the right to nullify existing contracts found to be not in the public interest.

Provide Incentives for Utilities to be Hard Negotiators

An obvious incentive is created when the responsibility for any revenue deficiency falls on stockholders rather than to core customers. In the short run, this is what occurs. Over the longer term, the incentive may be reinforced during rate cases if, rather than using actual revenues collected from contract customers, revenues that would have resulted had they been served under tariffs are imputed. As noted above, however, if contract service comes to represent an increasing proportion of total sales, completely insulating core customers from the effect of the revenue deficiency may not be possible. In this case, sharing the deficiency—possibly in the same way as profits above certain levels are shared under some incentive regulation plans—may be considered. It is not advisable to allow a utility to shift the entire deficiency to core customers as this would largely eliminate longer-run incentives to negotiate effectively.

Summary and Conclusions

One striking thing has emerged from the survey responses: the competitive genie is out of the bottle. Contract pricing of electric and telephone service by utilities is undertaken mainly for competitive reasons to prevent profit erosion in the competitive segments, and the number of competitive segments seems to be increasing.

Commissions, when faced with viable nonregulated providers, have reacted to give the utilities room to maneuver. The reaction has taken many guises: flexible pricing, individual-case-basis tariffs, customer specific offerings, detariffing, forbearance, or deregulation. Differences across jurisdictions abound, resulting from commission preferences, the extent of competition, and the degree of freedom given commissions. Moreover, commissions are doing whatever is necessary to create the ability of the regulated utilities to compete. At the same time, commissions are concerned about and are trying to safeguard against utilities hindering competition either by exploiting bottleneck positions or subsidizing competitive services with captive customers' revenues. Commissions seem to be somewhat less concerned with the intraclass problems that may arise when some customers are allowed competitive pricing and when others, without easy access to alternate suppliers, pay full tariff rates. The use of customer-specific offerings or individual-case-basis tariffs is expedient but may not be the best long-run policy.

Many regulators are preparing for the day when even more services will face viable competition and sophisticated buyers of electric and telephone services will see competitive bidding for their business as a natural part of doing business. The existence or threat of competition may exert positive pressures on utilities so that, even if competition could be eliminated, it would be unwise to do so. In telephone especially, the information intensive nature of many modern business and some residential functions will encourage providers to offer services not yet in widespread use. Competition provides rewards for innovation and efficiency. Thus, the development, marketing, and dissemination of new technologies and products are

likely to be better handled by a quasicompetitive market structure than by entrenched monopolies.

Regulation need to adapt to current conditions, renewing itself every so often to reflect changes in the economy, technology, or both. It is not the institutions or rules of regulation that should be inviolable, but the goals: promoting quality universal service at low cost in both a static and dynamic sense—including allowance for upgraded service and technological advances.

APPENDIX A

BACKGROUND INFORMATION

This Appendix briefly amplifies and provides conceptual and technical underpinning for some of the topics mentioned in the body of the report. No attempt has been made to cover these topics completely although references are provided for interested readers.

Cross-Subsidization and Related Issues

The term *cross-subsidization*¹ is often used in regulatory hearings; whether a set of utility rates results in cross-subsidization depends on a number of factors including the definition of being applied. In a broad sense, cross-subsidization refers to a situation in which one class or service pays more than its fair share while another pays less than its fair share. To ensure that there are no cross-subsidies resulting from a pricing scheme, there must be some method to determine fair shares. Unfortunately, there is no unequivocally correct way to do so because of the inherent value judgement involved. Furthermore, economists' formal definitions of cross-subsidization, in attempting to be value free, may create broad bands within which pricing might be considered subsidy-free, especially when production is characterized by economies of scale and scope and when there is a significant component of common costs. One test suggested for subsidy-free prices is that

¹ Cross-subsidization refers to using revenues from one or more market segments—customer classes or services—to subsidize one or more other segments.

... no group of customers is paying more than its stand-alone cost and the regulated firm covers all its fixed costs. An equivalent statement is that the regulated firm break even with each customer group paying at least the incremental cost of serving it.²

In a similar vein, since cross-subsidization and undue price discrimination are related—cross-subsidization is facilitated by the ability to segregate customers and practice price discrimination, and one indication of undue price discrimination is the existence of cross-subsidization, Alfred Kahn has noted that

... the proper limits of discrimination are ... a price to the inelastic demand customers no higher than the ATC [average total cost] of serving them in the absence of discrimination; a price to the elastic customers no lower than the full additional costs of taking on that additional business.³

In his discussion of cream skimming, Kahn indicated that

... no class of customers should be required to pay more than the total cost of serving it alone.⁴

The ceiling is the stand-alone cost of service, and the floor is the incremental cost of service.⁵ This may be generalized so that the appropriate test is that no combination of services is contributing more than its combined stand-alone cost or less than its combined incremental cost, and the firm's total costs are covered. Such standards are clear and relatively stringent in the sense that, if they are breached, there should be no doubt that cross-subsidies exist. On the other hand, these standards may allow wide variation in prices before cross-subsidization can be proved.

² Stephen J. Brown and David S. Sibley, *The Theory of Public Utility Pricing*, (New York: Cambridge University Press, 1986), 3.

³ Alfred E. Kahn, *The Economics of Regulation: Principles and Institutions, Volume I: Principles*, (New York: John Wiley & Sons, 1970), 142.

⁴ Alfred E. Kahn, *The Economics of Regulation: Principles and Institutions, Volume II: Institutions*, (New York: John Wiley & Sons, 1971), 222.

⁵ Stand-alone cost is the ceiling on practical as well as equity grounds. Charging more than stand-alone cost is unfair, and, if entry is not restricted, it invites competitive entry or self-provision—possibly by coalitions of customers.

Incremental and Stand-Alone Cost

Stand-alone cost is the cost of providing a service or serving a class of customers completely independently of other services or customers and, therefore, does not allow for economies of scope though it may allow for economies of scale within a class or service. *Incremental cost* includes only costs associated with adding a customer or a service holding all other outputs constant.⁶ In a more formal sense, suppose that a firm is producing two outputs, 1 and 2, in respective amounts q_1 and q_2 . If the total cost of producing these outputs simultaneously is given by $C(q_1, q_2)$, the stand-alone cost of q_1 is

$$C_{SA}(q_1) = C(q_1, 0),$$

the total cost of producing the current level of output 1 and none of output 2. The incremental cost of q_1 is

$$C_I(q_1) = C(q_1, q_2) - C(0, q_2),$$

the difference between the total cost of producing the current mix of outputs 1 and 2 simultaneously and the stand-alone cost of producing the current level of output 2. If there are economies of scale and scope present in the production of outputs 1 and 2, we will observe the following relation

$$C_{SA}(q_1) + C_{SA}(q_2) > C(q_1, q_2) > C_I(q_1) + C_I(q_2),$$

the sum of the stand-alone costs exceeds the cost of simultaneous production which, in turn, exceeds the sum of the incremental costs.⁷

⁶ These definitions are easily generalized to consider the stand-alone and incremental cost of combinations of services.

⁷ A simple cost function exhibiting these properties is

$$C(q_1, q_2) = A + c_1q_1 + c_2q_2$$

in which A represents fixed costs and each output is produced at constant marginal cost. Although this case involves only two outputs, the analysis is easily extended to many outputs, or output 2 may be thought of as "all other outputs" when considering the stand-alone and incremental cost of output 1.

Under this definition of subsidy-free pricing, a group of customers could claim they were subsidizing others if and only if they were paying more than the cost of serving them independently of other customers. Conversely, they would be receiving a subsidy if and only if other customers would be made better off by their not being served. Charging incremental cost for each output results in the firm failing to meet its revenue requirement or cover total cost, and charging stand-alone cost for each output results in the firm exceeding its revenue requirement. In this two-output example, either output could be charged its incremental cost and the other charged its stand-alone cost and the revenue requirement would be satisfied. Given such bounds, it is not surprising that evidence of explicit cross-subsidization is rare when economies of scale and scope are present.

Fully Distributed Costs and Subsidization

Formal economic tests for cross-subsidization are, as noted above, relatively stringent. As a result, participants in the regulatory process have resorted to weaker, less formal, standards of subsidization. Such standards are often based more on equity grounds than on economic theory. One such standard is based on differences in calculated rates of return across services or customer classes based on fully distributed cost studies. Under fully distributed cost (FDC) ratemaking the allocation of common costs—though based on informed judgement—is arbitrary to some extent since, by definition, common costs cannot be identified and assigned unambiguously to individual sources. Rather, they are apportioned by rule of thumb—though the rule is often quite complicated and scientific. Individual rates depend on the rule used and there are a number of possible allocation rules.⁸

There are two types of disagreements that typically arise from FDC analysis. First, since there is no universally accepted cost allocation method, there will almost always be customers who feel that the allocation rule is inappropriate—that they bear

⁸ See, for example, William Pollard et al., *Cost of Service Methods for Intrastate Jurisdictional Telephone Services* (Columbus, Ohio: The National Regulatory Research Institute, April 1985).

an excessive share of common costs—and that they are therefore subsidizing other groups. Second, given the allocation rule, when proposed prices lead to rates of return—calculated by FDC analysis—for individual services or customer classes that vary considerably from the overall allowed return, customers paying above average returns will claim they are subsidizing low-return customers. The extent to which a set of rates results in disparate class or service rates of return under FDC analysis depends on the allocation rule. Rates that create the appearance of subsidization under one rule may appear not to do so under another rule, or the direction of implied subsidy might be reversed.

Differences in class or service rates of return result from adjustments made after cost allocation rules are used to apportion common and joint investment and expenses to various classes and services. Revenue recovery methods result in rates conforming with various ideals or factors beyond simply meeting the utility's revenue requirement. For example, class or service rates of return calculated from FDC studies may vary intentionally, reflecting differences in competitive conditions or sensitivity of demand to business conditions. They may also vary if regulators allow value-of-service pricing, or if utility rates are used to further social goals.

The last situation is exemplified by the social goal of promoting universal access to the telephone network. Two commonly held beliefs lead to rate differentials. The first belief is that there are positive externalities associated with the consumption of telephone service. The second belief is that business demand for telephone service has a lower price elasticity than residential demand. These beliefs have justified pricing policies that encouraged universal access by setting lower rates for basic residential service—access to the local switch—than for basic business service. Lifeline rates are another example of utility rates being used to further social goals.

Eliminating inappropriate subsidies⁹ has long been a goal of regulation. The concept of "just and reasonable" rates has been used to keep utilities from collecting excess profits from customers with inelastic demands and using these profits to

⁹ The previous discussion of the differential charges for residential and business access is an example of what has been considered "appropriate" subsidization.

subsidize sales to customers with more elastic demands—possibly caused by the existence of competitive alternatives. Subsidizing sales to customers with competitive alternatives could be a form of anti-competitive pricing, especially if some prices were set at less than marginal cost. Widespread explicit cross-subsidization sense would not seem to be likely, but examples of what have been termed *internal subsidies* include uniform pricing of utility services to rural and urban customers with quite different costs of service.¹⁰

Economists are usually disdainful of FDC ratemaking. It considers only supply conditions, focusing on average cost and ignoring marginal cost, and it ignores demand conditions—except when competitive conditions or value-of-service judgements are used to adjust FDC results. Economists, on efficiency grounds, prefer methods such as Ramsey pricing or multi-part tariffs that use both supply—marginal cost—and demand conditions—elasticities and/or consumer surplus measures—to determine prices. Class or service rates of return under Ramsey or multi-part pricing schemes may also vary if computed by an FDC study though such rates of return are not meaningful.

Ramsey Prices¹¹

Under so-called Ramsey pricing, given independent demands, prices are set so that $(P_i - C_i)/P_i = -\alpha/\eta_i$ which is equivalent to $P_i = C_i/(1 + \alpha/\eta_i)$ or

¹⁰ See Kahn, *Economics of Regulation, Volume I*, 190-93. He defines (at 190) internal subsidies as being "where some services or markets pay less than their marginal costs, thus clearly imposing a burden on other users." Whether such subsidies are appropriate or not depends on a number of factors and one can make note of the public subsidies to rural utility customers in the form of the TVA, BPA, and REA programs designed to bring electric power and telephone service to areas that investor owned utilities were reluctant to serve.

¹¹ The name is taken from Frank P. Ramsey, "A Contribution to the Theory of Taxation," *Economic Journal*, 37, no. 1 (January 1927): 47-61. A more recent exposition may be found in William J. Baumol and David F. Bradford, "Optimal Departures from Marginal Cost Pricing," *American Economic Review* 60, no. 1 (March 1970): 265-83.

$P_i/C_i = \eta_i/(\alpha + \eta_i)$ in which P_i is the price for product or service i , C_i is its marginal cost, η_i is its own-price elasticity of demand, and α is a constant sometimes called the "Ramsey number."

If marginal cost is less than average total cost α will be positive, and setting prices at marginal cost will fail to meet the firm's revenue requirement. Ramsey pricing creates lets prices deviate from marginal cost so that the ratio of price to marginal cost is larger for less elastic or price sensitive services. Also, relative contributions to common costs per unit of use will be inversely related to price elasticities.¹²

If $\alpha = 1$, the Ramsey price is the profit-maximizing price for a monopolist using third-degree price discrimination. Conversely, if $\alpha = 0$, the Ramsey price equals marginal cost. Ramsey pricing is a *second-best* scheme; it results in a set of uniform prices that maximize welfare when the firm is subject to a breakeven constraint—total revenue equals total cost including an appropriate return to capital.

Although favored by many economists on efficiency grounds, Ramsey pricing is not without its detractors. It has been noted that the Ramsey pricing rule does not provide any insight as to which fixed costs are direct—and should be collected from individual customers—and which are truly common—and should be collected based on the inverse elasticity rule. Methods suggested for making such determinations may be as arbitrary and contentious as allocation schemes used in FDC studies.¹³ Also, switching to Ramsey pricing may induce multiproduct firms to choose technologies with a high proportion of common costs.¹⁴ Under Ramsey pricing, an increase in the

¹² This is one reason why Ramsey pricing has received a lukewarm response from regulators. It leads to large relative markups over marginal cost for low elasticity consumers who may be "captives" with few alternative providers. Thus, though Ramsey pricing is welfare maximizing, it may be unacceptable on distributional equity grounds since, in general, no mechanism exists for regulators to compensate the losers under such redistribution.

¹³ See Henry E. Kilpatrick, Jr., "Why Fully Allocated Cost Does Not Die a Natural Death," *Public Utilities Fortnightly* 124, no. 10, (November 9, 1989): 23-27.

¹⁴ This may be thought of as an analogue to the Averch-Johnson effect leading to overcapitalization.

relative proportion of common costs could result in these being collected largely from inelastic customers, allowing lower prices for unregulated or competitive services, helping them to compete.¹⁵

Multipart Tariffs

A theoretical optimal multipart tariff sets price at marginal cost and, if marginal-cost pricing does not allow a utility to cover its overhead, allocates common costs by assessing lump-sum user charges based on demand conditions—the relative amounts of consumer surplus that can be extracted from various users.¹⁶ Properly designed multipart tariffs may improve on the economic efficiency of uniform Ramsey prices but, like Ramsey prices, may be unacceptable on distributional grounds since low elasticity consumers may be assessed high customer charges. In practice, however, most multipart tariffs use lump-sum or customer charges to collect non-usage-sensitive costs based on FDC studies.

Price Discrimination

Price discrimination may be most simply defined as charging consumers different prices for the same or similar products when the price differentials do not reflect cost differentials. It is also price discrimination to charge the same prices to consumers who have different costs of service. Price discrimination per se is not

¹⁵ See Michael Sheehan, "Why Ramsey Pricing is Wrong: the Case of Telecommunications Regulation," *Journal of Economic Issues* 25, no. 1 (March 1991): 21-32.

¹⁶ Consumer surplus is the maximum amount that consumers would be willing to pay rather than forego a good or service less the amount that they actually pay in the market. It is the area under the consumers' demand curve but above the price they are charged per unit. References on two-part tariffs include Walter Y. Oi, "A Disneyland Dilemma: Two-Part Tariffs for a Mickey Mouse Monopoly," *Quarterly Journal of Economics* 85, no. 1 (January 1971): 77-96 and Richard Schmalensee, "Monopolistic Two-Part Pricing Arrangements," *Bell Journal of Economics* 12, no. 2 (Fall 1981): 445-66.

necessarily inappropriate and may even be beneficial.¹⁷ Marketing essentially equivalent services as being somehow different when in fact little or no difference exists—except that created by advertising or marketing in the customer's mind—is an example of non-substantive or spurious differentiation. One example of this is the "badge engineering" often practiced by auto manufacturers in which one basic chassis and body is marketed with different names and prices with only minor changes in trim and appointments. Marketing two utility services as being qualitatively different in some respect (reliability, for example, when marketing interruptible service for large electricity customers) when in fact little or no real difference exists is another example of nonsubstantive differentiation and might be considered a form of price discrimination.¹⁸ Considerable effort is expended in advertising, marketing, and product planning to create product differentiation—or the illusion thereof.

The type of price discrimination evidenced by most of the contract pricing of utility services is reverse-no-loser or give-in-if-you-must discrimination. These are essentially different names for the same concept. Reverse-no-loser discrimination involves a claim that discounting the price charged to a large customer with an alternate supplier is preferable to losing that customer's business so long as the discount price includes any contribution to the utility's fixed costs. Otherwise, captive customers or the company would be forced to assume the fixed-cost burden. This is a reversal of the "no-loser" argument for price discrimination based on the claim that price discrimination can potentially make all customers better off—as could happen if there are sufficient economies of scale and scope—so that lowering the price charged customers with elastic demand allows lowering—or, at least, not increasing—prices charged customers with less elastic demand. Give-in-if-you-must discrimination is

¹⁷ See J. Stephen Henderson and Robert E. Burns, *An Economic and Legal Analysis of Undue Price Discrimination*, (Columbus, Ohio: The National Regulatory Research Institute, August 1989), 9-20 and Alan R. Schriber, "Price Discrimination: Creatively Coping with Competition," *Public Utilities Fortnightly* 122, no. 5 (September 1, 1988): 11-14.

¹⁸ See Robert E. Burns, "Are Reliability-Differentiated Products Unduly Discriminatory?," in *New Service Opportunities for Electric Utilities*, (Palo Alto, California: Electric Power Research Institute, forthcoming).

defined as a situation in which "secret departures are made from list price when buyers play one seller off against the others."¹⁹

Long-Run Incremental Cost and Related Concepts

Economic theory has long held that setting price equal to marginal cost—the addition to total cost resulting from increasing output by the smallest feasible amount—is the appropriate rule if economic efficiency is the desired goal.²⁰ It is, however, no simple task to choose the appropriate marginal cost (short-run or long-run) and, once chosen, measure the marginal cost of a particular service or product, especially in multiproduct firms with significant common and joint costs. The problem is complicated additionally because analysts often use different names for equivalent cost concepts and similar names for different cost concepts. For example, sometimes avoidable, incremental, and marginal costs are used (almost) synonymously; at other times they describe different cost concepts.²¹ Moreover, there appears to be no single definition of cost that analysts can agree upon as being always and everywhere

¹⁹ For a discussion of reverse-no-loser discrimination, see Henderson and Burns, *Undue Price Discrimination*, 12. Give-in-if-you-must discrimination is described in Fritz Machlup, "Characteristics and Types of Price Discrimination," in the National Bureau of Economic Research conference report, *Business Concentration and Price Policy*, (Princeton, New Jersey: Princeton University Press, 1955), 400-23 as cited in F.M. Scherer, *Industrial Market Structure and Economic Performance*, (Chicago: Rand McNally, 1970), 256.

²⁰ Ignoring externalities in production and consumption and "second-best" problems such as those that lead to Ramsey pricing schemes.

²¹ Some indication of the variety of definitions and analytical techniques suggested for determining incremental and marginal costs of telephone service may be found in William Pollard, editor, *Marginal Cost Techniques for Telephone Services: Symposium Proceedings*, (Columbus, Ohio: The National Regulatory Research Institute, January 1991); Sanford V. Berg and Dennis L. Weisman, *Costing Principles in the Telecommunications Industry*, (Unpublished working paper, Gainesville, Florida: Public Utilities Research Center, University of Florida, February 18, 1991); and David Chessler and Boyd L. Nelson, *The Long Run Marginal Costs of the Michigan Bell Telephone Company: A Statistical and Econometric Analysis*, (Final report to the Michigan Divestiture Research Fund, Bethesda, Maryland: David Chessler and Associates, July 30, 1991).

appropriate when trying to ensure that contracts meet a cost test and possibly make some net contribution to common costs.

Long-run incremental cost (LRIC) may be defined as the change in total cost, including the effect on fixed and common costs, that results from permanently adding a unit of a single service, adding a customer, or adding a new service, with the specific definition depending on the circumstance—that is, the particular incremental unit being studied. In all cases, however, incremental cost is a forward looking or prospective concept. In contrast, avoided or avoidable cost signifies the reduction in total cost that would be realized if a customer reduced usage, or if a customer or a service were dropped from the system. Avoided cost is therefore a backward looking or retrospective concept. In a world without sunk costs or lumpy investments, incremental and avoided cost would be identical, but in most actual analytical circumstances they will differ.

Incremental cost and avoided cost, are proxies or surrogates for marginal cost. Either may be appropriate depending on whether investment is new, old, obsolete, and so on, and the special conditions, if any, that are attached to the service. For instance, when faced with competitive conditions for a service with existing dedicated or embedded plant with no alternative use (and no salvage value), it may be necessary to price the service at a level such that existing customers will not leave the system—resulting in stranded investment. In this case avoided cost—or, equivalently, short-run variable cost—would be an appropriate proxy for the service's marginal cost and pricing as low as that level could be defensible if demand conditions require it, although pricing somewhat above this floor is clearly preferable.

Avoided cost in this case includes only those costs that would not be incurred if the customer left the system. These include customer-specific and usage-sensitive administrative, maintenance, and operating expenses but do not include expenses that would be incurred whether the customer was or was not on the system. The latter expenses include property taxes, depreciation, and the required return on dedicated investment.

If demand conditions require, pricing to collect some contribution in excess of avoided cost would be defensible in the short run—which would be the remaining

economic life of dedicated investment. If the firm is to recover any additional contribution to non-avoided costs, it must be from other customers—who might prefer the customer being served than not. Alternatively, the firm's shareholders might have to absorb the loss until the dedicated plant is fully depreciated, but they would have no incentive to make new investment in providing that service.

At the other extreme, suppose that the utility is bidding to provide service to a new customer for whom additional investment would be required. In this case, it would be correct to use long-run incremental cost as a surrogate for marginal cost and use it as a price floor. However, that will not always be the case, especially if the new investment has other potential uses.

Different Versions of Incremental Cost

As noted above, incremental cost will vary depending on the assumptions made about the nature of the incremental unit. For example, one of four situations can generally be used to describe the cost of starting or continuing to offer a service or to serve a particular customer. In the first situation, existing investment is in place and would be reusable for another purpose if it were not used to provide the specific service or serve the customer in question. Here, incremental cost is an appropriate surrogate for marginal cost. In the second situation, an existing facility cannot be reused for another purpose if the customer discontinues service. Here, avoidable cost is an appropriate surrogate for marginal cost. A third situation applies when servicing a customer requires placement of a new facilities which would be reusable. Here, the appropriate marginal cost surrogate is incremental cost. The fourth situation exists when new facilities are required to provide service to a customer but, if not used to serve that customer, cannot provide service to another customer. Here, all up-front costs incurred to place the facility must be recovered and the full cost to place the facility would be an appropriate surrogate for marginal cost.

Another way to consider the situation is to note that there is one estimate of cost for increased usage by an existing customer—which may depend on whether capacity constraints have been reached. There is a second estimate of cost would be

for adding a new customer in an established service area. A third estimate would be for adding a new customer in a new service area. Finally, a fourth estimate—most applicable to telecommunications—would be for adding a new service for existing customers. The appropriate cost calculations depend crucially on the assumptions made about the service. Care must be taken, therefore, to ensure that appropriate and defensible assumptions are used in developing contract prices; there should be consistency over time, and cost analysis should drive pricing policy not vice versa.

The utility should price its services at or above incremental cost in those situations requiring new investment. There may be situations in which the utility's incremental cost exceeds the competitive market price for equivalent services. In such situations, the utility may be forced to price its services below full incremental cost in order to remain competitive. Utilities need this flexibility and discretion as long as the price is above variable or avoided cost and some contribution is made to common costs. Pricing at avoided cost should be reserved for those situations where investment is already sunk and the choice is either to recover operating costs plus some contribution to common costs or to allow investment to be stranded.

Allowing pricing strategies to reflect both the competitive nature of some markets and specific cost considerations for individual customers and services is reasonable and consistent with economic theory, but it is not without risks and possible undesirable consequences. Regulators should ensure that the utility does not take advantage of its monopoly position in some services to subsidize competitive services.

If the utility can be competitive in certain markets only by offering services at prices that result in a net loss over a considerable period and there is little real prospect of turning the situation around, the utility probably should not be in those markets. One exception is new telecommunications services which may sometimes be offered without a readily defined market; it is not reasonable for the firms or regulators to require them to be fully compensatory upon initial offering. It is usually thought that in such cases shareholders, not ratepayers, will be responsible for shortfalls and no subsidies from monopoly services will be allowed.

Predatory Pricing and Limit Pricing

Predatory pricing and limit pricing are two forms of strategic behavior designed to make it unprofitable for rivals to compete in a market. *Predatory pricing* describes a situation in which a firm initially lowers its price to a level below both its own and its rivals' costs to drive them from the market with the intention of raising its price to the monopoly level once control of the market has been established. *Limit pricing* refers to an incumbent firm setting its price just low enough to deter potential competitors from entering the market. Since competitors are lured into a market by the specter of high profits, such pricing need not be below cost, just low enough so that perceived profits do not attract entry. The incumbent firm must accept reduced profits in the short run in order to protect long-run profits. If entry and exit from a market are easy—involving few sunk or unrecoverable costs—and there are sufficient potential entrants, the threat of "hit and run" competition may be sufficient to make the market price approach the competitive price and even unregulated monopolists may behave in a socially benign manner.²²

The Effect of Discount Pricing

One way to think about the effect of contract pricing at a discount from tariff rates is to consider the pricing options available to the utility and regulators. A simple analysis of these options is based on Figure A-1, below.²³

²² See William Baumol, John Panzar, and Robert Willig, *Contestable Markets and the Theory of Industry Structure*, revised edition (New York: Harcourt, Brace, Jovanovich, 1988).

²³ This diagram is based on the exposition found in Henderson and Burns, *Undue Price Discrimination*, 13-19. Two comments about RR need to be made. First, the elliptical shape is used for illustrative purposes only: the actual shape of the locus will depend on the demand functions for the two customer groups and on the firm's cost function. Second, the use of the term "revenue requirement" in this context refers not to a specific dollar amount but, rather, to revenues sufficient to cover the utility's operating and maintenance expenses, depreciation, and taxes, with enough left over to cover the required rate of return on rate base.

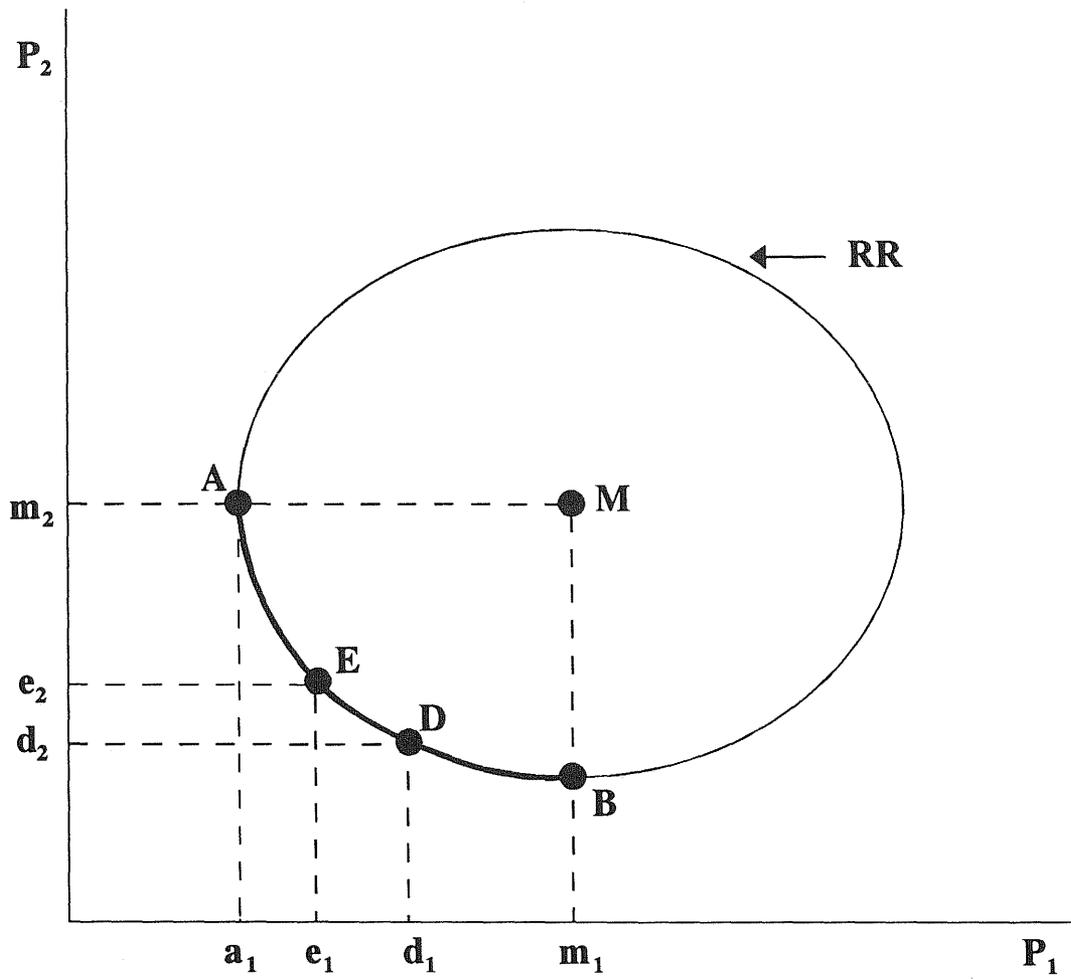


Fig. A-1. Pricing trade-offs under revenue-requirement regulation.

Figure A-1 shows combinations of prices, P_1 and P_2 , that a utility could charge for two outputs—or the same output to two customers. Assumptions behind this figure include the following:

Combinations of P_1 and P_2 that would just allow the utility to cover its revenue requirement are shown by ellipse RR;

Points outside RR result in the utility failing to cover its revenue requirement;

Points inside RR result in the utility collecting more than its revenue requirement;

The profit maximizing prices the utility would charge were it unregulated are shown (hypothetically) by point M with prices m_1 and m_2 ; and

Demands are independent.

Only segment AB of RR is rational.²⁴ On AB the firm's revenue requirement is met and P_1 or P_2 can be lowered if and only if the other price is increased to compensate. AB dominates other points on RR in the sense that moving to a point on AB from any point on RR but not on AB would allow the firm to meet its revenue requirement and lower one or both prices.

Suppose that prices are initially set at D with $P_1 = d_1$ and $P_2 = d_2$, and customer 1 now claims to have an alternate source of supply and demands a price concession, to e_1 . At (e_1, d_2) the utility will no longer meet its revenue requirement but may prefer that result to losing the customer. If the utility is allowed to shift the implicit revenue burden to customer 2, it can meet its revenue requirement at E, with $P_1 = e_1$ and $P_2 = e_2$. In fact, the utility can charge customer 1 a price as low as a_1 and customer 2 a price as high as m_2 while meeting its revenue requirement. These are the choices presented by contract pricing: first is whether to allow the utility to reduce its prices to retain customers, second is whether—and how much—other customers are to be affected by the discount.

²⁴ "Rational" in this context means that each price is set as low as possible given the other price and the revenue requirement.

Advantages of Incumbency

The competitive advantages accruing to a long-established, incumbent firm are intangible but should not be underestimated. The incumbent firm has advantages over new entrants who must generally not only beat the incumbent's price but do so by enough to overcome the advantages of incumbency including name recognition or "brand name capital" created by advertising and historical association with the market. Brand name capital includes the incumbent's reputation for quality service and a commitment to the market. The incumbent might also benefit more than a rival from each dollar of marketing and advertising expenditure. The incumbent would be viewed as much less likely to abandon its customers than would new entrants; it has facilities in place, and has historically been serving the customers that the entrant seeks to attract.

For these reasons, one may reasonably argue that an incumbent utility is likely to continue to be the dominant firm in the market and that its competitors must offer not merely equal but better deals to secure customers. Over time, however, the advantages of incumbency will, like other intangible assets, depreciate unless properly maintained through quality of service, technological improvement, and appropriate pricing policies.

Negative advantages may also accrue to the incumbent if it has developed a reputation for complacency, excessive prices, poor service, and unresponsive behavior towards its customers. Assuming that the utility has net positive advantages of incumbency, its optimal strategy towards meeting new competition is most likely to be to compete but to keep its prices above those of rivals, stressing its reputation for commitment, quality, and service. Over time, however, if rivals develop their own reputations for commitment, quality, and service, the utility must begin to compete more directly on price, but, in the short run, it can exploit its incumbency.

APPENDIX B

ELECTRIC AND TELEPHONE UTILITY CONTRACT PRICING SURVEYS: RESPONDENTS AND QUESTIONS

This Appendix contains the names of the respondents and the questions used in the NRRI survey of state public utility commissions on electric and telephone utility contract pricing practices. The results of these surveys are discussed in Chapters 3 and 5, respectively.

Respondents to the Electric Utility Survey

Commissions from forty-six states and the District of Columbia responded to the electric utility survey which was conducted during the winter of 1990-91. The authors would like to thank the commission staff members who took the time to respond to this survey. They are:

Robert T. Duxbury, Alabama PSC;	J. G. Franco, Alaska PUC;
Barbara Keene, Arizona CC;	Donna Campbell, Arkansas PSC;
Byron D. Shovlain, California PUC;	Saeed Barhaghi, Colorado PUC;
Mark Quinlan, Connecticut DPUC;	Susan B. Neidig, Delaware PSC;
Daniel J. Packey, District of Columbia PSC;	Connie S. Kummer, Florida PSC;
William G. Clay, Georgia PSC;	Norman Lee, Hawaii PUC;
Bill Eastlake, Idaho PUC;	Dennis L. Sweatman, Illinois CC;
Michael J. Mooney, Indiana URC;	Donald P. Judisch, Iowa UB;
Laurie Kelly, Kansas CC;	Michael D. Alexander, Kentucky PSC;
Robert E. Crowe, Louisiana PSC;	Alan Haymes, Maryland PSC;
Marla F. Simon, Massachusetts DPU;	Larry W. Bailey, Michigan PSC;
Bob Harding, Minnesota PUC;	B. Leon Browning, Mississippi PSC;
Jim Ketter, Missouri PSC;	Michael Lee, Montana PSC;
Frank McRae, Nevada PSC;	Thomas C. Frantz, New Hampshire PUC;

R. Prasad Potturi, New Mexico PSC;
Jerry Lein, North Dakota PSC;
Glen Gregory, Oklahoma CC;
Ahmed Kaloko, Pennsylvania PUC;
A. R. Watts, South Carolina PSC;
Jay Baugh, Tennessee PSC;
R. Burrup, Utah PSC;
Robert S. Gahn, Virginia SCC;
David J. Ellis, West Virginia PSC;
Mark Stacy, Wyoming PSC.

Frank Berak, New York PSC;
Robert B. Fortney, PUC of Ohio;
Lee Sparling, Oregon PUC;
Mary N. Kilmarx, Rhode Island PUC;
Bob Knadle, South Dakota PUC;
George Mentrup, PUC of Texas;
Ennis John Gidney, Vermont PSB;
Bruce Folsom, Washington UTC;
John E. Feit, PSC of Wisconsin;

Electric Utility Survey Form

A copy of the survey on state commission policies on utility contract pricing practices for electric utilities begins on the following page.

THE NATIONAL REGULATORY RESEARCH INSTITUTE

Survey on
State Commission Policies on
Utility Contract Pricing Practices
December 1990

As one of its Board approved projects for 1990-91, the National Regulatory Research Institute is studying contract pricing of utility services in the electric and telecommunications areas. We are interested in the extent of such contractual arrangements and the procedures used by state public utility commissions in approving and overseeing such arrangements. We are also interested in other rates which involve a discounted or lower rate and which are offered through contract service or through tariffs approved by the commission either in or outside of the standard ratemaking process. Examples of discounted rates are: economic development rates, incentive rates, and interruptible rates. To minimize confusion as to the types of tariffs and rates, we have included our definition of such rates at the top of the next page.

The results and the analysis of this survey will be included in an NRRI report to the state commissions. Please provide copies of any opinions, orders, statements, staff papers, or other documents that might be useful in understanding your commission's policies and viewpoints with respect to the above rates. Rate schedules and tariffs and service contracts would also be useful, if available. Please mail the documents by February 15, 1991 to:

Peter A. Nagler
The National Regulatory Research Institute
1080 Carmack Road
Columbus, OH 43210-1002
Phone No. (614) 292-9404
FAX (614) 292-7196

Thank you for your reply. The person responding will receive a complimentary copy of the final report.

Respondent Information:

Name: _____
Title: _____
Commission: _____
Address: _____
City, State, Zip Code: _____
Telephone Number: _____

The following is our definition of the rates under investigation.

- * **Contract pricing** is an arrangement by which the utility offers normally regulated services for purchase on a contract basis. The utility and the individual customer negotiate a price and the terms and conditions under which the service will be provided outside of the normal rate hearing.
- * **Economic development rates** are rates offered by a utility to encourage industry to locate in a state or to promote expansion of facilities or increased production by existing industries.
- * **Incentive rates** are rates offered by a utility in order to increase or retain sales to price-sensitive customers and/or retain and attract customers with fuel-switching capabilities to the utility's system.
- * **Interruptible rates** are rates, lower than those for firm service, offered by a utility to a customer willing to have its service interrupted if necessary by the utility.

The first part of this survey, questions 1 through 10, covers contract pricing and services generally. Subsequent sections cover economic development rates (questions 11 through 14), discount or incentive rates (questions 15 through 18), and interruptible rates (questions 19 through 22).

QUESTIONS

A. CONTRACT PRICING AND CONTRACT SERVICES

1. Have any electric utilities applied to the commission to provide service on a contract basis? Yes ___ No ___
 - 1a. If yes, must the commission preapprove such contracts? Yes ___ No ___
 - 1b. Does your commission hold hearings on the proposed contract service?
Yes ___ No ___ Are such hearings open or closed? Open ___ Closed ___
 - 1c. Does commission staff perform an analysis of the proposed contract service?
Yes ___ No ___
 - 1d. Please briefly describe your commission's approval process.

- 1e. What types of data must the utility submit along with the proposed contract?
2. Has the commission issued any generic policy statement or order, or does it deal with these contracts on an ad hoc, case by case basis? Generic statement or order ___ Ad hoc, case by case basis ___ Please attach copies of any orders or policy statements.
3. Which of the following criteria does the commission use in evaluating proposed contract rates? Please check off and briefly describe the criteria used.
- a. Just and reasonable rates _____
 - b. Undue discrimination between customer classes _____
 - c. Undue discrimination among customers in the same class _____
 - d. Load retention _____
 - e. Economic development _____
 - f. Antitrust/predatory pricing _____
 - g. Other anticompetitive effects (effects on the competitors of those receiving the discounted rate) _____
 - h. Economic v. noneconomic bypass _____
 - i. Price floor at marginal cost _____
 - j. Revenue losses occasioned by lower rates _____
 - k. Other (please describe) _____
4. How many electric utility applications to provide service through contracts has the commission approved, if any? _____
- 4a. What benefits (to ratepayers, to stockholders, to the utilities involved, to the local economy and/or the state, etc.) were most prominently expressed by the commission in approving the proposed contracts? Please attach any relevant staff analyses and commission orders and opinions with your answer, if available.

4b. How many such proposed contracts has the commission rejected? _____
What concerns were most prominently expressed by the commission as reasons for rejecting the proposed contracts? Please attach any relevant staff analyses and commission orders and opinions with your answer, if available.

5. How many electric utilities and customers are involved in contract service arrangements? _____ Please list below the utilities and customers involved and the type of service being provided.

6. Are the details of the contracts negotiated between the utility and the customer in the public domain? Yes ___ No ___ If yes, please provide sample contracts along with this survey.

7. Please describe any eligibility requirements (such as minimal amount of power consumption, new customer) for customers to qualify for the services being provided through contracts.

8. Are other customers made aware of the services being provided through contracts? Yes ___ No ___ If yes, can other customers subscribe to the services? Yes ___ No ___

Has the commission ordered the utilities involved to publicize the services? Yes ___ No ___ Please describe.

9. Have the projected benefits (for the utility, the customer, the ratepayer, the local economy and/or the state, etc.) of the contracted services been realized? Yes ___ No ___ Why or why not? Please elaborate.

10. Does the commission have in place any oversight mechanisms specifically for contract service? Yes ___ No ___

10a. Is review restricted to the utility's next rate case, or are special hearings held and special procedures used?
Next rate case ___ Special hearings and procedures used ___

10b. Please describe your commission's procedures for overseeing an electric utility's contract services and the criteria used in such reviews. Please also include any relevant staff analyses and commission orders or opinions with your answer, if available.

B. ECONOMIC DEVELOPMENT RATES

11. Has the commission approved any economic development rates for electric utilities? Yes ___ No ___

11a. If yes, is this service being provided through contracts or through tariffs approved by the commission through the standard ratemaking procedure or both? Contract ___ Tariff ___ Both ___

11b. Has the commission shown any preference for contracts over tariffs or vice versa for providing this service? Yes ___ No ___ If yes, please describe any such preference and the rationale for it.

11c. Has the commission rejected any proposed electric utility economic development rates? Yes ___ No ___

11d. What criteria did the commission use in evaluating and approving or rejecting the economic development rates?

11e. Have the projected benefits of the economic development rates (for the utilities, the customers, the ratepayers, the local economy and/or the state, etc.) been realized? Yes ___ No ___ Too early to tell ___ Please explain.

12. Please list the electric utilities providing and the customers receiving the economic development rates.

13. Please describe any eligibility requirements (such as minimal amount of power consumption, new customer) for customers in order to qualify for the economic development rates.

14. Are the contracts and/or tariffs incorporating the economic development rates in the public domain? Yes ___ No ___

C. INCENTIVE RATES

15. Has the commission approved any incentive rates for electric utilities?
Yes ___ No ___

15a. If yes, is this service being provided through contracts or through tariffs approved by the commission through the standard ratemaking procedure or both?
Contracts ___ Tariffs ___ Both ___

15b. Has the commission shown any preference for contracts over tariffs or vice versa for providing this service? Yes ___ No ___ If yes, please describe any such preference and the rationale for it.

15c. Has the commission rejected any proposed electric utility incentive rates?
Yes ___ No ___

15d. What criteria did the commission use in evaluating and approving or rejecting the incentive rates?

15e. Have the projected benefits of the incentive rates (for the utilities, customers, ratepayers, the local economy and/or the state, etc.) been realized?
Yes ___ No ___ Why or why not?

16. Please list the electric utilities providing and the customers receiving the incentive rates.

17. Please describe any eligibility requirements (such as minimal amount of power consumption, new customer) for customers to qualify for the incentive rates.

18. Are the contracts and/or tariffs incorporating the incentive rates in the public domain? Yes ___ No ___

D. INTERRUPTIBLE RATES

19. Has the commission approved any interruptible rates for electric utilities?
Yes ___ No ___

19a. If yes, is this service being provided through contracts or through tariffs approved by the commission through the standard ratemaking procedure or both?
Contract ___ Tariff ___ Both ___

19b. Has the commission shown any preference for contracts over tariffs or vice versa for providing this service? Yes ___ No ___ If yes, please describe any such preference and the rationale for it.

19c. Has the commission rejected any proposed electric utility interruptible rates?
Yes ___ No ___

19d. What criteria did the commission use in evaluating and approving or rejecting the interruptible rates?

19e. How often is the service of the interruptible customers expected to be interrupted? What is the nature of the interruptibility of such services?

19f. Have the projected benefits of the interruptible rates (for the utilities, the customers, the ratepayers, the local economy and/or the state, etc.) been realized?
Yes ___ No ___ Why or why not?

20. Please list the electric utilities providing and the customers receiving the interruptible rates.

21. Please describe any eligibility requirements (such as minimal amount of power consumption, new customer) for customers to qualify for the interruptible rates.

22. Are the contracts and/or tariffs incorporating the interruptible rates in the public domain? Yes ___ No ___

PLEASE NOTE: WE WOULD APPRECIATE RECEIVING FROM YOU SAMPLES OF THE MORE RECENT CONTRACTS IN THE ABOVE CATEGORIES PLUS ANY COMMISSION ORDERS AND OPINIONS AND STAFF ANALYSES OF CONTRACTUAL ARRANGEMENTS AND DISCOUNT RATES THAT MAY BE AVAILABLE TO THE PUBLIC. PLEASE ALSO INCLUDE, FOR PURPOSES OF COMPARISON, A SAMPLE OF A NONDISCOUNTED RATE AND A FIRM, UNINTERRUPTIBLE RATE. THANK YOU.

Respondents to the Telephone Survey

Commissions from forty-three states and the District of Columbia responded to the survey which was conducted during the spring and summer of 1991. The authors would like to thank the commission staff members who took the time to respond to this survey. They are:

Mr. Larry Smith, Alabama PSC;	Ms. Lorraine Plaga, Alaska PUC;
Mr. Will Shand, Arizona CC;	Ms. Kathy Gammill, Arkansas PSC;
Mr. Chew Y. Low, California PUC;	Mr. Bruce Armstrong, Colorado PUC;
Mr. Michael Coyle, Connecticut DPUC;	Mr. Donald B. Coates, Delaware PSC;
Mr. Bob Loube, District of Columbia PSC;	Ms. Robin Norton, Florida PSC;
Mr. Don Schubele, Georgia PSC;	Mr. Norman Lee, Hawaii PUC;
Ms. Eileen Benner, Idaho PUC;	Mr. Frank Bodine, Illinois CC;
Mr. Labros E. Pilalis, Indiana URC;	Ms. Sandra Makeeff, Iowa UB;
Ms. Karen Matson, Kansas CC;	Mr. Bobby L. Redmond, Kentucky PSC;
Mr. Edward L. Gallegos, Louisiana PSC;	Mr. Joel B. Shifman, Maine PUC;
Mr. M. Burkart, Maryland PSC;	Ms. Janice McCoy, Massachusetts DPU;
Ms. Diane Dietz, Minnesota PUC;	Mr. Randy Tew, Mississippi PSC;
Mr. John Van Eschen, Missouri PSC;	Mr. Dan Elliott, Montana PSC;
Mr. John D. McBride, Nevada PSC;	Mr. Leszeh Stachow, New Hampshire PUC;
Mr. John DeLuca, New Jersey BPU;	Mr. Robert Y. McMillin, New Mexico SCC;
Mr. Wayne Cornelius, New York PSC;	Mr. M. N. Carpenter, North Carolina UC;
Mr. Patrick Fahn, North Dakota PSC;	Mr. Roger Montgomery, PUC of Ohio;
Mr. Larry Manning, Oklahoma CC;	Mr. Tom Harris, Oregon PUC;

Mr. Robert 'Bert' A. Marinko,
Pennsylvania PUC;

Mr. James Lanni, Rhode Island
PUC;

Mr. Joe Rogers, South Carolina
PSC;

Mr. Harlan Best, South Dakota
PUC;

Mr. Joe Werner, Tennessee PSC;

Ms. Lori Morrison, Texas PUC;

Mr. Larry F. Fuller, Utah PSC;

Ms. Rita Barnmann, Vermont PSB;

Mr. Edward C. Addison, Virginia
SCC;

Mr. Thomas L. Wilson, Jr.,
Washington UTC;

Mr. Todd Carden, West Virginia
PSC;

Mr. Dennis Klaila, Wisconsin PSC;

Mr. Michael Korber, Wyoming PSC.

Telephone Utility Survey Form

A copy of the survey on state commission policies on utility contract pricing practices for telephone utilities begins on the following page.

THE NATIONAL REGULATORY RESEARCH INSTITUTE

Survey on
State Commission Policies on Telephone
Utility Contract Pricing Practices
May 1991

As part of our research program for this year, The National Regulatory Research Institute is studying contract pricing of telecommunications services. We are interested in the extent of such contractual arrangements and the procedures used by state public utility commissions in approving and overseeing such arrangements. We are also interested in other rates which involve a discounted or lower rate and which are offered through contract service or through tariffs approved by the commission either in or outside of the standard ratemaking process. Examples of discounted rates are: economic development rates and incentive rates. To minimize confusion as to the types of tariffs and rates, we have included our definition of such rates at the top of the next page.

The results and the analysis of this survey will be included in an NRRI report distributed to the state commissions. For this to be most successful, we need copies of any opinions, orders, statements, staff papers, or other documents that might be useful in understanding your commission's policies and viewpoints with respect to the above rates. Rate schedules and tariffs and service contracts would also be useful, if available. Please mail the documents by **June 17, 1991** to:

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1080 Carmack Road
Columbus, OH 43210-1002
Phone No. (614) 292-9404
FAX (614) 292-7196

Thank you for your reply. The person(s) responding will receive a complimentary copy of the final report.

Respondent Information:

Name: _____
Title: _____
Commission: _____
Address: _____
City, State, Zip Code: _____
Telephone Number: _____

The following is our definition of the rates under investigation.

- * **Contract pricing** is an arrangement by which the telephone company offers normally regulated services for purchase on a contract basis. The utility and the individual customer negotiate a price and the terms and conditions under which the service will be provided outside of the normal rate hearing.
- * **Economic development rates** are rates offered by a telephone company to encourage industry to locate in a state or to promote expansion of facilities or increased production by existing industries.
- * **Incentive rates** are rates offered by a telephone company in order to increase or retain sales to price-sensitive customers and/or retain and attract customers with competitive alternatives.
- * **Special Contracts** are contracts which set rates for unusual and/or new configurations of equipment for which there is insufficient demand to justify tariffs.

The first part of this survey, questions 1 through 10, covers contract pricing and services generally. Subsequent sections cover economic development rates (questions 11 through 14), and discount or incentive rates (questions 15 through 18).

QUESTIONS

A. CONTRACT PRICING AND CONTRACT SERVICES

1. Have any telephone companies applied to the commission to provide service on a contract basis? Yes ___ No ___
 - 1a. If yes, must the commission preapprove such contracts? Yes ___ No ___
 - 1b. Does your commission hold hearings on the proposed contract service? Yes ___ No ___ Are such hearings open or closed? Open ___ Closed ___
 - 1c. Does commission staff perform an analysis of the proposed contract service? Yes ___ No ___
 - 1d. Please briefly describe your commission's approval process.
 - 1e. What types of data must the utility submit along with the proposed contract?

2. Has the commission issued any generic policy statement or order, or does it deal with these contracts on an ad hoc, case by case basis?

Generic statement or order ___ Ad hoc, case-by-case basis ___

Please attach copies of any orders or policy statements.

3. Which, if any, of the following criteria does the commission use in evaluating proposed contract rates? Please check off and briefly describe the criteria used.

a. Just and reasonable rates _____

b. Undue discrimination between customer classes _____

c. Undue discrimination among customers in the same class _____

d. Load retention _____

e. Economic development _____

f. Antitrust/predatory pricing _____

g. Other anticompetitive effects (effects on the competitors of those receiving the discounted rate) _____

h. Economic v. noneconomic bypass _____

i. Price floor at marginal cost _____

j. Revenue losses occasioned by lower rates _____

k. Other (please describe) _____

4. About how many telephone company applications to provide service through contracts has the commission approved, if any? _____

4a. Were any of these "Special Contracts" as defined above?

Yes ___ No ___ How many? _____

4b. What benefits (to ratepayers, to stockholders, to the utilities involved, to the local economy and/or the state, etc.) were most prominently expressed by the commission in approving the proposed contracts? Please attach any relevant staff analyses and commission orders and opinions with your answer, if available.

4c. About how many such proposed contracts has the commission rejected? ____
What concerns were most prominently expressed by the commission as reasons for rejecting the proposed contracts? Please attach any relevant staff analyses and commission orders and opinions with your answer, if available.

5. About how many telephone companies and customers are involved in contract service arrangements? Telephone companies ____ Customers ____ Please list below the utilities and customers involved and the type of service being provided.

6. Are the details of the contracts negotiated between the telephone company and the customer in the public domain? Yes ____ No ____ If yes, please provide sample contracts along with this survey.

7. Please describe any eligibility requirements (such as being a new customer or a customer with a minimum amount of traffic) for customers to qualify for the services being provided through contracts.

8a. Are other customers made aware of the services being provided through contracts? Yes ____ No ____ If yes, can other customers subscribe to the services? Yes ____ No ____ Has the commission ordered the telephone companies involved to publicize the services? Yes ____ No ____ Please describe.

8b. Does the existence of Special Contracts for unusual and/or new configurations of equipment have any effect on your answer to question 8a? If so, why? Have services offered under Special Contracts become tariffed services after sufficient demand has materialized? Yes ____ No ____ If yes, was the tariff set at the Special Contract rate? Please describe.

9. Have the projected benefits (for the telephone company, the customer, the ratepayer, the local economy and/or the state, etc.) of the contracted services been documented? Yes ____ No ____ Why or why not? Is there a system in place to find out? What is the evidence in support of your answer? Please elaborate.

10. Does the commission have in place any oversight mechanisms specifically for contract service? Yes ____ No ____

10a. Is review restricted to the telephone company's next rate case, or are special hearings held and special procedures used? Next rate case ____ Special hearings and procedures used ____

10b. Please describe your commission's procedures for overseeing a telephone company's contract services and the criteria used in such reviews. Please also include any relevant staff analyses and commission orders or opinions with your answer, if available.

B. ECONOMIC DEVELOPMENT RATES

Economic development rates are rates offered by a telephone company to encourage industry to locate in a state or to promote expansion of facilities or increased production by existing industries.

11. Has the commission approved any economic development rates for telephone services? Yes ___ No ___

11a. If yes, is this service being provided through contracts or through tariffs approved by the commission through the standard ratemaking procedure or both? Contract ___ Tariff ___ Both ___

11b. Has the commission shown any preference for contracts over tariffs or vice versa for providing this service? Yes ___ No ___ If yes, please describe any such preference and the rationale for it.

11c. Has the commission rejected any proposed economic development rates for telephone? Yes ___ No ___

11d. What criteria did the commission use in evaluating and approving or rejecting the economic development rates?

11e. Have the projected benefits of the economic development rates (for the utilities, the customers, the ratepayers, the local economy and/or the state, etc.) been realized? Yes ___ No ___ Too early to tell ___ Please explain.

12. Please list the telephone companies providing and the customers receiving the economic development rates.

13. Please describe any eligibility requirements (such as new investment or new customer locating in service territory) for customers in order to qualify for the economic development rates.

14. Are the contracts and/or tariffs incorporating the economic development rates in the public domain? Yes ___ No ___ If in the public domain, can they be disclosed? Yes ___ No ___.

C. INCENTIVE RATES

Incentive rates are rates offered by a telephone company in order to increase or retain sales to price-sensitive customers and/or retain and attract customers with competitive alternatives.

15. Has the commission approved any incentive rates for telephone companies? Yes ___ No ___

15a. If yes, is this service being provided through contracts or through tariffs approved by the commission through the standard ratemaking procedure or both? Contracts ___ Tariffs ___ Both ___

15b. Has the commission shown any preference for contracts over tariffs or vice versa for providing this service? Yes ___ No ___ If yes, please describe any such preference and the rationale for it.

15c. Has the commission rejected any proposed incentive rates for telephone companies? Yes ___ No ___

15d. What criteria did the commission use in evaluating and approving or rejecting the incentive rates?

15e. Have the projected benefits of the incentive rates (for the telephone company, customers, ratepayers, the local economy and/or the state, etc.) been measured? Yes ___ No ___ Why or why not? Is there a system in place to find out?

16. Please list the telephone companies providing and the customers receiving the incentive rates.

17. Please describe any eligibility requirements for customers to qualify for the incentive rates.

18. Are the contracts and/or tariffs incorporating the incentive rates in the public domain? Yes ___ No ___

PLEASE NOTE: WE WOULD APPRECIATE RECEIVING FROM YOU SAMPLES OF THE MORE RECENT CONTRACTS IN THE ABOVE CATEGORIES PLUS ANY COMMISSION ORDERS AND OPINIONS AND STAFF ANALYSES OF CONTRACTUAL ARRANGEMENTS AND DISCOUNT RATES THAT MAY BE AVAILABLE TO THE PUBLIC. PLEASE ALSO INCLUDE, FOR PURPOSES OF COMPARISON, A SAMPLE OF A NONDISCOUNTED RATE. THANK YOU.

