President Richard Cabe, Inc. 221 I St. Salida, CO 81201

(719) 530-0278 (office) (928) 447-6761 (fax) Richard@SalidaMillwork.com

Education

Ph.D., Economics, University of Wyoming, 1988 Public regulation & Industrial organization Natural resource & Environmental economics

M.A., Economics, Pennsylvania State University, 1980 Mathematical economics History of economic thought

B.A., Mathematics, University of Maine at Presque Isle, 1978 Minor in Business Administration

AREAS OF INTEREST

Telecommunications industry Microeconomics of technological change Markets for real property

EXPERT TESTIMONY AND REPORTS:

In the United States District Court For the Eastern District of Texas, Marshall Division, T-Netix, Inc. v. Worldcom, Inc. and Global Tel*Link Corporation (Civil Action No. 2-01CV189 DF); Deposition of Richard Cabe in Dallas, Texas, 3 April, 2003, regarding damages from patent infringement

Before the Federal Communications Commission, CC Docket No. 96-128: In the Matter of Implementation of the Pay Telephone Reclassification and Compensation Provisions of the Telecommunications Act of 1996, Declaration of Richard Cabe, Ph.D. on behalf of T-NETIX, Inc.; Dated 22 May, 2002 (filed 24 May, 2002); Further Declaration of Richard Cabe, Ph.D. Dated 21 June, 2002 (filed 24 June, 2002)

Before the Minnesota Public Utilities Commission, PUC Docket No. P-421/C1-01-1375: In the Matter of the Commission's Review and Investigation of Qwest's Unbundled Network Element (UNE) Prices; Reply Testimony filed March 18, 2002, Surreply Testimony filed May 9, 2002 on behalf of Covad Communications Company; hearing testimony May 21, 2002

Before the Washington Utilities and Transportation Commission, Docket No. UT-003013: In the Matter of the Continued Costing and Pricing of Unbundled Network Elements and Transport and Termination; Supplemental Response Testimony filed February 14, 2002, Second Supplemental Response Testimony filed March 25, 2002 on behalf of Covad Communications Company; hearing testimony May 9, 2002

Before the Federal Communications Commission, CC Docket No. 01-277: In the Matter of Application by BellSouth Corporation, BellSouth Telecommunications, Inc., and BellSouth Long Distance, Inc., for Provision of In-Region, InterLATA Services in Georgia and Louisiana; Declaration of Sherry Lichtenberg, Rene Desrosiers, Karen Kinard and Richard Cabe, on behalf of WorldCom, Inc.; Filed 22 October, 2001; Reply Declaration filed 13 November, 2001

Before the Public Utilities Commission of Nevada, Docket No. 00-7031: In re petition for review and approval of the draft application of SBC COMMUNICATIONS, INC., NEVADA BELL TELEPHONE COMPANY and SOUTHWESTERN BELL COMMUNICATIONS SERVICES, INC., d/b/a Nevada Bell Long Distance, for provision of in-region interLATA services in Nevada; Prepared Testimony of Richard Cabe, filed 6 August, 2001, on behalf of Commission Staff

Before the Mississippi Public Service Commission, Docket No. 2000-UA-999; Direct and Rebuttal Testimony filed April 16, 2001, on behalf of WorldCom, Inc.; hearing testimony 21 June, 2001

Before the Washington Utilities and Transportation Commission, Docket No. UT-003013 Part B: In the Matter of the Continued Costing and Pricing of Unbundled Elements, Transport and Termination and Resale; Response testimony filed 23 October, 2000, Supplemental Response testimony filed 20 December, 2000, on behalf of Rhythms Links Inc. and Covad Communications Company

Before the New Mexico Public Regulation Commission, Case No. 3317: In the Matter of the Investigation into the Rates and Charges of Institutional Operator Service Providers; Direct Testimony filed 21 August, 2000 on behalf of Gateway Technologies, Inc.; Rebuttal Testimony filed 31 October, 2000; Further Direct Testimony filed 10 August, 2001; Further Rebuttal Testimony filed 31 August, 2001; Supplemental Rebuttal Testimony filed 13 September, 2001; Hearing testimony 1 October, 2001

Before the Washington Utilities and Transportation Commission, Docket No. UT-003013 Part A: In the Matter of the Continued Costing and Pricing of Unbundled Elements, Transport and Termination and Resale; Direct testimony filed 19 May, 2000, Response testimony filed 21 July, 2000, Rebuttal testimony filed 4 August, 2000, on behalf of Rhythms Links Inc. and Covad Communications Company; hearing testimony 25 August, 2000

Before the Washington Utilities and Transportation Commission, Docket No. UT-960369: In the Matter of the Pricing Proceeding For Interconnection, Unbundled Elements, Transport and Termination and Resale; Direct testimony on behalf of MCI Worldcom filed 15 December, 1999; rebuttal testimony filed 7 February; hearing testimony 28 February, 2000

Before the New Mexico Public Regulatory Commission, Utility Case No. 3111, In the Matter of the Implementation of a State Universal Service Fund, Hearing testimony December 1, 1999 on behalf of MCI Worldcom

Before the Tennessee Regulatory Authority: "Public Policy considerations for Regulation of the InterLATA Telecommunications Market in Tennessee", Statement of Richard Cabe on behalf of MCI Worldcom in the Tennessee Regulatory Authority's consideration of amendments to the IXC Rule; filed September 14, 1999

Before the Iowa Utilities Board, Docket No. INU-99-3: In the Matter of Petition for Determination of Effective Competition, for Waiver of Accounting Plan Requirement and for Expedited Consideration; Direct Testimony filed September 10, 1999; Hearing testimony October 12, 1999

Before the Public Utilities Commission of the State of Colorado, Docket No. 99A-161T: In the Matter of the Application of U S West Communications, Inc. to Reduce Business Basic Exchange and Long Distance Revenues upon Receipt of the Colorado High Cost Support Mechanism in Accordance with Decision No. C99-222; Direct Testimony filed August 6, 1999

State of Florida Division of Administrative Hearings DOAH Case No. 98-2445RP: Telephonic Deposition of Dr. Richard Cabe in the matter of Florida Competitive Carriers Association, Inc.; Telecommunications Resellers Association, Inc.; AT&T Communications of the Southern States, Inc.; MCI Telecommunications Corporation; and Sprint Communications Company Limited Partnership, Petitioners, v. Florida Public Service Commission, Respondent. August 14, 1998 on behalf of Florida Competitive Carriers Association.

Before the Mississippi Public Service Commission, Docket No. 97-AD-544: Generic Proceeding to Establish Permanent Prices for BellSouth Interconnection and Unbundled Network Elements; Direct Testimony filed January 28, 1998; Rebuttal testimony filed March 13, 1998; Hearing testimony March 31, 1998; On behalf of AT&T Communications of the South Central States, Inc.

Before the North Carolina Utilities Commission, Docket No. P-100, Sub 133d: Review of Cost Studies, Methodologies, and Cost-Based Rates for Unbundled Network Elements; Direct testimony filed December 15, 1997; Rebuttal testimony filed March 9, 1998; Hearing testimony March 25, 1998; On behalf of AT&T Communications of the Southern States, Inc. and MCI Telecommunications Corporation

Before the South Carolina Public Service Commission, Docket No. 97-374-C: Proceeding to Review BellSouth Telecommunications, Inc.'s Cost for Unbundled Network Elements and Interconnection Arrangements; Direct Filed November 17, 1997; Hearing Testimony December 16, 1997; On Behalf of AT&T Communications of the Southern States, Inc.

Before the Public Utilities Commission of the State of Colorado, Docket No. 97M-063T; On Behalf of AT&T Communications of the Mountain States, Inc. and MCI Telecommunications Corporations; In the Matter of the Administration of the Colorado High Cost Fund and the Development of a Cost Model; Direct Testimony filed in the name of William Lehr; Hearing Testimony 1 December, 1997

Before the North Carolina Utilities Commission, Docket No. P-55, SUB 1022; Hearing Testimony September 30, 1997; In RE: Notification of Intention to File a Section 271 Petition for In-Region InterLATA Authority with the FCC Pursuant to the Telecommunications Act of 1996; Filed September 3, 1997; On Behalf of MCI Telecommunications Corporation and AT&T Communications of the Southern States

Before the Alabama Public Service Commission, Docket No. 26029, Review of Cost Studies; Filed August 29, 1997; Hearing Testimony September 24, 1997; On Behalf of MCI Telecommunications Corporation and AT&T Communications of the South Central States Before the Georgia Public Service Commission, Docket No. 7061-U, Review of Cost Studies, Methodologies, and Cost-Based Rates for Interconnection and Unbundling of BellSouth Telecommunications Services; Direct filed April 30, 1997; Rebuttal and Supplemental filed August 29, 1997; Surrebuttal filed September 8, 1997; Hearing Testimony September 18,1997; On Behalf of MCI Telecommunications Corporation and AT&T Communications of the South Central States

Before the Louisiana Public Service Commission, Docket No. 22022/22093; In RE: Review and Consideration of BellSouth Telecommunications, Inc.'s TSLRIC and LRIC Cost Studies; Filed August 25, 1997; Hearing Testimony 12 September, 1997; On Behalf of MCI Telecommunications Corporation and AT&T Communications of the South Central States

Before the Public Service Commission, Commonwealth of Kentucky, In the Matter of: Inquiry into Universal Service and Funding Issues, Administrative Case No. 360, Filed July 11, 1997; Hearing Testimony August 6, 1997; on behalf of MCI Telecommunications Corporation

Before the Florida Public Service Commission, In The Matter of the Petition of MCI Telecommunications Corporation for Arbitration with United Telephone Company of Florida and Central Telephone Company of Florida concerning interconnection rates, terms and conditions pursuant to the Federal Telecommunications Act of 1996, Docket No. 961230-TP; Direct filed October 11, 1996; Rebuttal filed November 19, 1996; Hearing Testimony December 19, 1996; on behalf of MCI Telecommunications Corporation

Before the Arizona Corporation Commission, In The Matter of The Petition Of MCImetro Access Transmission Services, Inc. For Arbitration Of Interconnection Rates, Terms, And Conditions Pursuant to 47 U.S.C. § 252(b) Of The Telecommunications Act Of 1996, Docket No: U-3175-96-479; October 18, 1996; on behalf of MCImetro Access Transmission Services, Inc.

Before the Public Utility Commission of Texas, In The Matter of The Petition Of MCImetro Access Transmission Services, Inc. For Arbitration Of Interconnection Rates, Terms, And Conditions Pursuant to 47 U.S.C. § 252(b) Of The Telecommunications Act Of 1996, Docket Nos. 16300, 16355, October 14, 1996; on behalf of MCImetro Access Transmission Services, Inc.

Before the Public Utilities Commission of the State of Oregon, In The Matter of The Petition Of MCImetro Access Transmission Services, Inc. For Arbitration Of Interconnection Rates, Terms, And Conditions Pursuant to 47 U.S.C. § 252(b) Of The Telecommunications Act Of 1996, ARB 9, October 11, 1996; on behalf of MCImetro Access Transmission Services, Inc.

Before the Utah Public Service Commission, In the Matter of the Petition for Arbitration, Consolidation and Request for Agency Action of MCIMetro Access Transmission Services, Inc. Pursuant to 47 U.S.C. Section 252, Docket No. 96-095-01; Direct testimony filed 8 November 1996; Rebuttal testimony filed 22 November, 1996 Before the Iowa Utilities Board, In Re MCI Metro Access Transmission Services, Inc., Petitioning Party, and U S West Communications, Inc., Responding Party, Docket No. ARB-96-2, September 6, 1996; on behalf of MCImetro.

"Before the Public Utilities Commission of Oregon:UM 351, In the matter of the Investigation into the Cost of Providing Telecommun ications Services, Electric Lightwave, Inc.'s Response to Issues 1, 3, and 4, filed 30 August, 1993"

Before the Washington Utilities and Transportation Commission, In the Matter of the Complaint of GTE Northwest Incorporated against Pacific Northwest Bell Telephone Company with respect to Interexchange Traffic Utilizing Extended Area Service Facilities, Docket No. U-88-1719-F; on behalf of U.S. Metrolink Company; Cross Examination December 1989

Affidavit of Richard Cabe, in Support of Motion of U.S. MetroLink Company for Suspension and Hearing in the matter of U.S. West Communications Tariff Filing 2056T before the Washington Utilities and Transportation Commission, September 1989

Implementation of the Colorado Telecommunications Act of 1987: An Evaluation", Report Prepared on behalf of the Colorado Public Utilities Commission, with Vinson Snowberger, June 30, 1988

Before the Energy and Utilities Committee of the Washington State House of Representatives, to present the Annual Report of the Utilities and Transportation Commission on the Status of the Washington Telecommunications Industry, February 1987

Before the Washington Utilities and Transportation Commission, In the Matter of Application of Pacific Northwest Bell for Banded Tariffs, Cause no. U-86-40; Cross Examination September 1986

Before the Washington Utilities and Transportation Commission, In the Matter of the Petition of AT&T of the Northwest for Classification as a Competitive Telecommunications Company, Cause no. U-86-113; Cross Examination April 1986

Cost of Service Information for Implementation of the Regulatory Flexibility Act, Report to the Washington Utilities and Transportation Commission, July 1985

"On Reducing Errors in Air Pollution Epidemiology," with S. Atkinson and T.D. Crocker, draft report, Institute for Policy Research, University of Wyoming to U.S. Environmental Protection Agency for Grant CR808893-01, April 1982.

PUBLICATIONS:

"Multimedia Economics" Instructional CD ROM included in 5 CD MBA Boxed Set, Pro One Software, Las Cruces, New Mexico, 1998

"Issues, Indicators, and Baselines: The Benefits and Hazards of Using a Natural Resource Accounting System in the RCA Analytical Process", with Jason Shogren and Stanley R. Johnson, in Evaluating Our Nation's Natural Resources, edited by T. Robertson, B. English, R. Alexander, and P. Rosenberry, University of Tennessee Agricultural Experiment Station, 1996

"CEEPES: An Evolving System for Agroenvironmental Policy", with Aziz Bouzaher, Stanley Johnson, Andrew Manale and Jason Shogren, p 67-89 in Integrating Economic and Ecological Indicators, edited by J. Walter Milon and Jason Shogren, Praeger, Westport CT, 1995

"Metamodels and Nonpoint Pollution Policy in Agriculture", with Aziz Bouzaher, Alicia Carriquiry, Phil Gassman, P. G. Lakshminarayan, and Jason Shogren, Water Resources Research 29, p. 1579-1587, June 1993

"The Effects of Environmental Policy on Tradeoffs in Weed Control Management", with Aziz Bouzaher, David Archer, Alicia Carriquiry and Jason Shogren, The Journal of Environmental Management, 36, #1, 69 - 80, Sept. 1992

"The Regulation of Non-Point Source Pollution Under Imperfect Information", with Joseph Herriges, The Journal of Environmental Economics and Management 22, 134-146, 1992

"Equilibrium Diffusion of Technological Change Through Multiple Processes", Technological Forecasting and Social Change 39, Number 3, May 1991

"Natural Resource Accounting Systems and Environmental Policy Modeling", with Stanley R. Johnson, The Journal of Soil and Water Conservation 45 # 5, p 533-9, September/October 1990

"Network Differentiation and the Prospects for Competition in Local Telecommunications", in Sixth Annual Current Issues Challenging the Regulatory Process, The Center for Public Utilities, New Mexico State University, 1990

"Prospects for Competition in the Local Exchange Telecommunications Industry", in Telecommunications Regulation in Washington State, Washington Utilities and Transportation Commission, January 29, 1989

"Rate of Return Regulation of Multiproduct Firms," Doctoral Dissertation, University of Wyoming, Department of Economics, 1988

Annual Report to the Legislature on the Status of the Washington Telecommunications Industry, principal author for the Washington Utilities and Transportation Commission, January, 1987

"Normative Economics and the Acid Rain Problem" with L.S. Eubanks, in T.D. Crocker, ed., Perspectives on the Economics of Acid Deposition, 1983, Ann Arbor Michigan: Ann Arbor Science Press. "Intertemporal and Intergenerational Pareto Efficiency: An Extended Theorem," Journal of Environmental Economics & Management 9, p 355-360, December 1982.

"Investment Criteria for Projects with Intergenerational Effects," Masters Thesis, Pennsylvania State University, Department of Economics, 1982.

EMPLOYMENT

Teaching:

Associate professor, Department of Economics and International Business, New Mexico State University; 1994 - 1999, Tenure Granted 1995, Assistant professor 1990 to 1994: Antitrust Policy and Monopoly Power; Graduate Microeconomic Theory; Mathematical Economics; Industrial Organization; Seminar in Regulatory Economics; Economics of Risk, Uncertainty and Information; Game Theory; Advanced Seminar in Industrial Organization; Econometrics; Managerial Economics; Introduction to Economics; Microeconomic Principles

Assistant professor, Department of Economics, West Virginia University, 1983-1984: Graduate Environmental Economics; Principles of Economics.

Lecturer, Department of Economics, University of Wyoming, 1982–1983: Money & Banking; Intermediate Microeconomics.

Teaching assistant, Department of Economics, University of Wyoming; Fall, 1980.

Teaching assistant, Department of Economics and Department of Mathematics, Pennsylvania State University, five quarters in academic years 1978-1979 and 1979-1980.

Public Policy:

Economic Consultant, 1988. Performed economic analysis concerning regulation of the telecommunications industry under contract to the Colorado Public Utilities Commission and the Washington Utilities and Transportation Commission.

Associate, RCG/Hagler, Bailly, Inc. 1987-1988. Assignments included litigation support in Bell Operating Company requests for lessened regulation and a study of the effect on property values of proximity to a major defense facility containing hazardous waste sites.

Telecommunications Regulatory Flexibility Manager, Washington Utilities and Transportation Commission, 1985-1987. Duties included conduct of investigations and preparation of recommendations, primarily with regard to the telecommunications industry; preparing evidence, assisting in cross examination and presenting expert testimony; and serving as a member of the Federal - State Joint Board Staff, FCC Docket 86-297, concerned with revising jurisdictional separations of telecommunications company costs and revenues.

Research:

Post-Doctoral Research Associate, Center for Agricultural and Rural Development, Department of Economics, Iowa State University, September 1988 to August 1990. Participate in policy-oriented economic research and serve as liason to the Economic Research Service, USDA.

Research Associate, Department of Economics, University of Wyoming, spring 1981 through summer 1982. Theoretical modelling, data construction, and analysis on health effects of air pollution and application of economic methods to ecosystem modelling. Under the direction of Thomas Crocker.

Research assistant, Department of Economics, University of Wyoming, summer 1980. Data construction and analysis on health effects of air pollution. Under the direction of Ralph d'Arge.

Research assistant, Department of Economics, Pennsylvania State University, summer and fall 1979. Theoretical and empirical work with Assymetric Quadratic Gorman Polar forms (flexible functional forms with explicit analytical solutions for the dual cost or expenditure function). Under the direction of Jonathon Dickinson.

Other Employment:

December, 2002 to present, Commercial Appraiser and Economist, Rocky Mountain Valuation Specialists, LLC, Lakewood, Colorado

One year, Administrative Research Assistant, Aroostook County Action Program, Presque Isle, Maine.

Four years, U.S. Coast Guard, Electronics Technician.

PERSONAL

Born July 16, 1950; Pulaski County, Arkansas Married, one child Second language: Spanish