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FEDERAL COMMUNICATIONS COMMISSION  
 OFFICE OF SECRETARY

November 28, 1994

**EX PARTE**

Mr. William F. Caton  
 Acting Secretary  
 Federal Communications Commission  
 1919 M Street, N.W.  
 Washington, D.C. 20554

RE: CC Docket No. 94-1

Today, Bell Atlantic is filing the attached written Ex-Parte in the aforementioned proceeding. During recent Bell Atlantic contacts, Bell Atlantic has referred to the following documents which support many of the Bell Atlantic positions in Docket 94-1. The articles which are attached are as follows: "New Investment and the Regulatory Climate", by J. Rohlfis and H. Shooshan III, Telephony Magazine, issued May 2, 1994; "Review of Results of Price Regulation in Selected States" and "Summary of Recently Proposed Price Regulation Plans" by R. Harris, filed by USTA, September 26, 1994; "The Effect of Incentive Regulation on Local Exchange Companies' Deployment of Digital Infrastructure" by S. Greenstein, S. McMaster and P. Spiller, filed by Ameritech, June 24, 1994; "Comments on Promises Vs. Reality: Telecommunications Infrastructure, LEC Investment and Regulatory Reform A Paper by William Page Montgomery, August, 1994" by P. Spiller, filed by Ameritech, November 3, 1994. In addition Bell Atlantic has included a one page chart to indicate the real price reductions which have occurred during the period under review.

Please include this letter and the attached into this record as appropriate.

Sincerely,

*Maureen Keenan*

**Attachments**

CC: K. Brinkmann  
 J. Coltharp  
 K. Wallman  
 R. Welch

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041

# New investment and the regulatory climate

*Why hasn't LEC network investment been greater? Could it be that LECs are unconvinced that additional investment will help their bottom lines?*

JEFFREY H. ROHLFS and HARRY M. SHOOSHAN III

In recent months, studies by Economics & Technology and by Probe Research have attempted to show that local exchange carriers are not making adequate network investments. These analyses have shown that average LEC investment only slightly exceeds book depreciation. Furthermore, these studies argue, new investment by some LECs is less than book depreciation, which means that LEC net plant is declining.

Although these studies raise some important points, their comparison—between the recovery of already invested capital and new investment—is misleading. The costs of both switching and transmission are declining rapidly over time with advances in digital technology and fiber optics. Consequently, any given level of service can be provided less expensively now than in the past.

Moreover, according to the Federal Communications Commission, the rate of deployment of new technology—including the integrated services digital network and signaling system 7—has been greater under price caps than under traditional regulation. In short, there doesn't seem to be any evidence that LECs have failed to make the necessary investments to maintain their networks or that service quality has declined under price caps.

However, the challenge facing both companies and regulators is to move beyond a mentality that focuses on the investment levels sufficient to maintain current lev-



els of service and to accommodate anticipated growth in demand. LEC investment is required to move the country into the information age.

To be sure, companies other than LECs also contribute to the national information infrastructure. Long-distance carriers have already made substantial contributions through deployment of new

fiber networks, enhanced 800 services and virtual private networks.

These carriers will continue to play a vital role in the future. Each year, terminal equipment provides greater functionality at lower cost. In particular, computer users can now connect to a plethora of information networks, including the Internet, using cheap, fast modems.

But LECs have a critical role to play. They are the principal firms—along with other providers of local exchange service—that provide two-way telecommunications to the vast majority of Americans. They provide what Vice President Al Gore has called the on- and off-ramps to the information superhighway. Without continued investment in LEC networks, many users will not benefit fully from the information revolution. Furthermore, information age applications that require mass marketing will be delayed.

## Current LEC Investment

Given the current technological and market opportunities, one might wonder why LEC investment has not been greater. The obvious conclusion is that LECs are not convinced the additional investment will be profitable in the long term.

How can that be? Factors such as market conditions, business conditions, availability of capital and risk preferences favor large investments in LECs' networks.

When you look at market condi-

*continued on page 57*

## New Investment *continued*

tions, it is clear that telecommunications is a growth industry. Between 1989 and 1992, interstate switched access minutes, a major source of LECs' revenues, grew by 6% per year. Technological progress is lowering costs; so output expands along the demand curve. In addition, technology is continually creating profitable new applications for telecommunications, so a safe conclusion is that market conditions are favorable for large LEC investments.

Even though the country has recently gone through an economic recession and a subsequent period of flat economic growth, the telecommunications sector has continued to enjoy rapid growth, as shown above. Consequently, business conditions should not have impeded large LEC investments.

As for capital, LECs are well-funded and have good access to capital markets. LECs also have pursued more risky investment opportunities in the international marketplace and in related indus-

tries and apparently are willing to take risks to take advantage of profitable opportunities.

From a business perspective, LECs are unusually well-suited to

*The realization that the regulatory climate... is unfavorable may come as a surprise to some people.*

make network investments. Their customer base encompasses most businesses and residences in the country. They have substantial technological expertise, and there are significant economies of scope between new telecommunications services and the services currently offered by LECs.

If LECs have all of these factors in their favor, what, then, is the problem? The answer is inescapable: The regulatory climate discourages higher levels of investment.

## Roadblocks

The realization that the regulatory climate in many jurisdictions is unfavorable may come as a surprise to some people. Current earnings in the LEC industry certainly appear to be satisfactory. However, satisfactory short-term earnings, though necessary to stimulate investment, are not sufficient.

Regulators cannot make binding commitments for the future; they need to allow satisfactory earnings in the present to establish good faith with investors.

They also cannot reduce earnings to unsatisfactory levels now and expect companies to respond to regulatory incentives offered for the future. That would be analogous to a developing country confiscating investment by foreigners and then offering (so-called) lucrative incentives for new foreign investment in the future.

Needless to say, investors would be highly skeptical of such an approach. In addition to allowing satisfactory short-term earnings, reg-

*continued on page 58*

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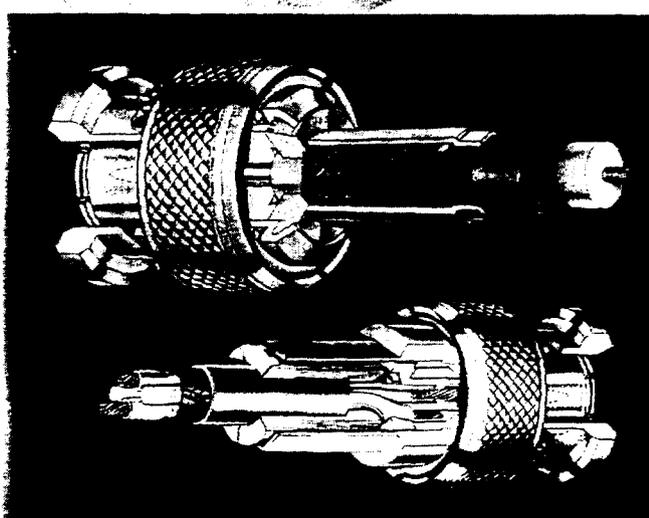
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### New Investment *continued*

ulators must establish a favorable long-term climate to stimulate investment. Unfortunately, several current regulatory policies contribute to an unfavorable long-term regulatory climate. Such policies were established for a variety of reasons, some worthwhile (universal service); others not so worthwhile (to protect firms in related industries from competition).

Whatever the reasons, these policies impede new investment

and could delay the information age indefinitely.

### Video Dial Tone

Telephone companies can use fiber optic facilities to bring broadband services to the general residential population. Unfortunately, the revenues currently produced by such services may not justify the costs unless the telco also offers video services in competition with cable TV providers.

LEC provision of fiber to the home or the curb would be a major increment to the national information infrastructure—and also would create needed competition for the cable industry. One might therefore expect government policy in this area to facilitate LEC provision of video services via fiber, perhaps to the extent of providing actual incentives.

In reality, the opposite is true. Federal and state governments have repeatedly erected roadblocks to inhibit LEC provision of video services. Initially, there was an outright prohibition. Currently, LECs are permitted only to provide video dial tone.

What video dial tone amounts to in practice is a set of complex administrative rules that appear impossible to implement, in large part because the cable industry has used the regulatory process strategically to thwart competition. No commercial applications of video dial tone have yet been approved and it has been eight years since the FCC began to examine the cable/telco cross-ownership rules.

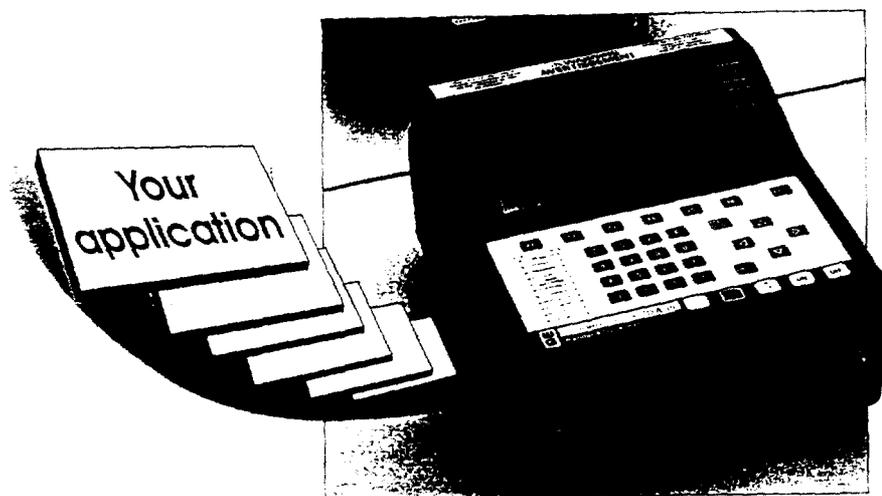
### No Flexibility

Information age services will be discretionary, at least initially, and many such services will be competitive. To succeed in competitive markets, firms need flexibility to price their offerings based on what the market will bear.

Companies must be able to change prices rapidly in response to changing technology and market conditions. To the degree that regulators limit pricing flexibility, the profitability of information age services declines. LECs' incentive to invest in the national information infrastructure will then correspondingly decline.

Most price-cap plans, including the FCC's current plan, give LECs some pricing flexibility. Unfortunately, the FCC has begun to backslide on pricing flexibility. Ironically, it has done so under pressure from competitors whose very presence should trigger even greater flexibility. This backsliding is precisely the wrong policy direction. Furthermore, current price-cap plans do not give firms the flexibility to deaverage or otherwise restructure rates. Deaver-

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aging will be essential in the future, since LECs operate in many local markets, with different costs and different market conditions.

Another regulatory policy that impedes investment is inadequate capital recovery. Telephone plant declines rapidly in value, as a result of technological obsolescence.

Allowable depreciation falls far short of matching these declines. LECs' accumulated depreciation is about 10% less than that of other high-tech firms. Cable firms depreciate plant more than twice as fast as the telephone industry.

Inadequate depreciation puts LEC capital at risk in the out years of an investment. Competition will be pervasive in the LEC industry in five to 10 years. At that time, LEC prices will have to be competitive or LECs will lose business.

LECs will not be able to charge prices to recover depreciation expenses that should have been recovered in the past. The likely result is loss of earnings. Of course, LECs can temper such earnings

losses by delaying investments and slowing down deployment of critical portions of the information superhighway.

Depreciation affects prices directly under rate-of-return regula-

to battle for higher depreciation rates.

At the same time, many state and federal regulators maintain tight control over depreciation, keeping it artificially low. In its Nov. 8, 1993, order inviting comment, the FCC proposed a minimum acceptable life for underground copper cable of 25 years. Apparently the left hand of the FCC does not know what the right hand is doing. Chairman Reed Hundt is aggressively pursuing policies to develop the information su-

perhighway, which presumably will be fiber based. At the same time, the FCC presumes that copper cable will be a productive asset for 25 years. The latter policy is wholly inconsistent with the chairman's vision and discourages the investment needed for its fruition.

#### The \$20-billion Problem

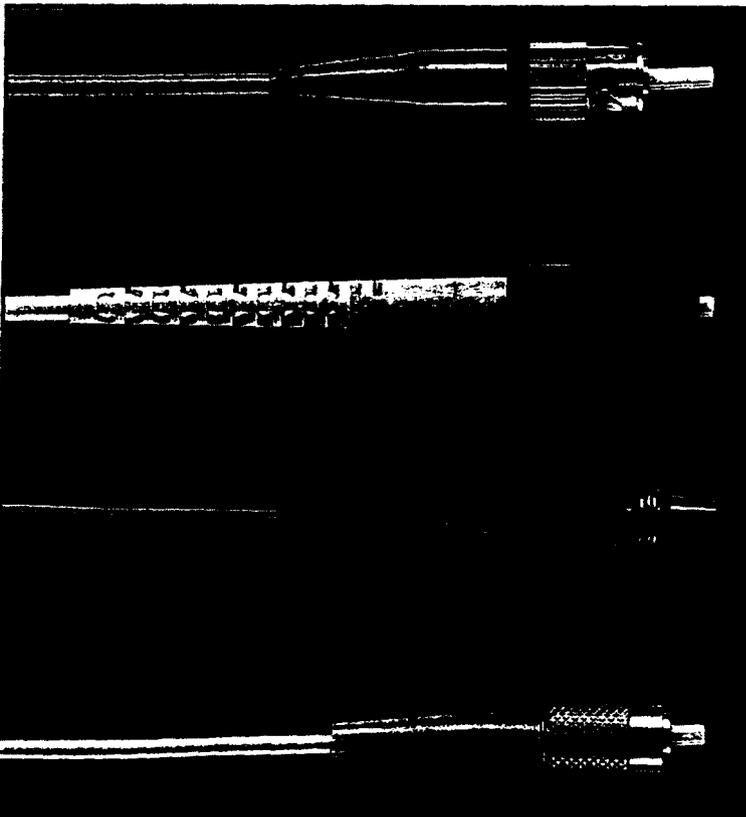
For decades, regulators have insisted that local services be priced below economically efficient levels. To make up the earnings shortfall,

*continued on page 60*

*the under-depreciation problem  
has gotten worse under  
the short-term price-cap plan  
adopted by the FCC*

tion. Depreciation also affects prices under short-term price-cap plans each time the plan is renegotiated. The new plan must allow LECs the opportunity to earn a fair return.

Contrary to the views of E&T and Probe, the under-depreciation problem has gotten worse under the short-term price-cap plan adopted by the FCC. Depreciation is not treated as an exogenous cost, so revenues do not increase as depreciation rates increase. Hence, LECs have less incentive



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## New Investment *continued*

long-distance services have been priced well above cost. Since the AT&T divestiture, this rate structure has been perpetuated via access charges. Access charges are used to defray substantial costs that are really attributable to subscriber access and local services.

A Strategic Policy Research study recently demonstrated that the disparity between prices and marginal costs for long-distance access and intraLATA toll is about \$20-billion per year.

The current pricing structure was originally intended to promote universal service, which was achieved long ago. Furthermore, the experience of the 1980s amply demonstrates that local rates can rise substantially without causing telephone subscribership to decline significantly.

Although the current pricing structure is economically inefficient in any event, it becomes completely untenable under competition. In particular, competitive access providers (CAPs) provide direct connections between end users and interexchange carriers. By using a CAP, a customer avoids

paying an appropriate share of the subsidy. Generally, these are the larger customers who would be providing the greatest subsidy.

As local competition becomes pervasive, LECs will be less and less able to recover the \$20 billion from long-distance access and intraLATA toll services. If LECs lower their prices toward marginal cost, they will no longer receive subsidy revenues. They will lose even more if they maintain prices and lose the business as a result.

In either case, LECs will have to recover the lost revenues from other sources. That is the \$20-billion problem. Solving this problem is politically difficult, and for the most part, regulators have avoided dealing with it. However, if it is not dealt with, LEC earnings could decline disastrously when competition becomes pervasive. That risk is a dark cloud over the entire LEC industry and has a chilling effect on any new investments in the LEC network.

The E&T and Probe studies criticize LECs for not making more network investments and recommend punishing LECs by reducing

allowed depreciation. E&T also suggests additional punishment in the form of expropriation of unregulated profits, skepticism toward price caps and a new round of divestiture. It is hard to imagine policies more precisely calculated to make the problem worse.

A more constructive approach is to offer incentives for network investment; for example, in a price-cap plan. For this approach to work, the incentives must be quite significant and viewed as credible. A good example is the federal government's investment tax credits of 15% to encourage firms to make investments that would otherwise be unprofitable.

A still better approach is to improve the regulatory climate for network investments, which involves facilitating entry into video services, increasing pricing flexibility, speeding up capital recovery and dealing with the \$20-billion problem. If policy-makers build the right regulatory structure, the investments will come. ■

*Jeffrey H. Rohlfis and Harry M. Shooshan III are Principals in Strategic Policy Research Inc., Bethesda, Md.*

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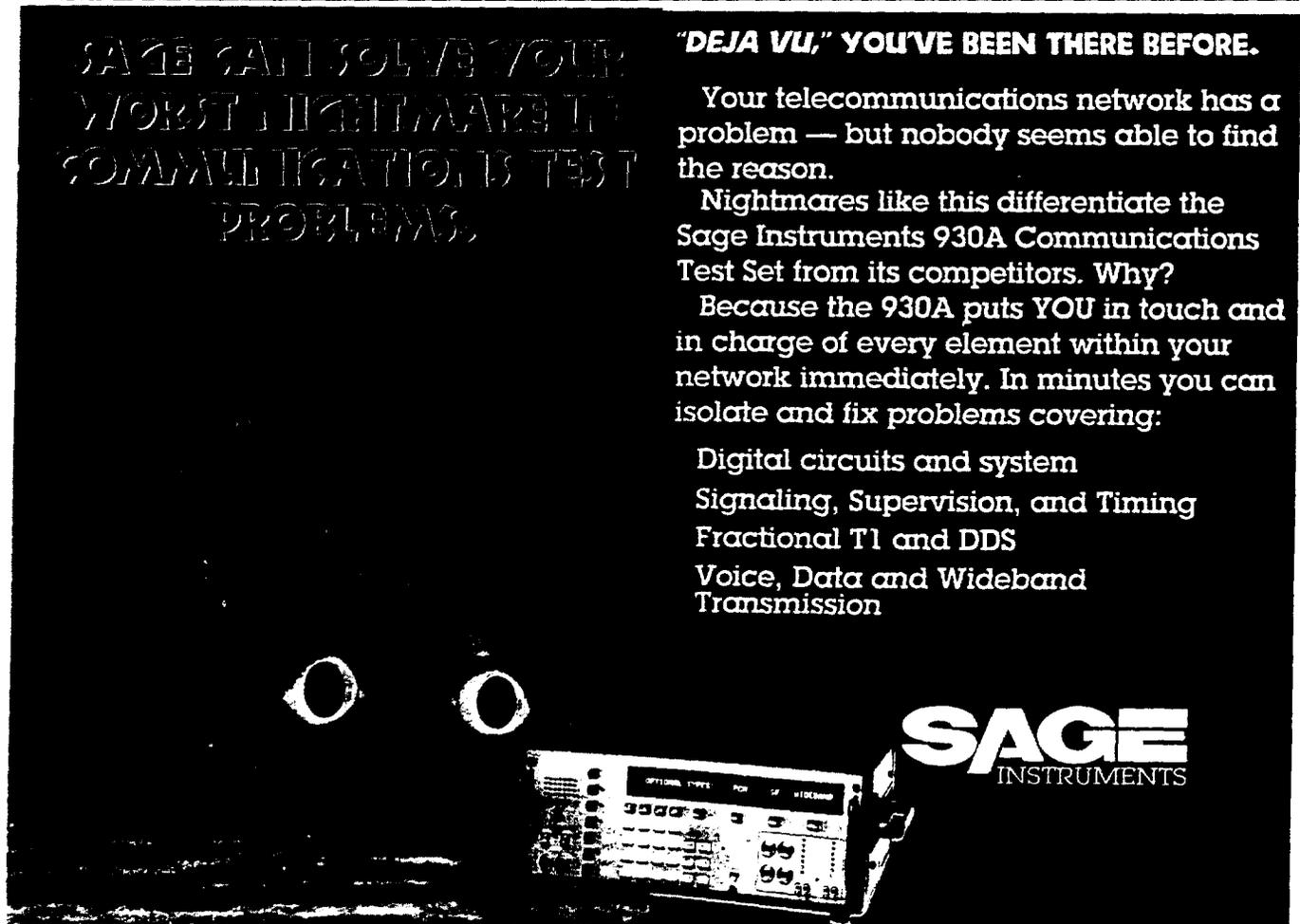
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September 26, 1994

Mr. William F. Caton  
Acting Secretary  
Federal Communications Commission  
1919 M Street NW - Room 222  
Washington, DC 20554

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Re: Ex Parte Communication  
CC Docket No. 94-1

Dear Mr. Caton:

On September 26, 1994, in response to questions posed at previous meetings, the United States Telephone Association (USTA) provided the attached two documents to the following people: Kathleen Wallman and Kathleen Levitz of the Common Carrier Bureau; David Nall, Dan Grosh, Mark Uretsky, Joanne Wall, and Anthony Bush of the Tariff Division; Robert Pepper and Michael Katz of the Office of Plans and Policy; and James Olson of the Competition Division. The documents are entitled "Review of Results of Price Regulation in Selected States" and "Summary of Recently Proposed Price Regulation Plans." The viewpoints expressed are consistent with USTA's written filings in this docket.

The original and a copy of this ex parte communication are being filed in the Office of the Secretary on September 26, 1994. Please include them in the public record of this proceeding.

Respectfully submitted,

Linda Kent  
Associate General Counsel

Attachments

- |                 |              |                  |
|-----------------|--------------|------------------|
| cc: David Nall  | Joanne Wall  | Robert Pepper    |
| Dan Grosh       | Anthony Bush | Michael Katz     |
| Mark Uretsky    | James Olson  | Kathleen Wallman |
| Kathleen Levitz |              |                  |

**ATTACHMENT 2**

Review of Results of Price Regulation

in Selected States

and

**ATTACHMENT 3**

Summary of Recently Proposed Price Regulation Plans

of

Comments of Dr. Robert G. Harris on Behalf of South Central Bell

in

Tennessee Public Service Commission Rulemaking Regarding

Local Exchange Competition

Docket 94-00184

## ATTACHMENT 2

### Review of Results of Price Regulation in Selected States

Six States have adopted price regulation or rate freezes with no earnings sharing early enough as part of their incentive regulation plans so that positive results can be identified. The states with price regulation or rate freezes and no earnings sharing or other features of rate of return regulation are:

- Kansas: TeleKansas Plan in 1990 for Southwestern Bell in Docket #166, 856-U.
- Michigan: The 1991 Michigan Telecommunications Act replaced an earlier earnings sharing incentive regulation plan in effect since 1989.
- Nebraska: LB835 was passed in 1986 to essentially deregulate local service rates and new service introduction.
- North Dakota: SB2320, enacted in 1989, created price cap indexes for essential services. SB2440, enacted in 1993, expanded SB2320 and set the price cap into law.
- Vermont: The 1989 Vermont Telecommunications Agreement froze local rates for three years and imposed no earnings limitation. The Agreement was renewed in 1991 until 1993 when no further extensions were permitted under current statutes.
- West Virginia: A second-generation incentive regulation plan was adopted in 1991 that continued the rate freeze on basic local rates of an earlier plan and had no earnings limitations.

Each of these plans included various stipulations and compromises to ensure that the state ratepayers and the participating local telephone companies would receive benefits from the proposed incentive schemes. A summary of each regulatory plan and their impact is provided in the following section.

## Kansas

The main features of TeleKansas, Southwestern Bell's incentive regulation plan, were:<sup>1</sup>

- The plan froze basic local residential and business rates for the period 1990-1995.
- Local rates could increase for some customers due to the elimination of some party lines and exchange reclassifications.
- Bell customers will save about \$21.3 million in each of the first two years of the plan and \$22.8 million in the remaining three years for a total of \$110 million.
- Bell committed to an investment of \$160 million over next five years to modernize telephone facilities and upgrade all customers to one-party service and eliminate all 911 basic service charges.
- The plan changed the way Bell was regulated (it removed the regulatory cap on Bell's earnings).
- Pricing flexibility on certain discretionary products was allowed by shortening the approval process to 20 days from 30 days.

The local press appeared to provide some evidence that the effects of TeleKansas have been very positive for both Southwestern Bell and telephone customers. While maintaining the price freeze on local service, the company went ahead with additional infrastructure investment and introduced new services made possible by increased regulatory flexibility.

"As Southwestern Bell Telephone Co. enters its second year under a plan that has closed the door on traditional rate-of-return regulation...the company is reaping the rewards with increased sales and rural customers are profiting with a more modernized telephone network... The company was able to attain a 20 percent sales increase in Kansas in the fiscal year ending Dec. 31st."<sup>2</sup>

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<sup>1</sup> Summarized from "State Modifies Bell Plan to Save Customers \$110 million" by United Press International, 2/2/90.

<sup>2</sup> Lee Ann Groene "Southwestern Bell Sales Increase as TeleKansas Finishes First Year" in Wichita Business Journal, 2/1/91

Conversion to digital switching was significant:

"As the first step of the TeleKansas plan in Kansas, the company in 1990 replaced mechanical switches with digital switches in 24 of the state's 131 central offices. Another 36 central offices will be equipped with the technology this year. Those installations, while providing rural customers with services previously unavailable, have also played a key role in boosting Southwestern Bell's sales."<sup>3</sup>

To be able to financially support the new infrastructure, Southwestern Bell introduced large numbers of new services and revamped its marketing strategy:

"With the recent approval by state utility regulators of a network modernization plan for the state's rural customers, Southwestern Bell's Telephone Co. is facing another major hurdle: how to gain a full return on the company's \$160 million investment. Already, the wheels are turning among those in the company's marketing and pricing departments, trying to devise unique ways to attract new customers with pricing structures that will not turn away prospective or existing customers."<sup>4</sup>

The new plan resulted in large numbers of new products:

"Sales also were stimulated by the introduction of dozens of new products in 1990, ranging from voice-mail services for both business and residential customers to a personalized ring service, which offers customers the ability to distinguish their calls by a personalized ring for different individuals."<sup>5</sup>

In summary, TeleKansas resulted in increased infrastructure investment, more new services to justify financially those investments, and rate stability to local service

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<sup>3</sup> Lee Ann Groene, "Southwestern Bell Sales Increase as TeleKansas Finishes First Year" in Wichita Business Journal, 2/1/91

<sup>4</sup> Lee Ann Groene, "TeleKansas Investment to Spark Telemarketing Blitz" in Wichita Business Journal, 1/22/90

<sup>5</sup> Lee Ann Groene, "Southwestern Bell Sales Increase as TeleKansas Finishes First Year" in Wichita Business Journal, 2/1/91

customers. The telephone company had impressive first year revenue increases while maintaining rate stability and increasing infrastructure investment.

### Michigan

Michigan's Telecommunications Act of 1991 essentially replaced rate of return regulation with service-by-service regulation. The main features of the plan were:

- Monthly service rates were frozen for all but the smallest LEC's for two years
- Residential rates were flat-rated up to 400 calls
- Basic local exchange rates may not cross-subsidize other services
- Access rates continue to be regulated and are capped at interstate rates unless approved by the Commission or upon agreement of the parties

A summary of the plan was provided in the local press:

"Freezes for two years basic local service rates...After the two-year period, Bell can file for a rate increase with the Michigan Public Service Commission. An increase less than the inflation rate will involve little state review. An increase higher than inflation will face more stringent review...Deregulates the long-distance service Michigan Bell provides within area codes. Bell says the intent is to remove the service from cumbersome state regulation and to lower rates. Rates can only go down because the law caps Bell's long-distance charges for homes and businesses."<sup>6</sup>

The new law required the Commission to issue a report on the impact of the new law to the legislature and the governor on Jan. 1, 1994.<sup>7</sup> Despite its opposition to and dissatisfaction with the new law, the Commission recognized some results after

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<sup>6</sup> Peter Luke, "Frequent Telephone Users to Pay More" in The Grand Rapids Press 12/5/91.

<sup>7</sup> Public Service Commission, 1994 Report to the Legislature and Governor.

passage of the law. One of the results of the plan was that local service rates did not increase despite allowances for carriers to increase them:

"No provider of basic local exchange service has had a general increase in rates pursuant to the notice process in Sec. 304. No provider of basic local exchange service has attempted to adjust rates for basic local exchange service under the provisions of Sec. 203."<sup>8</sup>

The Commission noted that Michigan Bell introduced 25 new services in basic local exchange services. This is significant in that, just prior to the Act, Michigan Bell offered only 82 local services.<sup>9</sup>

The Commission report also quoted local press reports and its own research on declines in toll services by Michigan Bell:

"Prices for the PEC's (Michigan Bell and GTE-North) toll services have moved primarily downward. The decline in toll rates for Michigan Bell seems greater than for GTE-North."<sup>10</sup>

"The National Utility Service determined Michigan Bell's intra-LATA toll rates "between 1991 and 1992 fell 4.6%" and "fell (between) April, 1992 (and) April, 1993 . . . 8.1%. The 8.1% decrease placed the Michigan Bell rates well below the national average."

Furthermore, in its overall assessment of the regulation, the Commission found that market forces were able to present workable alternatives to regulation in some competitive segments of the market.<sup>12</sup>

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<sup>8</sup> Public Service Commission 1994 Report to the Legislature and Governor p. 38-39.

<sup>9</sup> Public Service Commission 1994 Report to the Legislature and Governor p. 5.

<sup>10</sup> Public Service Commission 1994 Report to the Legislature and Governor p. 25.

<sup>11</sup> Detroit Free Press report on June 15, 1993 quoted in Public Service Commission 1994 Report to the Legislature and Governor p. 25.

<sup>12</sup> Public Service Commission 1994 Report to the Legislature and Governor p. 69.

The Commission recognized that competition as encouraged by the Act would also encourage investment in new technology.

"To the extent that Act 179 fosters or encourages a truly competitive telecommunications marketplace, it too will foster or encourage the deployment of state of the art technology."<sup>13</sup>

Finally, despite its criticisms of various segments of the plan and its perceived lack of clear evidence, the Commission found that overall, the plan provided a workable regulatory framework.

"The Commission believes Act 179 presents a workable regulatory framework that permits the forces in competitive markets to replace regulation. The law also provides protection for captive customers of monopolistic basic services. The Commission recommends deletion of the January 1, 1996 sunset."<sup>14</sup>

In summary, the deregulation law was passed too recently to draw many convincing results. No basic service rate increases have occurred and Michigan Bell has substantially reduced its toll service charges and intra-LATA toll rates.

### **Nebraska**

LB 835 deregulated all telecommunication company rates with one exception: basic local exchange service. Tariffs introducing new services or altering rates for existing services can be implemented 10 days after they are filed at the Commission. Basic local exchange service rates are not subject to traditional rate of return regulation. Basic local exchange rates are covered under various provisions of the Law: (1) The telephone companies must give their customers 120 days notice and hold a public

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<sup>13</sup> Public Service Commission, 1994 Report to the Legislature and Governor p. 51-52.

<sup>14</sup> Public Service Commission, 1994 Report to the Legislature and Governor p. 70.

informational meeting in each commission district before they can change their rates; (2) Consumers can authorize the Public Service Commission to review a rate increase if enough of the subscribers affected by a rate increase sign a petition; (3) The PSC can review basic local exchange service by its own motion if rates go up by more than 10% in a year.<sup>15</sup>

The apparent lack of regulation over rates does not mean that the PSC does not oversee the industry:

"The Nebraska PSC still plays an active role in monitoring industry developments and quality of service matters. It is authorized to investigate and monitor the technical quality of the state's public telecommunications facilities."<sup>16</sup>

LB 835 shifted the regulatory emphasis from rates and prices to quality of service and technology deployment

"The role of the Public Service Commission has changed as a result of the deregulation of local telephone rates. There is now more emphasis on quality of service regulation, which was enhanced by LB 835. The Commission mediated several hundred disputes last year between telephone companies and consumers. Also, an aggressive program has been implemented testing central telephone offices around the state, leading to technical upgrades in the industry and better service for the consumer."

Contrary to claims that telephone rates would double in five years, US West's basic service rates did not increase between 1987 and 1991.

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<sup>15</sup> This description was drawn from Mueller, Milton L. Telephone Companies in Paradise: A Case Study in Telecommunications Regulation. New Brunswick, NJ: Transaction Publishers, 1993. For more detail on the legislation, refer to this source.

<sup>16</sup> Mueller, Milton L. Telephone Companies in Paradise, p.33

<sup>17</sup> James Munnely (member of Nebraska Public Service Commission). "Commission Regulates Telephone Quality, not Rates" in Omana World Herald 7/27/93.

"US West's basic service rates have not changed at all since LB 835 went into effect. An unofficial rate freeze has been maintained since January 1987. This is true for allRate groups and for both residential and business lines..."<sup>18</sup>

Opponents of LB835 have tried to portray constant rates as excessive and contrary to a downward trend in the national average of basic local service rates. They base this on FCC statistics showing a \$3.174 billion decline in net decreases in state rate cases since 1987.<sup>19</sup> A comparison of Nebraska's business and residential rates with its neighbors, however, suggests that Nebraska's rates are not discernibly higher or lower than its neighbors or that they have missed any "downward trend":

"In 1991 US West-Nebraska's B1 rate for large exchanges was \$37.55 (including Touch Tone)...If B1 rates for the other four states are combined into an average weighted by the number of access lines, then Nebraska's rate is \$0.41 lower than the average of the other four states. Thus there is no indication that B1 rate levels in Nebraska have been pushed to abnormal heights by deregulation..."<sup>20</sup>

The same pattern holds for residential rates:

"The pattern of change since 1986 is very similar to the pattern for business rates. Minnesota and Iowa, which had significantly higher rates in large exchanges than Nebraska, have implemented 4-5% decreases. Colorado, with much lower rates, has moved steadily upward, increasing basic local service rates by 49% over 1986 levels. There is no evidence that Nebraska has missed out on a general downward trend..."<sup>21</sup>

In fact, the regional trend has been one of convergence of local rates for various states.

"The pattern revealed by these statistics is one of convergence toward a mean: states with rates that are higher than Nebraska (Minnesota and Iowa) made

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<sup>18</sup> Mueller, Milton L. Telephone Companies in Paradise, p. 56.

<sup>19</sup> See page 62 of Telephone Companies in Paradise for more detail.

<sup>20</sup> Mueller, Milton L. Telephone Companies in Paradise, p. 63.

<sup>21</sup> Mueller, Milton L. Telephone Companies in Paradise, p. 66.

reductions that brought them closer to Nebraska. The one state with rates significantly lower than all others (Colorado) raised them substantially."<sup>22</sup>

In service innovation, LB 835 gave Nebraska an advantage over other states. LB 835 allowed carriers to introduce and test new services virtually at will.

"We found that LB835 has been successful at encouraging new service introductions by US West in Nebraska. The absence of regulatory review gives the state a clear comparative advantage over other states as a site for introducing and testing new services."<sup>23</sup>

This had a small but measurable effect on investment:

"As noted before, Nebraska received new and experimental services more rapidly and more frequently than other US West states, despite its small market size. Rate deregulation at the state level appears to have provided a moderate stimulus to investment and service innovation by removing regulatory constraints on capital recovery."<sup>24</sup>

The effect of deregulation and increased investment is gradually having an impact on Nebraska's technological lead over other neighboring states.

"...US West's positive results in Nebraska represented a genuine response to opportunities created by detariffing. The differential between Nebraska and other states appears to be increasing rather than decreasing as time passes."<sup>25</sup>

Much of the increased investment and service introduction occurred despite a negative impact on US West earnings. Deregulation did not result in excessive earnings for the largest telephone carrier in Nebraska:

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<sup>22</sup> Mueller, Milton L. Telephone Companies in Paradise, p 63-64.

<sup>23</sup> Mueller, Milton L. Telephone Companies in Paradise, p 119.

<sup>24</sup> Mueller, Milton L. Telephone Companies in Paradise, p 138.

<sup>25</sup> Mueller, Milton L. Telephone Companies in Paradise, p 147.

"US West's rates of return have been consistently low and dropped steadily for the first three years [after deregulation]. The Lincoln Telephone Company has done better, but its profit levels have remained fairly stable, and not outside the norm for regulated companies. The state's small independent, privately owned companies, on the other hand, have seen their profits soar."<sup>26</sup>

This discrepancy in rates of return between the largest carriers and the smaller independents did not go unnoticed in the local press and even by opponents of the original legislation:

"The financial figures suggest that US West, the state's largest provider of local telephone service, has not abused the rate-setting freedom that the Legislature passed in 1986 as Legislative Bill 835."<sup>27</sup>

In summary, LB835 did not completely deregulate local telephone service. Instead it replaced control over rates and earnings with monitoring of service quality and technology improvements. Contrary to the assertions of various opponents, local rates did not rise after LB835 was enacted; Nebraska rates have remained close to those of neighboring states; the law had a positive impact on new service introduction and network investment; and finally, rates of return for the dominant carrier, US West, were in fact well below what they might have been under traditional regulation.

## North Dakota

Some key features of SB2320 and SB2440 governing incentive regulation were:

- SB2320 classified services as essential and non-essential.
- Rates for essential services were set by the PSC's price factor formula (basically a price cap index).

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<sup>26</sup> Mueller, Milton L. Telephone Companies in Paradise, p 152.

<sup>27</sup> State Senator David Landis of Lincoln quoted in "Landis Seeking to Re-regulate Phone Service" in Omaha World-Herald 12/29/93.

- Rates for non-essential services are not regulated
- SB2440 increased the number of non-essential services and reduced the number of essential services; it also set the price cap in the law.
- Essential service rates have been allowed to increase slightly by the price cap index; the price cap for US West was increased by 1.665% in 1992 and by .488% for 1993; for 1994 the increase will be .6%.

SB 2440 was introduced to clarify and set into the law the list of essential services to be governed by the price cap index and to set the price cap index and its productivity adjustment into the law. Public support for the passage of the law appeared to be broad-based as evidenced by the margin of passage in both chambers of the North Dakota Legislature. SB 2440 passed with 46 votes in favor and one against (2 absent) in the Senate and with 98 votes in favor and zero against in the House.<sup>28</sup>

There exists some evidence that the price regulation law may have aided the relocation of industries into the state:

"There are examples of telecommunications service industries locating a portion of their operations in North Dakota."<sup>29</sup>

Some new capabilities appear to have been made available for specialized applications:

"...There is a substantial increase in the number of long-distance educational consortiums organized by the schools."<sup>30</sup>

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<sup>28</sup> Senate Bill No. 2440, page 12, North Dakota Legislative Assembly.

<sup>29</sup> David Crothers "How Deregulation Has Affected North Dakota Telecommunications - A Look at the Past Two Years" in Rural Telecommunications 11(1) (Jan./Feb., 1992), p.43-45.

<sup>30</sup> David Crothers "How Deregulation Has Affected North Dakota Telecommunications - A Look at the Past Two Years" in Rural Telecommunications 11(1) (Jan./Feb., 1992), p.43-45.

In summary, evidence of positive effects of price regulation in North Dakota is limited. However, rate increases for essential services appear to have been limited as well. Furthermore, there seems to be broad public support for continuing and expanding the price cap plan as evidenced by the broad margin of passage of SB2440.

### Vermont

The Vermont Public Service Board approved the Vermont Telecommunications Agreement (VTA) on Dec. 30, 1988. It was originally to run for three years but was later extended for an additional two years. After a second agreement was withdrawn in 1992, the 1987 social contract could only be extended through 1993 due to statutory limitations. The main provisions of the VTA

- Eliminated rate of return regulation for New England Telephone.
- Provided NET with substantial freedom to offer "new services" with rates, terms and conditions of its own choosing
- Stabilized local service rates for three years (extended since then, but provided for rate increases when the agreement was extended)
- Committed over \$280 million for network modernization (completed by the end of 1992).
- Maintained quality of service in accordance with specific criteria.

The Vermont Press viewed the plan favorably

"In 1987, the Vermont Public Service Board signed a landmark agreement with New England Telephone that radically altered the way the company was regulated.

The result has been dramatic: Stable telephone rates; a proliferation of new services; and the most sophisticated telecommunications network in the country.

More than 80 percent of the state is served by digital switching and fiber optic trunk lines, and the figure is rising."<sup>31</sup>

"Under the Vermont Telecommunications Agreement, New England Telephone agreed not to raise the price of local telephone service and to accelerate its capital improvement program. In return, the state abolished regulation of competitive services and left the company free to earn any rate of return it could."<sup>32</sup>

The agreement appears to have had generally positive results as summarized by Richard Andrews of Vermont Business Magazine:<sup>33</sup>

- Local telephone rates in NET's territory have been stable since 1985. Ninety-five percent of all Vermont Residents have phones, the fourth-highest rate in the country.
- NET invested \$280 million in five years to upgrade its system. The money would have been spent eventually even without the agreement, but more slowly. The new equipment means development officials can assure potential corporate newcomers that they won't be isolated in Vermont.
- Nineteen new services have been introduced in Vermont, more than in any other state serviced by NET.
- The state has spent less time and money regulating NET
- Regulatory rules have not changed during the agreement, allowing NET, its customers and its competitors to plan with more certainty. Less regulation means NET and its competitors can focus more on their businesses and customers and less on regulators.

NET profits did not increase during the VTA:

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<sup>31</sup> Richard Andrews in "Telecommunications Agreement Scrutinized" in Vermont Business Magazine 3/1/91.

<sup>32</sup> Richard Andrews in "Telecommunications Agreement Scrutinized" in Vermont Business Magazine 3/1/91.

<sup>33</sup> Richard Andrews in "Telecommunications Agreement Scrutinized" in Vermont Business Magazine 3/1/91.

"The agreement hasn't been all beer and skittles from NET's point of view either. The freedom to innovate has, so far at least, created more costs than profits, and NET's rate of return has slipped several points."<sup>34</sup>

"NET says it lost money on VTA-1. According to company spokesman Fred Reidy, the agreement was intended to give the company an opportunity to earn a 13-percent rate of return, and it had managed only 7-percent when VTA-1 was extended. Reidy said NET calculated the annual revenue shortfall at \$15 million, and the Department of Public Service acknowledged it was \$10 million. Reidy pointed out that NET has had no rate increases for six years."<sup>35</sup>

Infrastructure modernization during the VTA was significant:

"The first VTA guaranteed NET certain rates of return in exchange for upgrading the telecommunications system of the state. At that time, according to the experts, Vermont's phone system was a backwater of antique switching stations, party lines, and rural neglect. We were not up to speed with the rest of the country, they said...Both sides agree the first VTA was a very good pact that kept phone charges predictable and allowed for the building of an advanced phone network. NET for its part was allowed to freely market many phone services and see predictable rates of return."<sup>36</sup>

Modernization has increased the number of services offered and made them widely available:

"With the current technology, New England Telephone offers services that can make life easier for telecommuters and for the companies who employ them...One of the newest services is ISDN (Integrated Services Digital Network) which allows two functions to occur on one telephone line. LL Bean has already taken advantage of the ISDN technology by directing catalog sales calls to operator's homes who then talk to the customer and place the order by computer

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<sup>34</sup> Richard Andrews in "Telecommunications Agreement Scrutinized" in Vermont Business Magazine 3/1/91.

<sup>35</sup> Richard Andrews in "Back to Square One for VTA: Proponents and Opponents of Telecommunications Agreement Face Off" in Vermont Business Magazine 10/1/92.

<sup>36</sup> Art Edelstein, "Changes Due on Telecommunications Pact" in Vermont Business Magazine p.27 10/1/91.

on the same telephone line. McDougall said the state is looking into the ISDN services for Vermont-based catalog sales merchants."<sup>37</sup>

In summary, the VTA did not allow New England Telephone to earn excessive profits. On the contrary, the expense of modernization and launching new products resulted in lower than expected earnings for NET. Basic local rates have not increased throughout the life of the agreement and the telephone network has been modernized significantly.

### West Virginia

Some key features of the incentive regulation plan for C&P:

- Effective January 1, 1992, an incentive regulation plan was approved, effective until the end of 1994.
- The plan retained the previous plan's service classification (competitive or discretionary, non-competitive, and intrastate access services) of an earlier incentive regulation plan and added one more category: services subject to "workable competition".
- Basic service rates were frozen during the plan.
- Under the incentive plan, C&P agreed to accelerate infrastructure investments toward becoming 100% digital by the end of the plan (it was on target to achieve this goal one year earlier, by the end of 1993).

The incentive regulation plan appears to have had a significant impact on the financial health of the telephone company while maintaining rate stability of basic local services. In explaining the ratings increase of C&P West Virginia debentures, Duff & Phelps discussed the following:

"Duff & Phelps expects maintenance of strong credit quality under the incentive regulation framework adopted by the West Virginia Public Service Commission in

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<sup>37</sup> Amy Jenness in "Short Commute: Telecommuting Grows as an Alternative to the Office" in Vermont Business Magazine 7/1/91 [Frank McDougall is secretary of the Agency of Community and Development Affairs for the State of Vermont].

December 1991... Although the new regulatory plan freezes basic rates through 1994, it removes earnings constraints on competitive services... CP-WV's improved financial performance can be traced to stronger economic activity in its service territory, improved regulation, revenue growth from new services, and the company's commitment to expense control... CP WV's expense control has been driven by its modern network. At the end of 1993, the company expects to have 100 percent penetration of digital switches [one year ahead of schedule], signaling system seven capabilities, and Custom Local Area Signaling Services (CLASS) capabilities.<sup>38</sup>

West Virginia's improved telecommunications infrastructure has also attracted telecommunications-intensive firms:

"United Reader Service Inc. announced last month that it will provide telephone contact services for a variety of clients...The company was first attracted to the state through the Office of the Future Project, a joint effort of the state of West Virginia and the C&P Telephone Co... For a year [the office has] had a national advertising campaign to increase awareness of West Virginia as a business location for telecommunications-intensive work operations.

[United Reader Service's] decision to locate in Wheeling was based on the existence of advanced telecommunications, the availability of a qualified workforce, and local training incentives.<sup>39</sup>

In summary, West Virginia's incentive regulation plan appears to have effectively maintained local service rate stability and provided incentives for C&P West Virginia to rapidly upgrade its network capabilities. Through its Office for the Future program, the state, in partnership with the local telephone company seems to be successfully marketing those advanced capabilities for outside investors to relocate to the state.

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<sup>38</sup> "Duff & Phelps Credit Rating Co. Upgrades the Chesapeake and Potomac Telephone Company of West Virginia" in PR NewsWire, 9/30/93.

<sup>39</sup> Eric Peters "Telemarketer Opens Bureau in Wheeling, The State Journal 12/1/91.

## ATTACHMENT 3

### Summary of Recently Proposed Price Regulation Plans

#### Delaware

##### Status:

- . Legislation enacted July, 1993 allowing LECs to elect or opt in to an alternative regulation framework.
- . Election must be accompanied by a Plan for Technological Investment and Deployment.
- . Infrastructure commitment of \$250 million must be provided by any utility electing into the plan.

##### Rate Adjustments/Current Rates:

- . No rate adjustments specifically required by legislation.
- . Separate rate proceeding determined appropriate level of rates

##### Price Index:

- . Formula:  
Change in Inflation -3.0%
- . Cap covers basic services.
- . Commission can adjust rate structure for submitted price changes
- . Provider or ratepayers may request exogenous change adjustments

##### Rate Freeze:

- . Discretionary services rates may not be increased for one year.
- . Rates for basic services can only be changed once a year subject to Commission approval.

##### Service Classification:

- . Legislation divided services into three categories: basic, discretionary and competitive.
- . Basic Services include, among others: residence, business, public and semi-public dial tone line and local usage services; switched access, Centrex access component, White Page listing; Touch Tone; and ISDN Basic and Primary rate interface.
- . Discretionary are those services neither competitive nor basic.
- . No discretionary services rates may be increased more than 15% in any year.
- . Competitive services are those services generally available within a relevant geographic area from at least one unaffiliated provider which is present and viable; and there are no significant barriers to entry.
- . Competitive services include directory advertising, 800 service, WATS, billing and collection services, Centrex Intercom and features, Inside Wire, Answer Call and Voice Mail, High Cap Special (1.544 Mb) and others.