

Attachment A

Statement of Qualifications

PATRICIA D. KRAVTIN

Patricia D. Kravtin is Vice President and Senior Economist at ETI. Ms. Kravtin did graduate study in the Ph.D. program in Economics at the Massachusetts Institute of Technology, where she was a National Science Foundation Fellow. Her fields of study have included Industrial Organization, Government Regulation of Industry, and Urban and Regional Economics. While at M.I.T., Ms. Kravtin performed research for the Sloan School of Management and the Joint Center for Urban Studies of M.I.T. and Harvard. Her own empirical work has centered on multiproduct industries and has included econometric estimation of multiproduct cost functions and measurement of product-specific economies of scale and economies of joint production.

While in Washington, D.C., Ms. Kravtin gained valuable insight into the regulatory process performing research and policy analysis at the United States Department of Commerce, the Securities and Exchange Commission, and the Private Radio Bureau of the Federal Communications Commission.

Since joining ETI in 1982, Ms. Kravtin has been actively involved in telecommunications regulatory proceedings in state jurisdictions throughout the country and has frequently testified as an expert witness before regulatory commissions. Ms. Kravtin has testified before the Rhode Island Public Utilities Commission, the Maine Public Utilities Commission, the Florida Public Service Commission, the New York Public Service Commission, the Louisiana Public Service Commission, the Minnesota Public Utilities Commission, the Mississippi Public Service Commission, the Arizona Corporation Commission, the Kentucky Public Service Commission, the Delaware Public Service Commission, the Georgia Public Service Commission, the Tennessee Public Service Commission, the New Hampshire Public Utility Commission, the New Jersey Board of Regulatory Commissioners, the Arkansas Public Service Commission, the Kansas Corporation Commission, and the California Public Utilities Commission. Ms. Kravtin has also testified as an expert witness in anti-trust litigation before the United States District Court for the Eastern District of Tennessee at Greeneville.

Ms. Kravtin's assignments have involved the analysis of both rate design and revenue requirements issues. She has performed analyses of various cost methodologies used by telephone companies to determine costs and set rates, and econometric demand models used to develop estimates of repression and stimulation of demand as a result of price changes. She has conducted numerous analyses of the costs and benefits of local measured service.

Ms. Kravtin has also been involved in the analysis of issues relating to telephone company modernization expenditures and plant utilization. Ms. Kravtin has presented testimony on the subject of infrastructure/plant modernization before the Ohio General Assembly senate select Committee on telecommunications Infrastructure and Technology and the New Jersey Senate Transportation and Public Utility Committee.

More recently, Ms. Kravtin has gained extensive expertise in the area of video and multi-media information service markets. Ms. Kravtin has submitted numerous filings before the FCC

concerning the economics of video dialtone investment and/or VDT tariffs proposed by New Jersey Bell, Pacific Bell, Ameritech, Southern New England Telephone, US West, GTE, Bell Atlantic, BellSouth, NYNEX, Puerto Rico Telephone Company and Carolina Telephone in over 25 Section 214 Application proceedings. Over the past year, Ms. Kravtin has actively participated in a number of proceedings relating to the implementation of local competition pursuant to federal and state legislation, covering such topics as universal service, cost of basic service, interconnection, unbundling of network elements, and tariff development for new entrants.

Ms. Kravtin has authored and co-authored numerous papers and reports pertaining to these issues. These include the following:

"The Economic Viability of Stentor's 'Beacon Initiative,' Exploring the extent of its financial dependency upon revenues from services in the Utility Segment," prepared for Unitel, submitted as evidence before the Canadian Radio-television and Telecommunications Commission, March 1995.

"A Public Good/Private Good Framework for Identifying POTS Objectives for the Public Switched Network" prepared for the National Regulatory Research Institute, October 1991;

"The U S Telecommunications Infrastructure and Economic Development," presented at the 18th Annual Telecommunications Policy Research Conference, Airlie, Virginia, October 1990;

"An Analysis of Outside Plant Provisioning and Utilization Practices of US West Communications in the State of Washington," prepared for the Washington Utilities and Transportation Commission, March 1990; and

"Telecommunications Modernization: Who Pays?," prepared for the National Regulatory Research Institute, September 1988.

Ms. Kravtin has also been actively involved in the analysis of issues relating specifically to industry structure, BOC market power and MFJ restrictions, regulatory reform, price caps regulation, access charges, and local and long-distance competition in the telecommunications industry at both the state and federal level. Ms. Kravtin has served as an expert witness in antitrust cases involving BOC monopolization. She has co-authored numerous papers and reports pertaining to these issues. These include the following:

"Analysis of Incumbent LEC Embedded Investment: An Empirical Perspective on the "Gap" between Historical Costs and Forward-looking TSLRIC," Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, submitted in FCC CC Docket 96-98, May 30, 1996.

"Reply to X-Factor Proposals for the FCC Long-Term LEC Price Cap Plan," prepared for

the Ad Hoc Telecommunications User Committee, submitted in FCC CC Docket 94-1, March 1, 1996.

"Establishing the X-Factor for the FCC Long-Terms LEC Price Cap Plan," prepared for the Ad Hoc Telecommunications User Committee, submitted in FCC CC Docket 94-1, December, 1995.

"Fostering a Competitive Local Exchange Market in New Jersey: Blueprint for Development of a Fair Playing Field," prepared for the New Jersey Cable Television Association, January 1995.

"The Enduring Local Bottleneck: Monopoly Power and the Local Exchange Carriers." February 1994.

"A Note on Facilitating Local Exchange Competition," prepared for E.P.G., November 1991;

"Testing for Effective Competition in the Local Exchange," prepared for the E.P.G., October 1991;

"Report on the Status of Telecommunications Regulation, Legislation, and modernization in the states of Arkansas, Kansas, Missouri, Nebraska, Oklahoma and Texas." prepared for the Mid-America Cable-TV Association, December 13, 1990;

"Sustainability of Competition in Light of New Technologies," presented at the Twentieth Annual Williamsburg Conference of the Institute of Public Utilities, Williamsburg, Virginia, December 1988;

"Industry Structure and Competition in Telecommunications Markets: An Empirical Analysis," presented at the Seventh International Conference of the International Telecommunications Society at MIT, July 1988;

"Market Structure and Competition in the Michigan Telecommunications Industry." prepared for the Michigan Divestiture Research Fund Board, April 1988;

"Impact of Interstate Switched Access Charges on Information Service Providers - Analysis of Initial Comments," submitted in FCC CC Docket No. 87-215, October 26, 1987;

"An Economic Analysis of the Impact of Interstate Switched Access Charge Treatment on Information Service Providers," submitted in FCC CC Docket No. 87-215, September 24, 1987;

"Regulation and Technological Change: Assessment of the Nature and Extent of Competition From A Natural Industry Structure Perspective and Implications for Regulatory

Policy Options," prepared for the State of New York in collaboration with the City of New York. February 1987;

"Long-Run Regulation of AT&T: A Key Element of a Competitive Telecommunications Policy," *Telematics*. August 1984;

"BOC Market Power and MFJ Restrictions: A Critical Analysis of the 'Competitive Market' Assumption," submitted to the Department of Justice, July 1986; and

"Economic and Policy Considerations Supporting Continued Regulation of AT&T," submitted in FCC CC Docket No. 83-1147, June 1984.

Ms. Kravtin attended George Washington University on an Honor Scholarship where she received a B.A. with Distinction in Economics. She was elected to Phi Beta Kappa and Omicron Delta Epsilon in recognition of high scholastic achievement in the field of Economics. Ms. Kravtin is a member of the American Economic Association.

Attachment B

Statement of Qualifications

DR. LEE L. SELWYN

Dr. Lee L. Selwyn has been actively involved in the telecommunications field for more than twenty-five years, and is an internationally recognized authority on telecommunications regulation, economics and public policy. Dr. Selwyn founded the firm of Economics and Technology, Inc. in 1972, and has served as its President since that date. He received his Ph.D. degree from the Alfred P. Sloan School of Management at the Massachusetts Institute of Technology. He also holds a Master of Science degree in Industrial Management from MIT and a Bachelor of Arts degree with honors in Economics from Queens College of the City University of New York.

Dr. Selwyn has testified as an expert on rate design, service cost analysis, form of regulation, and other telecommunications policy issues in telecommunications regulatory proceedings before some forty state commissions, the Federal Communications Commission and the Canadian Radio-television and Telecommunications Commission, among others. He has appeared as a witness on behalf of commercial organizations, non-profit institutions, as well as local, state and federal government authorities responsible for telecommunications regulation and consumer advocacy.

He has served or is now serving as a consultant to numerous state utilities commissions including those in Arizona, Minnesota, Kansas, Kentucky, the District of Columbia, Connecticut, California, Delaware, Maine, Massachusetts, New Hampshire, Vermont, New Mexico, Wisconsin and Washington State, the Office of Telecommunications Policy (Executive Office of the President), the National Telecommunications and Information Administration, the Federal Communications Commission, the Canadian Radio-television and Telecommunications Commission, the United Kingdom Office of Telecommunications, and the Secretaria de Comunicaciones y Transportes of the Republic of Mexico. He has also served as an advisor on telecommunications regulatory matters to the International Communications Association and the Ad Hoc Telecommunications Users Committee, as well as to a number of major corporate telecommunications users, information services providers, paging and cellular carriers, and specialized access services carriers.

Dr. Selwyn has presented testimony as an invited witness before the U.S. House of Representatives Subcommittee on Telecommunications, Consumer Protection and Finance and before the U.S. Senate Judiciary Committee, on subjects dealing with restructuring and deregulation of portions of the telecommunications industry.

In 1970, he was awarded a Post-Doctoral Research Grant in Public Utility Economics under a program sponsored by the American Telephone and Telegraph Company, to conduct research on the economic effects of telephone rate structures upon the computer time sharing industry. This work was conducted at Harvard University's Program on Technology and Society, where he was appointed as a Research Associate. Dr. Selwyn was also a member of the faculty at the College of Business Administration at Boston University from 1968 until 1973, where he taught courses in economics, finance and management information systems.

Dr. Selwyn has published numerous papers and articles in professional and trade journals on the subject of telecommunications service regulation, cost methodology, rate design and pricing policy. These have included:

"Taxes, Corporate Financial Policy and Return to Investors"
National Tax Journal, Vol. XX, No.4, December 1967.

"Pricing Telephone Terminal Equipment Under Competition"
Public Utilities Fortnightly, December 8, 1977.

"Deregulation, Competition, and Regulatory Responsibility in the Telecommunications Industry"
Presented at the 1979 Rate Symposium on Problems of Regulated Industries - Sponsored by: The American University, Foster Associates, Inc., Missouri Public Service Commission, University of Missouri-Columbia, Kansas City, MO, February 11 - 14, 1979.

"Sifting Out the Economic Costs of Terminal Equipment Services"
Telephone Engineer and Management, October 15, 1979.

"Usage-Sensitive Pricing" (with G. F. Borton)
(a three part series)
Telephony, January 7, 28, February 11, 1980.

"Perspectives on Usage-Sensitive Pricing"
Public Utilities Fortnightly, May 7, 1981.

"Diversification, Deregulation, and Increased Uncertainty in the Public Utility Industries"
Comments Presented at the Thirteenth Annual Conference of the Institute of Public Utilities, Williamsburg, VA - December 14 - 16, 1981.

"Local Telephone Pricing: Is There a Better Way?; The Costs of LMS Exceed its Benefits: a Report on Recent U.S. Experience."
Proceedings of a conference held at Montreal, Quebec - Sponsored by Canadian Radio-Television and Telecommunications Commission and The Centre for the Study of Regulated Industries, McGill University, May 2 - 4, 1984.

"Long-Run Regulation of AT&T: A Key Element of A Competitive Telecommunications Policy"
Telematics, August 1984.

"Is Equal Access an Adequate Justification for Removing Restrictions on BOC Diversification?"

Presented at the Institute of Public Utilities Eighteenth Annual Conference, Williamsburg, VA - December 8 - 10, 1986.

"Market Power and Competition Under an Equal Access Environment"

Presented at the Sixteenth Annual Conference, "Impact of Deregulation and Market Forces on Public Utilities: The Future Role of Regulation" Institute of Public Utilities, Michigan State University, Williamsburg, VA - December 3 - 5, 1987.

"Contestable Markets: Theory vs. Fact"

Presented at the Conference on Current Issues in Telephone Regulations: Dominance and Cost Allocation in Interexchange Markets - Center for Legal and Regulatory Studies Department of Management Science and Information Systems - Graduate School of Business, University of Texas at Austin, October 5, 1987.

"The Sources and Exercise of Market Power in the Market for Interexchange Telecommunications Services"

Presented at the Nineteenth Annual Conference - "Alternatives to Traditional Regulation: Options for Reform" - Institute of Public Utilities, Michigan State University, Williamsburg, VA, December, 1987.

"Assessing Market Power and Competition in The Telecommunications Industry: Toward an Empirical Foundation for Regulatory Reform"

Federal Communications Law Journal, Vol. 40 Num. 2, April 1988.

"A Perspective on Price Caps as a Substitute for Traditional Revenue Requirements Regulation"

Presented at the Twentieth Annual Conference - "New Regulatory Concepts, Issues and Controversies" - Institute of Public Utilities, Michigan State University, Williamsburg, VA, December, 1988.

"The Sustainability of Competition in Light of New Technologies" (with D. N. Townsend and P. D. Kravtin)

Presented at the Twentieth Annual Conference - Institute of Public Utilities Michigan State University, Williamsburg, VA, December, 1988.

"Adapting Telecom Regulation to Industry Change: Promoting Development Without Compromising Ratepayer Protection" (with S. C. Lundquist)

IEEE Communications Magazine, January, 1989.

"The Role of Cost Based Pricing of Telecommunications Services in the Age of Technology and Competition"

Presented at National Regulatory Research Institute Conference, Seattle, July 20, 1990.

"A Public Good/Private Good Framework for Identifying POTS Objectives for the Public Switched Network" (with Patricia D. Kravtin and Paul S. Keller)
Columbus, Ohio: *National Regulatory Research Institute*, September 1991.

"Telecommunications Regulation and Infrastructure Development: Alternative Models for the Public/Private Partnership"
Prepared for the Economic Symposium of the International Telecommunications Union Europe Telecom '92 Conference, Budapest, Hungary, October 15, 1992.

"Efficient Infrastructure Development and the Local Telephone Company's Role in Competitive Industry Environment" *Presented at the Twenty-Fourth Annual Conference, Institute of Public Utilities, Graduate School of Business, Michigan State University, "Shifting Boundaries between Regulation and Competition in Telecommunications and Energy", Williamsburg, VA, December 1992.*

"Measurement of Telecommunications Productivity: Methods, Applications and Limitations" (with Françoise M. Clottes)
Presented at Organisation for Economic Cooperation and Development, Working Party on Telecommunication and Information Services Policies, '93 Conference "Defining Performance Indicators for Competitive Telecommunications Markets", Paris, France, February 8-9, 1993.

"Telecommunications Investment and Economic Development: Achieving efficiency and balance among competing public policy and stakeholder interests"
Presented at the 105th Annual Convention and Regulatory Symposium, National Association of Regulatory Utility Commissioners, New York, November 18, 1993.

"The Potential for Competition in the Market for Local Telephone Services" (with David N. Townsend and Paul S. Keller)
Presented at the Organization for Economic Cooperation and Development Workshop on Telecommunication Infrastructure Competition, December 6-7, 1993.

"Market Failure in Open Telecommunications Networks: Defining the new natural monopoly," *Utilities Policy*, Vol. 4, No. 1, January 1994.

"*The Enduring Local Bottleneck: Monopoly Power and the Local Exchange Carriers,*" (with Susan M. Gately, et al) a report prepared by ETI and Hatfield Associates, Inc. for AT&T, MCI and CompTel, February 1994.

"Commercially Feasible Resale of Local Telecommunications Services: An Essential Step in the Transition to Effective Local Competition." (Susan M. Gately, et al) a report prepared by ETI for AT&T, July 1995.

"Efficient Public Investment in Telecommunications Infrastructure"
Land Economics, Vol 71, No.3, August 1995.

"Market Failure in Open Telecommunications Networks: Defining the new natural monopoly," in *Networks, Infrastructure, and the New Task for Regulation*, by Werner Sichel and Donald L. Alexander, eds., University of Michigan Press, 1996.

Dr. Selwyn has been an invited speaker at numerous seminars and conferences on telecommunications regulation and policy, including meetings and workshops sponsored by the National Telecommunications and Information Administration, the National Association of Regulatory Utility Commissioners, the U.S. General Services Administration, the Institute of Public Utilities at Michigan State University, the National Regulatory Research Institute at Ohio State University, the Harvard University Program on Information Resources Policy, the Columbia University Institute for Tele-Information, the International Communications Association, the Telecommunications Association, the Western Conference of Public Service Commissioners, at the New England, Mid-America, Southern and Western regional PUC/PSC conferences, as well as at numerous conferences and workshops sponsored by individual regulatory agencies.

Attachment C

Statement of Qualifications

JOSEPH W. LASZLO

Joseph W. Laszlo is a Senior Analyst at ETI. His main areas of interest include telecommunications regulatory policy and economics; advanced network technology and modernization; and international telecommunications policy and development.

Mr. Laszlo has contributed extensively to the research and writing of a number of ETI consulting projects and research papers. In the area of the regulation of telecommunications services, Mr. Laszlo has contributed to projects including: evidence presented before the Canadian Radio-Television Telecommunications Commission concerning price caps; testimony on cost allocation submitted to the Idaho Public Utilities Commission in a 1996 US West rate case; and a study of the imputation of Yellow Pages revenues for the support of universal service. Mr. Laszlo's work on advanced technology has included: contributing to a study refuting BOC claims regarding the impact of the growth of Internet usage on the public-switched telephone network; research for a report on the potential impact of the universal service provisions of the 1996 Telecommunications Act on educational institutions, which was presented at a National Regulatory Research Institute Conference; and analysis of the availability and pricing of frame relay services.

Mr. Laszlo joined ETI in 1996 upon receiving a Master of Arts in Law and Diplomacy from The Fletcher School of Law and Diplomacy in Medford, Massachusetts (jointly administered by Tufts and Harvard Universities). At the Fletcher School, Mr. Laszlo concentrated in the fields of international trade and finance, technology policy, and business and economic law. He worked as Business Manager of *The Fletcher Forum of World Affairs*, the official journal of the Fletcher School, and also as a teaching assistant in the Fletcher economics department. Prior to attending the Fletcher School, Mr. Laszlo received his A.B., *Magna Cum Laude*, from Columbia University. He has also studied at the Stanford Japan Center in Kyoto, Japan.

**REPLY TO INCUMBENT LEC
CLAIMS TO SPECIAL REVENUE
RECOVERY MECHANISMS:**

In the Matter of
Access Charge Reform

CC Docket No. 96-262

Patricia D. Kravtin
Lee L. Selwyn
Joseph W. Laszlo

February 14, 1997



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	For digital switching plant categories, 75% of ILEC historical book investment as of the end of 1996, was acquired on or after January 1, 1990.	6
	Beginning January 1, 1990, if not earlier, ILECs were well aware of and had ample opportunity to actively manage ongoing investment and construction planning to reflect the emerging competitive market environment.	7
	USTA/ILEC arguments assume that capacity, technology, and customer requirements driving ILEC investments are based on the provision of basic local exchange and exchange access service, when in fact a significant amount of ILEC investment must be explained by <i>other</i> than demand growth for basic service.	9
	A substantial portion of ILEC historical book investment, some \$30-billion, corresponding to \$9-billion in estimated annual costs, cannot be explained by basic service demand growth over the 1990 to 1996 period.	9
	Investment data for Year End 1996 provided in ILEC comments provides validation for ETI's projections and serves to confirm the accuracy of ETI's study methodologies and the results derived therefrom.	11

Reply to Incumbent ILEC Claims to Special Revenue Recovery Mechanisms

USTA and the ILECs have not demonstrated a cost causative link to basic local exchange or exchange access services for plant currently on the ILECs' books. 12

USTA/ILEC arguments ignore or discount other revenue sources available to the ILECs for recovery of embedded plant which must be taken into account in assessing the need for special recovery mechanisms. 13

Relatively high ILEC market-to-book values, premiums over book value in recent ILEC merger agreements, and estimates of new revenue opportunities all belie ILEC claims of capital recovery problems. 14

At least one ILEC - SNET - acknowledges that the correct economic framework for evaluating capital recovery includes consideration of revenue opportunities, but then inappropriately assumes away such opportunities in its own reserve deficiency analysis. 15

RBHC arguments that interLATA revenues should not be taken into account in offsetting access charge reductions are patently unreasonable, given the *quid pro quo* established in the Act and the realities of their new competitive operating environment. 16

ILEC statements that seek to diminish the significance of revenue opportunities associated with the sale of additional residential access lines are contradicted by ILEC marketing activities, investment reports, public statements by top ILEC officials, and ILEC outside plant provisioning practices. 18

USTA/ILEC arguments assume the ILEC embedded base of copper cable and digital switching plant is declining in value and rapidly becoming obsolete, despite documented technological advances demonstrating that these important categories of ILEC embedded plant are both useful and valuable, and will likely remain so into the foreseeable future. 20

TFI fails to tie its theories of technology substitution to the specific issues relating to ILEC claims of special revenue recovery raised in this proceeding 20

The SPR Study's reports of the death of the existing network infrastructure are greatly exaggerated. 22

The SPR Study's arguments that cable and wire (and in particular copper cable) are practically worthless totally ignores the current deployment of digital communications technology in the loop which makes the continued use

Reply to Incumbent LEC Claims to Special Revenue Recovery Mechanisms

	of copper cable viable in the long term.	23
	Far from being “obsolete,” modern digital switches are designed to be easily and regularly upgraded, giving them new and expanded functionality at a fraction of the cost of purchasing an entirely new switch.	28
	The SPR Study is factually wrong in its assertion that any likely network changes will render existing digital switches obsolete.	29
	Several final examples demonstrate that the expense of purchasing entirely new switches is so great that it is almost always more efficient to upgrade existing switches.	32
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1 | INTRODUCTION AND SUMMARY

This Reply responds to comments submitted by USTA and incumbent local exchange companies (ILECs) pertaining to empirical issues raised in the NPRM concerning the difference between historical embedded costs and forward-looking costs, and associated ILEC claims to special revenue recovery mechanisms. As discussed in this Reply, the arguments presented by USTA and the ILECs fail to support their claims for special revenue recovery.

The arguments advanced by USTA, ILECs, and their numerous experts do not directly respond or refute evidence presented by AT&T and others. That evidence showed that much of the difference between the revenues generated by access prices based upon embedded costs as compared to forward-looking costs is the result of strategic overbuilding of plant and/or inefficiencies, both of which were and are within the control of ILEC management. Despite allegations of underrecovery, the ILECs have presented no evidence that prices set at forward looking cost for exchange access services, coupled with new revenue opportunities, will not fully compensate them for their historical network expenses.

USTA's and the ILECs' initial presentation to the Commission can be characterized as largely unsupported assertions around two major themes:

- (1) That ILEC investments were made prudently pursuant to regulatory compacts and in fulfillment of universal service obligations. Accordingly, the ILECs assert these investments represent "legitimate costs of doing business" for which the ILECs are entitled full recovery through special recovery mechanisms.
- (2) That major categories of ILEC embedded plant, principally copper cable and digital switching, are experiencing a major decline in economic value due to obsolescence. This purported decline in economic value and imminent obsolescence in turn produces sizable depreciation reserve deficiencies for which the ILECs assert an entitlement to full recovery through special recovery mechanisms.

Introduction and Summary

As discussed in this Reply, these assertions are directly refuted with evidence from the ETI Study, *Assessing Incumbent ILEC Claims to Special Revenue Recovery Mechanisms: Revenue opportunities, market assessments, and further empirical analysis of the "Gap" between embedded and forward-looking costs* ("Assessing Incumbent ILEC Claims").¹ ETI's study, *Assessing ILEC Claims*, anticipated many of the arguments and assertions that have been raised by USTA and the ILECs, and provides an empirical framework and concrete evidence to refute ILEC claims to special revenue recovery mechanisms. In addition, we augment ETI's previous study with extensive evidence on technological advances - some of which has been announced by manufacturers since the study was completed just a few weeks ago - that will dramatically extend the life of the installed base of ILEC plant. This evidence strongly negates the technological substitution theories advanced by USTA and ILEC experts.

In this Reply, we identify a number of critical flaws in the arguments and assertions presented by USTA and the ILECs that nullify ILEC claims to special revenue recovery mechanisms.

- USTA/ILEC arguments are based fundamentally upon the application of rate of return regulation concepts no longer applicable under price cap regimes;
- USTA/ILEC arguments assume that capacity, technology, and customer requirements driving ILEC investments are based on the provision of basic local exchange and exchange access service, when in fact a significant amount of ILEC investment must be explained by *other* than demand growth for basic service;
- USTA/ILEC arguments ignore or discount other revenue sources available to the ILECs for recovery of embedded plant which must be taken into account in assessing the need for special recovery mechanisms; and
- USTA/ILEC arguments assume the ILEC embedded base of copper cable and digital switching plant is declining in value and rapidly becoming obsolete, despite documented technological advances demonstrating that these important categories of ILEC embedded plant are both useful and valuable, and will likely remain so into the foreseeable future.

The relevant issue now before the Commission is not whether the embedded costs incurred by the ILECs are costs of doing business for the ILECs, but rather whether those embedded costs are properly recovered through special revenue recovery mechanisms to be assessed on ILEC competitors and customers of ILEC noncompetitive service offerings.

1. The ETI Study was attached to AT&T Comments, dated January 29, 1997, submitted in this proceeding.

Introduction and Summary

Absent a demonstrative showing of a cost causative link to basic local exchange or exchange access services for the ILEC plant currently on the books, and which according to the ILECs, is on the verge of replacement, no persuasive claim of special revenue recovery can be made. As shown in this Reply, USTA and the ILECs have not come close to demonstrating the required cost causative link in their Comments in this proceeding.

2 | USTA AND ILEC ASSERTIONS FAIL TO SUPPORT THEIR CLAIMS FOR SPECIAL REVENUE RECOVERY

USTA/ILEC arguments are based fundamentally upon application of rate of return regulation concepts no longer applicable under price cap regimes.

USTA asserts that the difference between embedded costs allocated to the interstate jurisdiction and forward-looking costs are “legitimate costs of doing business” the recovery of which should be allowed.² Individual LECs make similar arguments. For example, BellSouth characterizes the “historical costs” of past LEC network investments, and the investments of the LECs allocated to the interstate jurisdictions by the separations process“ as “real costs” for which ILECs are entitled to recovery.³ US West asserts that the Commission “may not take action which operates to deprive ILECs of the opportunity to recover their investment - or to recover their ongoing costs of doing business” and further asserts “the right of regulated companies to the opportunity to earn a reasonable rate of return so long as they are regulated.”⁴

These are “strawman” arguments. The issue before the Commission is not whether ILEC embedded costs are costs of doing business for the ILECs. Rather, the issue is whether those costs are properly recovered through special revenue recovery mechanisms and from competitors of the ILECs and customers of ILEC noncompetitive services.

2. USTA Comments at 68.

3. BellSouth Comments at 53.

4. US West Comments at 4-6.

The majority of plant currently carried on the ILECs' books is relatively new, i.e., acquired on or after January 1, 1990.

ETI's study, *Assessing ILEC Claims*, provides specific empirical evidence directly pertinent to this issue. The study's "Vintage analysis" demonstrates that 65% of aggregate ILEC historical book investment as of the end of 1996, can be attributed to plant vintages of 1990 or later.⁵ As shown in Table 1, this pattern was found to be quite consistent across the RBHCs and SNET.⁶ Thus, we find that the majority of plant carried on the ILECs' books is relatively new, having been acquired during the 1990s - a time period in which fundamental regulatory changes including the adoption of price cap regulation, competitive inroads, and corresponding strategic responses were clearly being contemplated by the ILECs.

Table 1

<u>RBHCs</u>	Aggregate Projected Net TPIS Year End 1996 (\$000)	Aggregate Net TPIS Attributed to Pre 1-1-90 Vintages (\$000) <u>Percent</u>		Aggregate Net TPIS Attributed to Post 1-1-90 Vintages (\$000) <u>Percent</u>	
	Ameritech	\$14,636,125	\$5,766,633	39.4%	\$8,869,492
Bell Atlantic	\$18,232,039	\$6,508,838	35.7%	\$11,723,201	64.3%
BellSouth	\$23,026,512	\$7,161,245	31.1%	\$15,865,267	68.9%
Nynex	\$16,915,514	\$5,396,049	31.9%	\$11,519,465	68.1%
Pacific Telesis	\$14,509,056	\$5,339,333	37.0%	\$9,169,723	63.5%
SBC Communications	\$15,027,699	\$5,920,913	39.4%	\$9,106,786	60.6%
US West	\$17,359,694	\$5,364,145	30.9%	\$11,995,549	69.1%
TOTAL RBHC	\$119,706,639	\$41,457,156	34.6%	\$78,249,483	65.4%
 SNET	 \$2,055,409	 \$719,393	 35.0%	 \$1,336,016	 65.0%

Sources: FCC ARMIS 43-02; ETI Study, *Assessing ILEC Claims*, Table B1.

5. See *Assessing ILEC Claims*, pp. 12-13.

6. Data was not available to perform these analyses for GTE.

USTA and ILEC Assertions Fail to Support Their Claims

For digital switching plant categories, 75% of ILEC historical book investment as of the end of 1996, was acquired on or after January 1, 1990.

As discussed below, a major theme of USTA and ILEC comments is the impending obsolescence of the ILECs' embedded base of digital switching plant and the resulting depreciation reserve deficiencies (for which the ILECs assert an entitlement to recover).⁷ Building upon the Vintage Analysis presented in *Assessing ILEC Claims*, we respond to ILEC assertions concerning the obsolescence of digital switching plant by investigating the relative age of ILEC net book investment in digital switching plant categories. The results of our analysis are presented in Table 2. As shown in Table 2, the results of the Vintage Analysis performed for digital switching plant categories alone show the same, and indeed stronger, pattern to hold true. We find that 75% of ILEC historical book investment in digital switching plant as of the end of 1996, was acquired on or after January 1, 1990.

Table 2

RBHCs	Digital Switching Projected Net TPIS Year End 1996 (\$000)	Digital Switching Net TPIS Attributed to Pre 1-1-90 Vintages (\$000) Percent		Digital Switching Net TPIS Attributed to Post 1-1-90 Vintages (\$000) Percent	
Ameritech	\$2,998,704	\$825,530	27.5%	\$2,173,174	72.5%
Bell Atlantic	\$3,227,092	\$1,014,879	31.4%	\$2,212,213	68.6%
BellSouth	\$3,867,021	\$993,627	25.7%	\$2,873,394	74.3%
Nynex	\$3,843,722	\$1,095,550	28.5%	\$2,748,172	71.5%
Pacific Telesis	\$1,271,784	\$244,130	19.2%	\$1,027,654	80.8%
SBC Communications	\$2,058,452	\$458,425	22.3%	\$1,600,027	77.7%
US West	\$2,915,419	\$562,327	19.3%	\$2,353,092	80.7%
TOTAL RBHC	\$20,182,194	\$5,194,468	24.8%	\$14,987,726	75.2%

Sources: FCC ARMIS 43-02, ETI Study, *Assessing ILEC Claims* Worksheets.

7. See, e.g., USTA Attachment 12, Poitras and Vanston, "Implications of Technology Change and Competition on the Local Exchange Carriers," USTA Attachment 14, Vanston Affidavit; USTA Attachment 15, Rohlfs, Jackson, and Richardson, "The Depreciation Shortfall," (Strategic Policy Research Study (SPR) study, SNET Comments at 49-50; Bell Atlantic/NYNEX at 28-31; Pacific at 46-47; Southwestern Comments at 56-58.

Beginning January 1, 1990, if not earlier, ILECs were well aware of and had ample opportunity to actively manage ongoing investment and construction planning to reflect the emerging competitive market environment.

The date January 1, 1990 is significant, because it marks the beginning of the time period in which price caps and other forms of incentive regulation for the ILECs had either been adopted or under formal consideration in the federal and many state jurisdictions.⁸ In this time period, ILECs knowingly accepted, and indeed aggressively sought, the delinking of costs and prices, and the opportunity to realize both the risks and rewards associated with capital investments made from that point forward. From that date forward, ILECs were well aware of and had the opportunity to actively manage ongoing investment and construction planning to reflect the emerging competitive market environment.

Under price cap regulation, adoption of which was actively sought by the ILECs, the rates of return earned by the ILECs reflect their own business initiatives, operating efficiencies, and responses to the emerging competitive environment, rather than a pre-determined rate of return on rate base established by the regulator. Under price caps, ILECs have been able to earn rates of return significantly in excess of a "fair" (i.e., competitive) return on their net book investment and to enjoy increased freedom to make market-driven decisions.⁹ The excess earnings that are permitted - and that have been achieved - under price caps have provided the ILECs with additional recovery of the costs of their local network facilities. The ILECs now appear to be asking the Commission to guarantee that they will be made whole - using the old rate of return standard - for historical book investments *the majority of which were made under a price caps regime*. To provide such a guarantee now is totally inappropriate, given that under price caps the ILECs have been able to enjoy excess earnings and have made capital investment decisions in full contemplation of the emerging competitive telecommunications market environment.

8. Price caps regulation was adopted for the ILECs in the interstate jurisdiction in 1990, having been under formal consideration by the Commission in the preceding year. See *Policy and Rules Concerning Rates for Dominant Carriers*, CC Docket 87-313, 5 FCC Rcd 6786 (1990), "LEC Price Cap Order." Adoption of price caps and other forms of incentive regulation in state jurisdictions has occurred throughout the period beginning January 1, 1990, and even earlier in some states, e.g., California. See California PUC, Re: Alternative Regulatory Frameworks for Local Exchange Carriers, I.87-11-033, Decision 89-10-031, October 12, 1989. As noted by the Kansas Corporation Commission, "Southwestern Bell Telephone (SBC)...has been operating under an incentive rate making plan in Kansas since February, 1990, with no earnings sharing mechanism in place. In effect there has been no cap on regulated earnings". KCC comments at 10. BellSouth notes that "in [that ILECs'] service territory, all nine State commissions have adopted price regulation." BellSouth Comments at 46-47. It is reported that over 70% of current ILEC revenue streams are regulated on the basis of "pure price caps" regulation. Merrill Lynch Report, "Telecom Services - Local," April 23, 1996.

9. *Assessing ILEC Claims*, pp. 5-6, pp. 25-26.

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Apparently, the ILECs would like to enjoy the rewards of price cap regulation (the opportunity to earn excessive returns), but without having to absorb any of the downside risks.¹⁰

Bell Atlantic/NYNEX argue that “price cap regulation is an extension of the enduring compact with the regulator that the regulated company will have an opportunity to recover its actual costs.”¹¹ In framing their argument, Bell Atlantic/NYNEX are explicitly recognizing the change in regulatory regime that occurred with the adoption of price caps. They nonetheless improperly seek to apply the rate of return concept of cost-based regulation to price caps.¹² The delinking of prices and costs is the fundamental defining attribute of price cap regulation vis-a-vis rate of return regulation. In any event as discussed below, ETI’s study *Assessing ILEC Claims* demonstrates that ILECs have had, and will continue to have, ample *opportunity* to recover embedded investment in plant acquired in the post 1990 time frame. Not only are special revenue recovery mechanisms not required, establishment of such mechanisms to recover embedded investment associated with plant acquired since the adoption of price caps is totally inconsistent with price cap regulation.

For this reason, to the extent the Commission decides to adopt a date certain whereby all costs incurred after that date are “regarded as incurred under the new competitive paradigm established by the Act and thus entitled to no special treatment,”¹³ the date certain should be set no later than January 1, 1990. As described above, this date represents a reasonable break-point between historical rate of return regulation and competitive price cap operating environments for the ILECs. The Commission should reject arguments such as those made by BellSouth that a date certain method would be

10. In the NPRM, the Commission expressed concerns with “double recovery” and sought comments on how the Commission could best address this issue. NPRM at para. 244. The ILECs’ ability to earn excess earnings under price caps and also to seek special recovery mechanisms in this proceeding will (if the latter is granted) provide the ILECs with “double recovery” of their capital investment. Accordingly, to address the double recovery problem, the Commission must reject ILEC requests for special recovery mechanisms.

11. Bell Atlantic/NYNEX Comments, p.16.

12. Ironically, in another section of their comments addressing the issue of whether price cap indices should be reinitialized based on either the existing benchmark cost of capital of 11.25% or a newly calculated cost of capital, BA/NYNEX argue that a number of factors affect the cost of capital and appropriate rate of return, and that a “further proceeding to fully examine all these factors... would be administratively burdensome and inconsistent with ongoing price cap regulation.” See BA/NYNEX Comments at 24-27, emphasis added.

13. NPRM at para. 255.

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appropriate only if the date set is “prospective in nature, e.g., the date of the order in this proceeding.”¹⁴

USTA/ILEC arguments assume that capacity, technology, and customer requirements driving ILEC investments are based on the provision of basic local exchange and exchange access service, when in fact a significant amount of ILEC investment must be explained by *other* than demand growth for basic service.

USTA asserts that the “regulatory contract between regulators and utilities obligates the regulator to provide the utility with a reasonable opportunity to recover all of its economic costs.”¹⁵ USTA further asserts that “[t]he existence of spare capacity does not infer imprudent investment. Spare capacity is necessary to accommodate new customers and growth of customer needs on a timely basis and pursuant to quality standards as required by regulation” and also “to facilitate the economic transition to a replacement technology.”¹⁶

Similar arguments are made by individual ILECs. For example, SWBT argues that “[t]he efficiency of LEC operations must be reviewed in light of the regulatory social contract under which the LECs operate ... The collective existing costs reflect regulatory policies and mandates for the industry to 1) provide network capacity for all U.S. residents, and 2) establish the most reliable network while meeting high service standards.”¹⁷ BellSouth invokes the Commission’s “public policy obligations to afford LECs the opportunity to recover the capital that they have prudently invested in facilities devoted to public use.”¹⁸

In making these types of arguments, USTA and the ILECs assume, without any substantiating evidence, that the requirements driving ILEC investments are linked to the provision of basic local exchange and exchange access service and hence are justified on the basis of regulatory compacts.

14. See BellSouth Comments at 58.

15. USTA Comments at 69.

16. *Id.* at 76.

17. SWBT Comments at 40. See also SNET at 43, and US West at 4.

18. BellSouth Comments at 53.

A substantial portion of ILEC historical book investment, some \$30-billion, corresponding to \$9-billion in estimated annual costs, cannot be explained by basic service demand growth over the 1990 to 1996 period.

As explained in ETI's study, *Assessing ILEC Claims*, the only embedded costs for which the ILECs should be even remotely justified in making a claim for special revenue recovery are those associated with the provision of basic telephony services that relate to a specific regulatory mandate under the traditional rate-of-return regulatory regime.¹⁹ ILECs are not entitled to recover embedded costs associated with strategic ILEC investments in modernized facilities designed to provide new non-basic services (e.g., advanced or broadband digital) or to acquire excess capacity over and above that explained by demand growth for basic service. As discussed in the preceding section, neither are ILECs entitled to recover embedded costs incurred in the period following adoption of price cap regulation, when they have enjoyed increased freedoms to earn excess returns and to make market-driven decisions.

In *Assessing ILEC Claims*, we present compelling empirical evidence showing that a substantial portion of ILEC historical book investment, some \$30-billion, corresponding to \$9-billion in estimated annual costs, cannot be explained by basic service demand growth over the 1990 to 1996 period (See Table 3).²⁰ These results indicate that a substantial portion of ILEC investment made in the period following adoption of price caps can be associated with the ILECs' pursuit of strategic business goals, i.e., positioning for other than basic exchange or exchange access lines of business (e.g., additional lines, custom calling) or for entry into new lines of business (e.g., other advanced digital and video services). In addition, in ETI's original "Gap" Study, we present other anecdotal evidence supporting the conclusion that capacity, technology, and customer requirements driving ILEC investments have been based in large part on ILEC provisioning of non-basic or competitive service offerings.²¹

We can conclude from the empirical and anecdotal evidence presented in the ETI studies that plant deployment, upgrades and improvements were motivated by ILEC competitive strategies as much or more so than the continuing provision of universal service, as USTA and the ILEC Comments would have the Commission believe. For this reason, it is critical that the alleged interstate reserve deficiency of \$4.48-billion and the

19. *Assessing ILEC Claims*, pp. 6-7.

20. *Assessing ILEC Claims*, pp. 13-14.

21. See, Lee L. Selwyn and Patricia D. Kravtin, *Analysis of Incumbent ILEC Embedded Investment: An Empirical Perspective on the "Gap" Between Historic Costs and Forward-looking TSLRIC*, submitted as part of AT&T's Reply Comments, CC Docket 96-98, filed May 30, 1996, pp. 27-33.

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\$14-billion in costs assigned to the interstate jurisdiction identified by USTA in its Comments²² be viewed in light of the results of ETI's "Gap" analyses, and rejected.²³

Investment data for Year End 1996 provided in ILEC comments provides validation for ETI's projections and serves to confirm the accuracy of ETI's study methodologies and the results derived therefrom.

Table 3		
<u>RBHCs</u>	Excess Net Book Inv. '90-'96 (Projected) <u>(\$B)</u>	Annual Costs '90-'96 (Projected) <u>(\$B)</u>
Ameritech	\$5.0	\$1.65
Bell Atlantic	5.3	1.65
BellSouth	3.8	1.04
Nynex	6.7	2.46
Pacific Telesis	3.7	1.03
Southwestern Bell	1.7	0.45
US West	3.5	0.92
Total - RBHCs	\$29.8	\$9.19
Source: ETI Study, <i>Assessing ILEC Claims</i> , Appendix B		

A number of the ILECs provide estimates of Year End 1996 TPIS and depreciation reserve figures in their comments.²⁴ ILEC estimates of investment data for Year End 1996 was not available to ETI at the time we prepared the *Assessing ILEC Claims* study. As indicated in *Assessing ILEC Claims*, because actual ARMIS results for Year End 1996 were not yet available, ETI developed projections of ILEC historical net book investment for Year End 1996. To develop estimates of Year End 1996 figures, ETI applied the growth rate from the previous annual period (1994 to 1995) derived from ARMIS data for Net Telephone Plant In Service (TPIS) to the Year End 1995 TPIS results as presented in ETI's Original "Gap" Study.²⁵ As shown in Table 4 on the next page, there are only very small differences between the ILEC estimates of Year End 1996 investment figures and ETI's projected figures. Thus, the 1996 data that was provided in the ILEC comments

22. See USTA Comment at 78, 80

23. See Richard B. Lee, *Reply to Local Exchange Carrier Depreciation Reserve Arguments*, attached to AT&T Reply Comments, February 14, 1996.

24. See BellSouth Comments, Attachment 3; Southwestern Bell Comments, Appendix 2; Bell Atlantic/NYNEX Comments, Attachment CR; Declaration of Terry R. Orr in Support of Comments of Pacific Telesis Group; SNET Comments, Exhibit 4.

25. *Assessing ILEC Claims*, pp. 13-14.