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A symposium on public utility regulation in Maine

The regulation of public utilities in Maine continues to evolve in response to changing economic, political and social forces. Not only has the structure of regulation of the electrical and telecommunications industry seen dramatic changes in the past twenty years, but it also is certain the next decade will see equally fundamental changes. Maine Policy Review invited three key participants in Maine's regulatory arena - Robert Briggs of Bangor Hydro-Electric, Public Advocate Steve Ward, and Thomas McBrierty of New England Telephone - each to interpret the changes of the past two decades and what future changes we can expect. - Editor

The changing role of regulation in the telecommunications industry

by Thomas D. McBrierty, Vice President - Maine, New England Telephone

In just two decades the telecommunications industry has undergone profound technological and market-place changes that are shaping our information based, global economy. In twenty years, the industry has gone from rotary black phones to personal computers, modems, and fax machines; from copper cables to fiber optics; from electro-mechanical switches to computer switches; from a single dominant company to an ever-more competitive marketplace.

While the industry has changed dramatically, federal and state regulators - including those here in the state of Maine - have not stood still. On the other hand, the pace of regulatory change has not been as fast as the technological and marketplace changes. Nevertheless, there is a growing recognition that the underpinnings of traditional rate of return regulation no longer apply in today's relentlessly changing industry and in the competitive, global economy in which we all operate.

What were those assumptions of traditional rate of return regulation?

1. the desire for universal telephone service at reasonable rates;
2. the belief that universality required use of internal subsidies (long distance subsidizing local basic exchange service and business rates generally subsidizing residence rates); and
3. the belief that a unified Bell System could pursue these arrangements.

Universal service achieved

Traditional rate of return regulation worked well, so well in fact, that the goal of universal service has been virtually achieved. Today in Maine, about 95 percent of households have telephone service.

As Federal Communications Commission (FCC) Chairman Sikes (1990a) puts it: "Past policies have served us well. The unified Bell System, cross-subsidies, rate of return regulation, and the like helped produce the world's leading telecommunications network. Those same policies, however, are in some ways as obsolete as yesterday's black rotary phone."

Why do Chairman Sikes and a growing number of regulators and policymakers reach this conclusion? Isn't universal service as important today as it was twenty or twenty-five years ago? The answer is yes, absolutely. However, society is changing its assumption of how best to assure that those truly in need can still obtain basic exchange service. Instead of price subsidies, we have established federal and state programs for certified low-income individuals. For example, in Maine, New England Telephone, working closely with the Maine Public Utilities Commission (PUC), has expanded its Lifeline promotion program for discounted basic service as part of an interim, incentive-regulation agreement that replaces traditional rate-of-return regulation with some incentives and flexibilities.

National policy needed

Other countries have a well-defined, national telecommunications policy. However, we in the United States have yet to develop a clear vision. "A firm national consensus favoring the establishment of an advanced, feature-rich network of the future does not now exist," Sikes (1990b) notes.

Many regulators question who should pay for what they see as a "gold-plated" network that would benefit only heavy users of data. The operating phone companies like New England Telephone must meet this concern head-on if our individual states and the nation as a whole are to remain globally competitive.

The arguments against network modernization sound very much like those made by skeptics of the telephone itself. Some wondered aloud what anyone would do with Alexander Graham Bell's invention. FCC Commissioner Andrew Barrett (1991) cautions his fellow regulators:

"We shouldn't presume, as many regulators are fond of doing, that most residential customers will only want plain old telephone services in the future. We simply don't know that until those residential customers have been offered something more."

Arguments against network modernization also ignore the very real benefits to the general public of applications involving distance learning, telecommuting, health monitoring, services for the disabled, home shopping, banking, and money management. These types of services could reduce traffic congestion, pollution and unnecessary private and public costs.

Telecommunications 'have and have-nots'

Business customers already are looking for more advanced services, and most troubling, the larger ones have the means to develop their own communications systems. In 1987, U.S. companies spent \$14.7 billion on private networks, and will spend 14 times that amount between 1988 and 1993, according to George Gilder (1991), a senior fellow of the Hudson Institute. In the U.S., he estimates there are now 700,000 private networks, compared to just 14,000 in all of Europe. Several Maine companies in recent years also have begun building private networks.

The prospect of large users by-passing the public switched network could leave small businesses and residential customers footing the bill for a second-class communications system. The critical

question becomes whether the public switched network will develop in a way that allows the general public to participate in the benefits of the "Information Age" or whether those benefits will be available only to those who can afford to interconnect with specialized private networks. This prospect is particularly troubling to a rural, geographically remote state like Maine, where small business plays a significant role in the economy.

A "have" and "have-not" patch-work of private and public networks also bodes ill for the competitiveness of our nation. The Japanese strategy targets fiber optics and opto-electronics as the foundation of its economy in the next century. According to Gilder (1991), the Japanese Ministry of International Trade and Industry projects that by 2020, its fiber network will generate no less than one third of Japan's entire gross national product.

Clearly, other countries are betting that in the twenty-first century the telecommunications infrastructure will be even more crucial than it is today. New England Telephone has become increasingly aware of the role that we must play in the development of a world-class telecommunications infrastructure. We have aggressively automated and redesigned our operating systems, begun deploying Signaling System 7 that makes it possible to offer new services, replaced analog switches with digital switches, and increased deployment of fiber-optic cable, broadband services, and network intelligence.

But we and the other regional companies are still hamstrung by the lack of a clear national policy and by regulations that impede rather than advance the vision of an information-rich network. While some regulatory progress - both at the federal and state levels - has been made, it has been mostly piecemeal. However, on the positive side, some states have served as "laboratories" for various types of regulatory refinements.

Maine stipulation

Maine is among more than forty states that have examined or approved alternative forms of regulation in recent years. In June 1989, the Maine Public Utilities Commission approved a stipulation reached by NET and several interveners, including business and consumer groups and the Public Advocate's Office. Hopefully, the agreement is an interim step towards a more permanent form of incentive regulation.

The stipulation provides earnings incentives and flexibility in the pricing and marketing of new services. In return, NET agreed to reduce residence and business toll rates by \$8 million per year. We also spent \$100,000 to increase public awareness of the Maine Lifeline Program, which provides a seven-dollar credit for basic service for customers certified as eligible. NET committed to investing up to an additional \$10 million over-and-above its normal network modernization program for specific new technologies such as Signaling System 7, a network platform for information-age services.

The stipulation provided the company with the freedom to conduct one-year promotional trials for existing services and market trials for new ones. NET also was free to offer special contracts as market conditions warrant. Over the two-year period of the initial agreement, NET tested or introduced an unprecedented fourteen new services. Two of the new services trialed were

Integrated Services Digital Network (ISDN) and Phonesmart (sm) call management services. ISDN is a technology that allows for the simultaneous transmission of voice and data over a single telephone line.

As part of the Stipulation, the company also began listening more closely to its customers through quarterly meetings with a panel of large business customers and another panel of small business and residence customers. We also began holding a series of half-day telecommunications seminars to educate small business customers about telecommunications services.

In June 1990, NET filed comments with the Maine PUC as part of a docket on incentive regulation for telecommunications utilities. In June 1991, the commission extended the current stipulation for a year. Under the extended agreement, the commission and its staff are working on a process to initiate rulemaking on incentive regulation.

Various forms of regulatory reform are steps in the right direction. NET looks forward to working with the commission staff and interveners in moving further along the spectrum of incentive regulation.

Alternatives to rate-of-return regulation

Alternatives to rate-of-return regulation are being tried or studied in almost every state. Alternatives can be considered under four broad categories: (1) service by service flexibility; (2) sharing, a range of earnings or a combination of the two; (3) contracts; and (4) price regulation.

Service by service flexibility

This methodology allows competitive and enhanced services to be offered under greater marketing and earnings flexibility than so-called monopoly services. The Maine PUC has used this for Centrex Services and Quickway Digital Private Line Service.

Sharing, a range of earnings, or combination of the two

Under sharing provisions, a regulated company "shares" earnings in excess of some specified level with customers. Under a range of earnings, the company's allowed rate of return is permitted to fluctuate within some range. Either procedure provides some incentives for regulated firms to improve performance. The commission used this approach in authorizing a range of return on intrastate investment in 1987. It does present incentives; however, the earnings incentive usually is in effect for a very short period of time, thereby limiting the ability of the incentives to generate systematic, strategic change.

Contract

A contract approach, which is sometimes called a "social contract," usually involves the negotiation of various new responsibilities and new incentives for regulated utilities. The Maine Stipulation, which was previously described, is an example.

Price regulation

This method of regulation places a ceiling on prices by using a formula that reflects changes in

the cost of providing the services. The formula automatically adjusts for forces like inflation. The regulated firm under price regulation faces a fixed regulatory formula over an extended period and hence confronts a long-term set of incentives to improve performance.

Strategic versus tactical role

Whatever form or combination of models is adopted, the overall goal should be a framework that allows a direct focus on customers. Too often, utilities spend too much time concentrating on regulators, rather than on customers. No doubt, at times regulators also must feel that their resources are diverted away from greater attention to broader public goals.

The form of incentive regulation should allow the commission to adopt an effective, strategic role in place of a time-consuming, inefficient, tactical one. Regulators should be able to effectively penalize and reward performance based on available opportunities. Marketing efforts, critical to the current and future prospects for the state's economy, should be effectively rewarded. Prices, service quality, new services, and company returns all should be evaluated in a balanced fashion to establish that the company has an opportunity to earn a fair, but not necessarily fixed, return.

States can lead the way

Incentive regulation better redefines the changing roles of both regulators and the regulated firms. States like Maine have served as valuable laboratories for testing new forms of incentive regulation like the stipulation. The states can help lead the way to building a national telecommunications strategy based on a shared vision of a truly world-class infrastructure. More fundamentally, neither state nor federal regulators alone can achieve a comprehensive policy. Continued progress is needed on both levels.

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