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Dr. Taylor received a B.A. magna cum laude in Economics from Harvard College, an M.A. in Statistics and a Ph.D. in Economics from the University of California at Berkeley. He has taught economics, statistics, and econometrics at Cornell and the Massachusetts Institute of Technology and was a post doctoral Research Fellow at the Center for Operations Research and Econometrics at the University of Louvain, Belgium.

At NERA, Dr. Taylor is a Senior Vice President, heads the Cambridge office and is Director of the Telecommunications Practice. He has worked primarily in the field of telecommunications economics on problems of state and federal regulatory reform, competition policy, terms and conditions for competitive parity in local competition, quantitative analysis of state and federal price cap and incentive regulation proposals, and antitrust problems in telecommunications markets. He has testified on telecommunications economics before numerous state regulatory authorities, the Federal Communications Commission, the Canadian Radio-Television and Telecommunications Commission, federal and state congressional committees and courts. Recently, he was chosen by the Mexican Federal Telecommunications Commission and Telmex to arbitrate the renewal of the Telmex price cap plan in Mexico. Other recent work includes studies of the competitive effects of major mergers among telecommunications firms and analyses of vertical integration and interconnection of telecommunications networks. He has appeared as a telecommunications commentator on PBS Radio and on The News Hour with Jim Lehrer.

He has published extensively in the areas of telecommunications policy related to access and in theoretical and applied econometrics. His articles have appeared in numerous telecommunications industry publications as well as *Econometrica*, the *American Economic Review*, the *International Economic Review*, the *Journal of Econometrics*, *Econometric Reviews*, the *Antitrust Law Journal*, *The Review of Industrial Organization*, and *The Encyclopedia of Statistical Sciences*. He has served as a referee for these journals (and others) and the National

Science Foundation and has served as an Associate Editor of the *Journal of Econometrics*.

EDUCATION

UNIVERSITY OF CALIFORNIA, BERKELEY

Ph.D., Economics, 1974

UNIVERSITY OF CALIFORNIA, BERKELEY

M.A., Statistics, 1970

HARVARD COLLEGE

B.A., Economics, 1968

(Magna Cum Laude)

EMPLOYMENT

NATIONAL ECONOMIC RESEARCH ASSOCIATES, INC. (NERA)

1988- Senior Vice President, Office Head, Telecommunications Practice Director. Dr.

Taylor has directed many studies applying economic and statistical reasoning to regulatory, antitrust and competitive issues in telecommunications markets. In the area of environmental regulation, he has studied statistical problems associated with measuring the level and rate of change of emissions.

BELL COMMUNICATIONS RESEARCH, INC. (Bellcore)

1983-1988 Division Manager, Economic Analysis, formerly Central Services Organization, formerly American Telephone and Telegraph Company. While at Bellcore, Dr. Taylor performed theoretical and quantitative research focusing on problems raised by the implementation of access charges. His work included design and implementation of demand response forecasting for interstate access demand, quantification of potential bypass liability, design of optimal nonlinear price schedules for access charges and theoretical and quantitative analysis of price cap regulation of access charges.

BELL TELEPHONE LABORATORIES

1975-1983 Member, Technical Staff, Economics Research Center. Performed basic research on theoretical and applied econometrics, focusing on small sample theory, panel data and simultaneous equations systems.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Fall 1977 Visiting Associate Professor, Department of Economics. Taught graduate courses in econometrics.

CENTER FOR OPERATIONS RESEARCH AND ECONOMETRICS

Université Catholique de Louvain, Belgium.

1974-1975 Research Associate. Performed post-doctoral research on finite sample econometric theory and on cost function estimation.

CORNELL UNIVERSITY

1972-1975 Assistant Professor, Department of Economics. (On leave 1974-1975.) Taught graduate and undergraduate courses on econometrics, microeconomic theory and principles.

MISCELLANEOUS

1985-1995 Associate Editor, *Journal of Econometrics*, North-Holland Publishing Company.
1990- Board of Directors, National Economic Research Associates, Inc.
Board of Trustees, Treasurer, Episcopal Divinity School, Cambridge, Massachusetts.

PUBLICATIONS

- “Smoothness Priors and Stochastic Prior Restrictions in Distributed Lag Estimation,”
International Economic Review, 15 (1974), pp. 803-804.
- “Prior Information on the Coefficients When the Disturbance Covariance Matrix is Unknown,”
Econometrica, 44 (1976), pp. 725-739.
- “Small Sample Properties of a Class of Two Stage Aitken Estimators,” *Econometrica*, 45
(1977), pp. 497-508.
- “The Heteroscedastic Linear Model: Exact Finite Sample Results,” *Econometrica*, 46 (1978),
pp. 663-676.
- “Small Sample Considerations in Estimation from Panel Data,” *Journal of Econometrics*, 13
(1980) pp. 203-223.
- “Comparing Specification Tests and Classical Tests,” Bell Laboratories Economics Discussion
Paper, 1980 (with J.A. Hausman).
- “Panel Data and Unobservable Individual Effects,” *Econometrica*, 49 (1981), pp. 1377-1398
(with J.A. Hausman).
- “On the Efficiency of the Cochrane-Orcutt Estimator,” *Journal of Econometrics*, 17 (1981), pp.
67-82.
- “A Generalized Specification Test,” *Economics Letters*, 8 (1981), pp. 239-245 (with J.A.
Hausman).
- “Identification in Linear Simultaneous Equations Models with Covariance Restrictions: An
Instrumental Variables Interpretation,” *Econometrica*, 51 (1983), pp. 1527-1549 (with
J.A. Hausman).
- “On the Relevance of Finite Sample Distribution Theory,” *Econometric Reviews*, 2 (1983), pp.
1-84.
- “Universal Service and the Access Charge Debate: Comment,” in P.C. Mann and H.M. Trebing
(editors), *Changing Patterns in Regulation, Markets, and Technology: The Effect on
Public Utility Pricing*. The Institute of Public Utilities, Michigan State University,
1984.
- “Recovery of Local Telephone Plant Costs under the St. Louis Plan,” in P.C. Mann and H.M.
Trebing (editors), *Impact of Deregulation and Market Forces on Public Utilities*. The
Institute of Public Utilities, Michigan State University, 1985.
- “Access Charges and Bypass: Some Approximate Magnitudes,” in W.R. Cooke (editor),
Proceedings of the Twelfth Annual Telecommunications Policy Research Conference,
1985.
- “Federal and State Issues in Non-Traffic Sensitive Cost Recovery,” in *Proceedings from the
Telecommunications Deregulation Forum*. Karl Eller Center, College of Business and
Public Administration, University of Arizona, Tucson, Arizona, 1986.
- “Panel Data” in N.L. Johnson and S. Kotz (editors), *Encyclopedia of Statistical Sciences*. John
Wiley & Sons, New York, 1986.

- “An Analysis of Tapered Access Charges for End Users,” in P.C. Mann and H.M. Trebing (editors), *New Regulatory and Management Strategies in a Changing Market Environment*. The Institute of Public Utilities, Michigan State University, 1987 (with D.P. Heyman, J.M. Lazorchak, and D.S. Sibley).
- “Efficient Estimation and Identification of Simultaneous Equation Models with Covariance Restrictions,” *Econometrica*, 55 (1987), pp. 849-874 (with J.A. Hausman and W.K. Newey).
- “Alternative NTS Recovery Mechanisms and Geographic Averaging of Toll Rates,” in *Proceedings of the Thirteenth Annual Rate Symposium: Pricing Electric, Gas, and Telecommunications Services*. The Institute for the Study of Regulation, University of Missouri, Columbia, 1987.
- “Price Cap Regulation: Contrasting Approaches Taken at the Federal and State Level,” in W. Bolter (editor), *Federal/State Price-of-Service Regulation: Why, What and How?*, Proceedings of the George Washington University Policy Symposium, December, 1987.
- “Local Exchange Pricing: Is There Any Hope?,” in J. Alleman (editor), *Perspectives on the Telephone Industry: The Challenge of the Future*. Ballinger Publishing Company, Cambridge, Massachusetts, 1989.
- “Generic Costing and Pricing Problems in the New Network: How Should Costs be Defined and Assessed,” in P.C. Mann and H.M. Trebing (editors) *New Regulatory Concepts, Issues, and Controversies*. The Institute of Public Utilities, Michigan State University, 1989.
- “Telephone Penetration and Universal Service in the 1980s,” in B. Cole (editor), *Divestiture Five Years Later*. Columbia University Press, New York, New York, 1989 (with L.J. Perl).
- “Regulating Competition for IntraLATA Services,” in *Telecommunications in a Competitive Environment*, Proceedings of the Third Biennial NERA Telecommunications Conference, 1989, pp. 35-50.
- “Costing Principles for Competitive Assessment,” in *Telecommunications Costing in a Dynamic Environment*, Bellcore-Bell Canada Conference Proceedings, 1989 (with T.J. Tardiff).
- “Optional Tariffs for Access in the FCC's Price Cap Proposal,” in M. Einhorn (ed.), *Price Caps and Incentive Regulation in the Telecommunications Industry*. Kluwer, 1991 (with D.P. Heyman and D.S. Sibley).
- “Alternative Measures of Cross-Subsidization,” prepared for the Florida Workshop on Appropriate Methodologies for the Detection of Cross--Subsidies, June 8, 1991.
- “Predation and Multiproduct Firms: An Economic Appraisal of the Sievers-Albery Results,” *Antitrust Law Journal*, 30 (1992), pp. 785-795.
- “Lessons for the Energy Industries from Deregulation in Telecommunications,” *Proceedings of the 46th Annual Meeting of the Federal Energy Bar Association*, May 1992.
- “Efficient Price of Telecommunications Services: The State of the Debate,” *Review of Industrial Organization*, Vol. 8, pp. 21-37, 1993.

- “Status and Results of Regulatory Reform in the U.S. Telecommunications Industry,” in C.G. Stalon, *Regulatory Responses to Continuously Changing Industry Structures*. The Institute of Public Utilities, Michigan State University, 1992.
- “Post-Divestiture Long-Distance Competition in the United States,” *American Economic Review*, Vol. 83, No. 2, May 1993 (with Lester D. Taylor). Reprinted in E. Bailey, J. Hower, and J. Pack, *The Political Economy of Privatization and Deregulation*. London: Edward Elgar, 1994.
- “Comment on ‘Pricing of Inputs Sold to Competitors,’ by W.J. Baumol and J.G. Sidak,” *Yale Journal on Regulation*, Vol. 11, Issue 1, 1994, pp. 225-240 (with Alfred E. Kahn).
- “Comments on Economic Efficiency and Incentive Regulation,” Chapter 7 in S. Globerman, W. Stanbury and T. Wilson, *The Future of Telecommunications Policy in Canada*. Toronto: Institute for Policy Analysis, University of Toronto, April 1995.
- “Revising Price Caps: The Next Generation of Incentive Regulation Plans,” Chapter 2 in M.A. Crew (ed.) *Pricing and Regulatory Innovations under Increasing Competition*. Boston: Kluwer Academic Publishers, May 1996 (with T. Tardiff).
- “An Analysis of the State of Competition in Long-Distance Telephone Markets,” *Journal of Regulatory Economics*, May 1997, pp. 227-256 (with J.D. Zona).
- “An Analysis of the Welfare Effects of Long Distance Market Entry by an Integrated Access and Long Distance Provider,” *Journal of Regulatory Economics*, March 1998, pp. 183-196 (with Richard Schmalensee, J.D. Zona and Paul Hinton).
- “Market Power and Mergers in Telecommunications,” *Proceedings of the Institute of Public Utilities; 30th Annual Conference: Competition in Crisis: Where are Network Industries Heading?* The Institute of Public Utilities, Michigan State University, 1999.
- “The Baby and the Bathwater: Utility Competition, But at What Price?,” *Public Utilities Fortnightly*, Vol. 137, No.21, November 15, 1999, pp. 48-56 (with Anne S. Babineau and Matthew M. Weissman).

TESTIMONIES

Access Charges

- Florida Public Service Commission (Docket No. 820537-TP), July 22, 1983.
- Arkansas Public Service Commission (Docket No. 83-042-U), October 7, 1985.
- Public Utility Commission of Texas (Docket No. 8585), December 18, 1989.
- Mexican Secretariat of Communications and Transport, affidavit re interconnection regulation with T.J. Tardiff, October 18, 1995.
- Federal Communications Commission (CC Docket No. 96-98), affidavit July 8, 1996; *ex parte* letters filed July 22, 1996 and July 23, 1996.
- Federal Communications Commission (CC Docket No. 96-262 et. al.) with Richard Schmalensee, January 29, 1997). Rebuttal February 14, 1997.

New York Public Service Commission (Case 94-C-0095 and 28425), Panel Testimony, May 8, 1997. Rebuttal Panel Testimony July 8, 1997.
Pennsylvania Public Utility Commission (Docket No. I-00960066), June 30, 1997. Rebuttal July 29, 1997. Surrebuttal August 27, 1997.
Connecticut Department of Public Utility Control (Docket No. 96-04-07), October 16, 1997.
Federal Communications Commission (*ex parte* CC Docket No. 96-262 *et. al.*), with Richard Schmalensee, January 21, 1998.
Federal Communications Commission (CCB/CPD 98-12), March 18, 1998.
Federal Communications Commission (CC Docket Nos. 96-262, 94-1, 97-250 and RM 9210), October 26, 1998. Reply November 9, 1998.
Federal Communications Commission (Docket No. 99-24), with Karl McDermott, January 20, 1999. Reply April 8, 1999.
Vermont Public Service Board (Docket No. 6167), May 20, 1999. Supplemental May 27, 1999.

Incentive and Price Cap Regulation

Federal Communications Commission (Docket No. 87-313), March 17, 1988.
Florida Public Service Commission (Docket No. 880069-TL), June 10, 1988.
Federal Communications Commission (Docket No. 87-313), August 18, 1988. Rebuttal November 18, 1988.
New Hampshire Public Service Commission (Docket 89-010), March 3, 1989.
Federal Communications Commission (Docket No. 87-313), June 9, 1989.
Federal Communications Commission (Docket No. 87-313), August 3, 1989. (2 filings)
New York State Public Service Commission (Case 28961 - Fifth Stage), September 15, 1989.
Georgia Public Service Commission (Docket No. 3882-U), September 29, 1989.
Federal Communications Commission (Docket 87-313), May 3, 1990.
Federal Communications Commission (Docket 87-313), June 8, 1990 (2 filings).
State of Maine Public Utilities Commission (Docket No. 89-397), June 15, 1990.
Montana Public Service Commission (Docket No. 90.8.46), October 4, 1990.
Federal Communications Commission (Docket 87-313), December 21, 1990.
Tennessee Public Service Commission, February 20, 1991.
Federal Communications Commission (Docket 87-313) with Alfred E. Kahn), June 12, 1991.
California Public Utilities Commission (Phase II of Case 90-07-037) with Timothy J. Tardiff, August 30, 1991. Supplemental testimony January 21, 1992.
Rhode Island Public Utilities Commission (Docket No. 1997), September 30, 1991.
Montana Public Service Commission (Docket No. 90.12.86), November 4, 1991. Additional testimony January 15, 1992.
Federal Communications Commission (Pacific Bell Tariff F.C.C. No. 128, Transmittal No. 1579) with T.J. Tardiff, April 15, 1992. Reply comments July 31, 1992.
California Public Utilities Commission (Docket No. I.87-11-033), with T.J. Tardiff, May 1, 1992.

Delaware Public Utilities Commission (Docket No. 33), June 22, 1992.
Florida Public Service Commission (Docket No. 920260-TL), December 18, 1992.
California Public Utilities Commission (Docket No. I.87-11-033), with T.J. Tardiff, April 8, 1993, reply testimony May 7, 1993.
Canadian Radio-Television and Telecommunications Commission (Docket No. 92-78), with T.J. Tardiff, April 13, 1993 (2 filings).
Federal Communications Commission (Petition for Declaratory Ruling and Related Waivers to Establish a New Regulatory Model for the Ameritech Region), April 16, 1993. Reply Comments, July 12, 1993.
Delaware Public Utilities Commission (Docket No. 33), June 1, 1993. Supplementary statement, June 7, 1993. Second supplementary statement," June 14, 1993.
Vermont Public Service Board (Dockets 5700/5702), September 30, 1993. Rebuttal testimony July 5, 1994.
Pennsylvania Public Utility Commission (Docket No. P-009350715), October 1, 1993. Rebuttal January 18, 1994.
Massachusetts Department of Public Utilities (Docket No. D.P.U. 94-50), April 14, 1994. Rebuttal October 26, 1994.
Federal Communications Commission (CC Docket 94-1), May 9, 1994. Reply June 29, 1994.
Federal Communications Commission (CC Docket 94-1) with R. Schmalensee, May 9, 1994. Reply June 29, 1994.
New York State Public Service Commission (Case 92-C-0665), panel testimony, October 3, 1994.
State of Maine Public Utilities Commission (Docket Nos. 94-123/94-254), December 13, 1994. Rebuttal January 13, 1995.
Canadian Radio-Television and Telecommunications Commission (Application of Teleglobe Canada for Review of the Regulatory Framework of Teleglobe Canada Inc.), December 21, 1994.
Kentucky Public Service Commission, testimony re concerning telecommunications productivity growth and price cap plans, April 18, 1995.
California Public Utilities Commission (U 1015 C), May 15, 1995. Rebuttal January 12, 1996.
State of Connecticut, Department of Public Utility Control (DPUC Docket No. 95-03-01), June 19, 1995.
Louisiana Public Service Commission (Docket No. U-17949, Subdocket E), July 24, 1995.
California Public Utilities Commission (Investigation No. I.95-05-047), with R.L. Schmalensee and T.J. Tardiff, September 8, 1995. Reply September 18, 1995.
Mississippi Public Service Commission (Docket No. 95-UA-313), October 13, 1995.
Louisiana Public Service Commission (Docket No. U-20883), November 21, 1995.
Federal Communications Commission (CC Docket No. 94-1), with T. Tardiff and C. Zarkadas, December 18, 1995. Reply March 1, 1996.
North Carolina Utilities Commission (Docket No. P-7, Sub 825; P-10, Sub 479), February 9, 1996.

Rhode Island Public Utilities Commission (Docket No. 2370), February 23, 1996. Rebuttal June 25, 1996.

Pennsylvania Public Utility Commission (Docket No. P-00961024), April 15, 1996. Rebuttal July 19, 1996.

Canadian Radio-Television and Telecommunications Commission, in response to CRTC Telecom Public Notice CRTC 96-8 (2 filings), June 10, 1996.

Federal Communications Commission (CC Docket 96-262 et al.), *ex parte* March 1997.

Federal Communications Commission (CC Docket Nos. 93-193, Phase 1, Part 2, 94-65), May 19, 1997.

Vermont Public Service Board (Docket no. 6000), January 19, 1998.

Colorado Public Utilities Commission (Docket No. 97A-540T, January 30, 1998. Rebuttal May 14, 1998.

California Public Utilities Commission, affidavit on economic principles for updating Pacific Bell's price cap plan. Filed February 2, 1998.

California Public Utilities Commission, reply comments on Pacific proposal to eliminate vestiges of ROR regulation and inflation minus productivity factor formula/index, filed June 19, 1998.

Pennsylvania Public Utility Commission (Docket No. P-00981410), October 16, 1998. Rebuttal February 4, 1999.

Comisión Federal de Telecomunicaciones de México ("Cofetel"), "Economic Parameter Values in the Telmex Price Cap Plan," arbitrator's report regarding the renewal of the price cap plan for Telmex, February 15, 1999.

Kentucky Public Service Commission (Docket No. 98-292), April 5, 1999.

Federal Communications Commission (Docket Nos. 94-1, 96-26), January 7, 2000.

Payphone

California Public Utilities Commission (Case 88-04-029), July 11, 1988.

Illinois Commerce Commission (Docket No. 88-0412), August 3, 1990. Surrebuttal December 9, 1991.

Michigan Public Service Commission (Case No. U-11756), October 9, 1998.

South Carolina Public Service Commission (Docket No. 97-124-C), December 7, 1998.

New Jersey Board of Public Utilities (OAL DOCKET Nos. PUCOT 11269-97N, PUCOT 11357-97N, PUCOT 01186-94N AND PUCOT 09917-98N), March 8, 1999. Surrebuttal June 21, 1999.

Economic Costing and Pricing Principles

Florida Public Service Commission (Docket No. 820400-TP), June 25, 1986.

Delaware Public Service Commission (Docket No. 86-20, Phase II), March 31, 1989. Rebuttal

November 17, 1989.

Delaware Public Service Commission (Docket No. 89-24T), August 17, 1990.

Florida Public Service Commission (Docket No. 900633-TL), May 9, 1991.

Maryland Public Service Commission (Case No. 8584, Phase II), December 15, 1994.

Additional direct testimony May 5, 1995. Rebuttal testimony filed June 30, 1995.

Canadian Radio-Television and Telecommunications Commission, Response to Interrogatory SRCI(CRTC) 1Nov94-906, "Economies of Scope in Telecommunications," January 31, 1995.

Pennsylvania Public Utility Commission (Docket Nos. A-310203F0002, A-310213F0002, A-310236F0002 and A-310258F0002), March 21, 1996.

State of Connecticut, Department of Public Utility Control (DPUC Docket No. 95-06-17), July 23, 1996.

New Jersey Board of Public Utilities (Docket No. TX95120631), August 15, 1996. Rebuttal filed August 30, 1996.

Florida Public Service Commission (Docket No. 980000-SP), September 24, 1998.

Nebraska Public Service Commission, on behalf of U S WEST (Application No. C-1628), October 20, 1998. Reply November 20, 1998.

Florida Public Service Commission (Docket No. 980000-SP), November 13, 1998.

Wyoming Public Service Commission (Docket No. 70000-TR-99), April 26, 1999.

New Mexico Public Regulation Commission (Utility Case No. 3147), December 6, 1999.

Statistics

Arizona State Air Pollution Control Hearing Board (Docket No. A-90-02), affidavit December 7, 1990.

Expert testimony: Michigan Circuit Court (Case No. 87-709234-CE and 87-709232-CE), *Her Majesty the Queen, et al., v. Greater Detroit Resource Recovery Authority, et al.*, February, 1992.

Expert testimony: United States District Court, Eastern District of New York, *Jancyn Manufacturing Corp. v. The County of Suffolk*, January 11, 1994.

New York Public Service Commission (Case Nos. 93-C-0451 and 91-C-1249), July 23, 1996.

New York Public Service Commission (Cases 95-C-0657, 94-C-0095, 91-C-1174 and 96-C-0036): panel testimony, March 18, 1998. Rebuttal June 3, 1998.

InterLATA Toll Competition

Canadian Radio-Television and Telecommunications Commission (Docket No. 1990-73), November 30, 1990.

Federal Communications Commission (Docket 91-141), August 6, 1991.

Federal Communications Commission (CC Docket 92-141), July 10, 1992.

Federal Communications Commission (In the Matter of Policy and Rules Concerning Rates for

Competitive
Common
Carrier
Services
and
Facilities
Authorization
Therefor)
with A.E.
Kahn,
November
12, 1993.

- U.S. District Court for the District of Columbia *United States of America v. Western Electric Company, Inc. and American Telephone and Telegraph Company*, Affidavit with A.E. Kahn, May 13, 1994.
- U.S. Department of Justice, *United States of America v. Western Electric Company, Inc. and American Telephone and Telegraph Company*, August 25, 1994.
- Federal Communications *ex parte* filing in CC Docket No. 94-1, March 16, 1995.
- Federal Communications Commission (CC Docket No. 79-252) *ex parte* comments with J. Douglas Zona, April 1995.
- U.S. Department of Justice in *United States of America v. Western Electric Company, Inc. and American Telephone and Telegraph Company*, regarding Telefonos de Mexico's provision of interexchange telecommunications services within the United States, affidavit May 22, 1995.
- U.S. Department of Justice in *United States of America v. Western Electric Company, Inc. and American Telephone and Telegraph Company*, regarding provision of interexchange telecommunications services to customers with independent access to interexchange carriers, May 30, 1995.
- Expert testimony: *US WATS v. AT&T*, Confidential Report, August 22, 1995. Testimony October 18-20, 25-27, 30, 1995. Rebuttal testimony December 4, December 11, 1995.
- Expert testimony: United States District Court for the Northern District of Texas, Dallas Division, Civil Action 394CV-1088D, *Darren B. Swain, Inc. d/b/a U.S. Communications v. AT&T Corp.* Confidential Report, November 17, 1995.
- U.S. District Court, Southern District of New York, *Multi Communications Media Inc., v. AT&T and Trevor Fischbach* (96 Civ. 2679 (MBM)), December 27, 1996.
- Federal Communications Commission (CC Docket Nos. 96-262 and 96-45), March 18, 1998.
- Subcommittee on Communications of the Senate Committee on Commerce, Science and Transportation, *Statement* and oral testimony regarding long distance competition and Section 271 of the Telecommunications Act of 1996, March 25, 1998.
- Federal Communications Commission (CC Docket No. 96-262), with P.S. Brandon, October

16, 1998.

Federal Communications Commission (CC Docket No. 96-262) with P.S. Brandon, October 22, 1998.

IntraLATA Toll Competition

New Jersey Board of Public Utilities (Docket No. TX90050349), December 6, 1990.

New York Public Service Commission (Case No. 28425) with T.J. Tardiff, May 1, 1992.

New Jersey Board of Regulatory Commissioners (Docket No. TX93060259), Affidavit October 1, 1993.

New Jersey Board of Public Utilities (Docket Nos. TX90050349, TE92111047, TE93060211), April 7, 1994. Rebuttal April 25, 1994. Summary Affidavit and Technical Affidavit April 19, 1994.

Delaware Public Utilities Commission (Docket No. 42), October 21, 1994.

Pennsylvania Public Utility Commission (Docket No. I-940034), panel testimony, December 8, 1994. Reply February 23, 1995. Surrebuttal March 16, 1995.

Public Service Commission of West Virginia (Case No. 94-1103-T-GI), March 24, 1995.

New Jersey Board of Public Utilities (Docket No. TX94090388), April 17, 1995. Rebuttal May 31, 1995.

New York Public Service Commission (Case 94-C-0017), August 1, 1995.

Rhode Island Public Service Commission (Docket No. 2252), November 17, 1995.

Massachusetts Department of Telecommunications and Energy (Docket No. 98-85), October 20, 1998.

Local Competition

Massachusetts Department of Public Utilities (Docket No. D.P.U. 94-185), May 19, 1995.
Rebuttal August 23, 1995.

The Public Utilities Commission of Ohio (Case No. 94-1695-TP-ACE), May 24, 1995.

Vermont Public Service Board (Open Network Architecture Docket No. 5713), June 7, 1995.
Rebuttal July 12, 1995.

New Jersey Board of Public Utilities (with Kenneth Gordon and Alfred E. Kahn), paper filed in connection with arbitration proceedings, August 9, 1996.

Florida Public Service Commission, "Local Telecommunications Competition: An Evaluation of a Proposal by the Communications Staff of the Florida Public Service Commission," with A. Banerjee, filed November 21, 1997.

Rhode Island Public Utilities Commission (Docket No. 2681), January 15, 1999.

Connecticut Department of Public Utility Control (Docket No. 95-06-17RE02), June 8, 1999.

Interconnection

Federal Communications Commission (Docket 91-141), September 20, 1991.

Maryland Public Service Commission (Case No. 8584) with A.E. Kahn, November 19, 1993.
Rebuttal January 10, 1994. Surrebuttal January 24, 1994.
Maryland Public Service Commission (Case No. 8659), November 9, 1994.
Federal Communications Commission (CC Docket No. 95-185), affidavit March 4, 1996.
Federal Communications Commission (CC Docket No. 96-98), videotaped presentation on
economic costs for interconnection, FCC Economic Open Forum, May 20, 1996.

Imputation

New Hampshire Public Service Commission (Docket DE 90-002), May 1, 1992. Reply
testimony July 10, 1992. Rebuttal testimony August 21, 1992.
Canadian Radio-Television and Telecommunications Commission (Telecom Public Notice
CRTC 95-36), August 18, 1995.
Massachusetts Department of Public Utilities (Docket No. D.P.U./D.T.E. 94-185-C), Affidavit
February 6, 1998. Reply Affidavit February 19, 1998.
New Jersey Board of Public Utilities (BPU Docket No. TO97100808, OAL Docket No.
PUCOT 11326-97N), July 8, 1998. Rebuttal September 18, 1998.
Vermont Public Service Board (Docket No. 6077), November 4, 1998.

Economic Depreciation

Florida Public Service Commission (Docket No. 920385-TL), September 3, 1992.
Louisiana Public Service Commission (Docket No. U-17949, Subdocket E), November 17,
1995. Surrebuttal, December 13, 1995, Further Surrebuttal, January 12, 1996.
Federal Communications Commission (CC Docket No. 98-137), with A. Banerjee, November
23, 1998.

Spectrum

Federal Communications Commission (ET Docket 92-100) with Richard Schmalensee,
November 9, 1992.
Federal Communications Commission (Amendment of Part 90 of the Commission's Rules to
Adopt Regulations for Automatic Vehicle Monitoring Systems, PR Docket No. 93-61),
with R. Schmalensee, June 29, 1993.

Mergers

U.S. District Court for the District of Columbia, *United States of America v. Western Electric
Company, Inc. and American Telephone and Telegraph Company*, with A.E. Kahn,
January 14, 1994.
Vermont Public Service Board (Docket No. 5900), September 6, 1996.
Maine Public Utilities Commission (Docket No. 96-388), September 6, 1996. Rebuttal October

30, 1996.

- New Hampshire Public Service Commission (Docket DE 96-220), October 10, 1996.
Federal Communications Commission (Tracking No. 96-0221), with Richard Schmalensee, October 23, 1996.
New York Public Service Commission (Case 96-C-0603), panel testimony, November 25, 1996. Reply December 12, 1996.
Federal Communications Commission (CC Docket No. 97-211), with R. Schmalensee, affidavit March 13, 1998. Reply affidavit May 26, 1998.
Connecticut Department of Public Utility Control, testimony regarding economic aspects of the SBC-SNET proposed change in control, filed June 1, 1998.
Federal Communications Commission (CC Docket No. 98-141), with R. Schmalensee, July 21, 1998. Reply November 11, 1998.
Alaskan Public Utilities Commission (Docket Nos. U-98-140/141/142 and U-98-173/174), February 2, 1999. Rebuttal March 24, 1999.
Pennsylvania Public Utility Commission (Docket Nos. A-310200F0002, A-311350F0002, A-310222F0002, A-310291F0003), April 22, 1999.
State Corporation Commission of Virginia, *In re: Joint Petition of Bell Atlantic Corporation and GTE Corporation for approval of agreement and plan of merger*, May 28, 1999.
Ohio Public Utility Commission (Docket No. 98-1398-TP-AMT), June 16, 1999.
Kentucky Public Service Commission (Docket No. 99-296), July 9, 1999.
Colorado Public Utilities Commission (Docket No. 99A-407T), December 7, 1999.

Broadband Services

- Federal Communications Commission (File Nos. W-P-C 6912 and 6966), August 5, 1994.
Federal Communications Commission (File Nos. W-P-C 6982 and 6983), September 21, 1994.
Federal Communications Commission, affidavit examining cost support for Asymmetric Digital Subscriber Loop (ADSL) video dialtone market trial, February 21, 1995.
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