SARAH GOODFRIEND, Ph.D.

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EXPERIENCE

Goodfriend Consulting, Austin, TX

Principal, 9/97 - present Provide advice and advocacy for client's economic, regulatory and antitrust policy positions. Specialty areas include antitrust and competitive issues, market power, discrimination, economies of scope and scale, efficient pricing and investment incentives and public welfare effects of industrial and regulatory change, with applications for the U.S. electric power and telecommunications industries.

MCI Telecommunications Corporation, Washington, DC

Executive Staff Member, Regulatory and Public Policy Analysis 9/95 - 5/97 Joined four person team of economists responsible for creation of MCI's national economic regulatory strategy. Specific responsibilities included developing and delivering presentations to the FCC, NARUC and State PUCs. Expert witness testimony addressed competitive, economic and regulatory aspects of federal and state implementation of the Federal Telecommunications Act of 1996. Directed outside teams of economic and engineering experts advocating MCI's national regulatory policy.

Public Utility Commission of Texas (PUC), Austin, TX

Commissioner 9/93 - 5/95 Appointed by Governor Ann Richards to the three member commission responsible for regulating the electric and telephone utilities of Texas. Advocated for procompetitive regulatory reforms. Significant electric decisions included the Texas Utilities' rate proceeding and the proposed CSW-EPEC electric merger. Significant telecommunications decisions reformed telecommunication utility pricing and required unbundling of network components.

Public Utility Commission of Texas -- continued
Director, Economic and Regulatory Policy Division 11/92 - 8/93
Graduate Internship, Economic Research Division Summer, 1980
Economist, Economic Research Division 5/78 - 5/79

Federal Energy Regulatory Commission (FERC), Office of Economic Policy, Washington, DC Advisory Economist and Expert Witness 6/87 - 9/92

Federal Trade Commission (FTC), Bureau of Economics, Washington, DC Expert Witness and Research Economist 10/85 - 6/87

Carolina Power and Light Company, Conservation and Load Management Department, Raleigh, NC Consulting Economist 5/83 - 5/84

University of North Carolina, Department of Economics, Chapel Hill, NC Teacher Training Program Supervisor 5/81 - 5/83, Teaching Instructor 8/80 - 5/81,

Research Assistant 8/79 - 5/80

EDUCATION

Ph.D. Economics, University of North Carolina, Chapel Hill, NC 1985

Dissertation: Estimation of a Q-Ratio Function for Regulated Electric Utilities: A Test of the Stigler-Peltzman Hypothesis of Regulatory Behavior

B.A. Economics (with high honors), University of Texas, Austin, TX 1978

Phi Kappa Phi Honorary Society Grinnell College, Grinnell, IA 1974-1976

EXPERT WITNESS TESTIMONY OR APPEARANCES

Caption of Proceeding	Before the	Testimony and Date
TXU Application for CC&N in Denton and Collin Counties	Public Utility Commission of Texas	Direct 6/00
Merger of the Parent Corp.s of Qwest Comm.Corp., LCI International Telecom Corp., USLD Comm. Inc., Phoenix Network Inc. and US WEST Comm. Inc.	Minnesota PUC Iowa PUB Nebraska PSC Montana PSC Washington UTC Utah PSC	Direct 1/00
American Electric Power Co. and Central and South	Public Utility Commission of Texas	Direct 7/99
American Electric Power Co. and Central and South West	Federal Energy Regulatory	Direct 4/99 Deposition 6/99
Collaborative Process Worksessions (re: Application of SBC for In- Region InterLATA Service)	Staff Advisors, Public Utility Commission of Texas	Public Interest, Performance Measurement and Penalties, 9/98 and 8/98
Independent System Administrator (ISA) Workshop	Public Utility Commission of Nevada	Oral Testimony 8/98
Petition of the Navy for Declaratory Ruling on Wholesale Customer Status for Three Bases in Texas	Public Utility Commission of Texas	Direct 6/98 Cross Examination 6/98
Application of SBC Communications, et al. for Provision of In-Region InterLATA Service in Texas	Public Utility Commission of Texas	Affidavit 4/98 Cross Examination 4/98
Application of Houston Lighting and Power Company For A Change in Accounting Procedures and Approval of Certain Base Rate Credits	Public Utility Commission of Texas	Direct 3/98 Deposition 3/98 Cross Examination 3/98
Texas-New Mexico Power Company's Application for Approval of TNMP's Transition Plan	Public Utility Commission of Texas	Direct 2/98 Cross Examination 3/98
Motion for Leave to File Brief Amicus Curiae and Brief in Support in SBC, et	U.S. District Court for the Northern District of Texas – Wichita Falls Division	Attachment (Affidavit)11/97 Affidavit 10/97
	TXU Application for CC&N in Denton and Collin Counties Merger of the Parent Corp.s of Qwest Comm.Corp., LCI International Telecom Corp., USLD Comm. Inc., Phoenix Network Inc. and US WEST Comm. Inc. American Electric Power Co. and Central and South American Electric Power Co. and Central and South West Collaborative Process Worksessions (re: Application of SBC for In-Region InterLATA Service) Independent System Administrator (ISA) Workshop Petition of the Navy for Declaratory Ruling on Wholesale Customer Status for Three Bases in Texas Application of SBC Communications, et al. for Provision of In-Region InterLATA Service in Texas Application of Houston Lighting and Power Company For A Change in Accounting Procedures and Approval of Certain Base Rate Credits Texas-New Mexico Power Company's Application for Approval of TNMP's Transition Plan Motion for Leave to File Brief Amicus Curiae and	TXU Application for CC&N in Denton and Collin Counties Merger of the Parent Corp.s of Qwest Comm.Corp., LCI International Telecom Corp., USLD Comm. Inc., Phoenix Network Inc. and US WEST Comm. Inc. American Electric Power Co. and Central and South Commission of Texas American Electric Power Co. and Central and South West Worksessions (re: Application of SBC for In-Region InterLATA Service) Independent System Administrator (ISA) Workshop Petition of the Navy for Declaratory Ruling on Wholesale Customer Status for Three Bases in Texas Application of Houston Lighting and Power Company For A Change in Accounting Procedures and Approval of Certain Base Rate Credits Texas-New Mexico Power Company's Application for Approval of TNMP's Transition Plan Motion for Leave to File Brief Amicus Curiae and Brief in Support in SBC, et Minnesota PUC Iowa PUB Ninnesota PUC Iowa PUB Nebraska PSC Montana PSC Washington UTC Utah PSC Montana PSC Washington UTC Utah PSC Washington UTC Utah PSC Washington UTC Utah PSC Washington UTC Utah PSC Washington UTC Utah PSC Washington UTC Utah PSC Washington Public Utility Commission of Texas Public Utility

MCI Telecommunications Corp. and MCImetro Access Inc.	Petition for Arbitration of Interconnection with GTE of Florida	Florida PSC	Direct 8/96 Rebuttal 9/96 Deposition 9/96
	Petition for Arbitration of Interconnection with Bell South of North Carolina	North Carolina UC	Direct and Rebuttal 9/96 Cross Examination 10/96
	Petition for Arbitration of Interconnection with GTE of North Carolina	North Carolina UC	Direct 9/96 Rebuttal 10/96 Cross Examination 11/96
	Petition for Arbitration of Interconnection with Southwestern Bell of Missouri	Missouri PSC	Direct 9/96 Rebuttal 10/96 Cross Examination 10/96
	Petition for Arbitration of Interconnection with Bell South of Kentucky	Kentucky PSC	Direct 10/96 Cross Examination 11/96
	Affidavit in Opposition to GTE Supplemental Non-Recurring Cost Studies	Kentucky PSC	Affidavit 3/97
Public Utility Commission of Texas	Impact of Federal Telecommunications Legislation on Texas Regulatory Policy	Texas State Senate Joint Interim Committees on Telecommunication and the PUC	Report 5/94
	PUC Initiatives Related to NAFTA	Texas State Senate Committee on International Relations, Trade and Technology	Report 12/94
Staff of the Federal Energy Regulatory Commission	Proposed Merger between Southern California Edison and San Diego Gas and Electric Company	Federal Energy Regulatory Commission	Direct 5/89 Cross Examination 5/90
	Northeast Utilities Service Co. (Re: Public Service Company of New Hampshire)	FERC ALJ	Direct 5/90 Rebuttal 6/90 Deposition 6/90 and 7/90
Bureau of Economics of the Federal Trade Commission	Analysis of the 256K DRAM Market in Japan	U.S. Dept. of Commerce ALJ	Direct 4/86
	Analysis of the DRAM Market in Japan	U.S. International Trade Commission	Direct 4/86 Cross Examination 4/86

NATIONAL PRESENTATIONS OR PAPERS_

Policies For Telecommunications And The Electric Industry: Industry Differences and Transition Pricing, NARUC Staff Subcommittee on Communications, Washington DC,

- Breaking the Enduring Local Bottleneck: Prospects for Local Competition, Consumer Leaders Forum, MCI Telecommunications, Washington DC, 3/96
- Federal-State Legislation and Regulation: Competition in the Local/IntraLata Markets,
 Bonbright Center 16th Annual Telecommunications Conference, Atlanta, GA 3/96
- *Incentive Design and Pricing Flexibility in Telecommunications*, 27th Annual Conference of the Institute of Public Utilities, Williamsburg, VA, 12/95
- Assessing The Workability Of Competition In Utility Industries, NARUC Annual Regulatory Studies Program, East Lansing, MI, 8/95
- Utility Consolidation and Reorganization, NARUC Annual Regulatory Studies Program, East Lansing, MI, 8/95
- Preparing for a Competitive Structure: Unbundling and Revaluing Utility Assets, Current Issues Challenging the Regulatory Process, Center for Public Utilities, Santa Fe, NM, 3/95
- Experience and Implementation Issues of Incentive and Performance Based Regulation, Commissioners' Policy Information Forum, NARUC Subcommittee on Commissioner Education, Washington, DC, 2/95
- Federal-State-Local Telecom Summit on Public Right of Way (NARUC representative),
 Annenberg Washington Program and the Department of Commerce, Washington, DC,
 1/95
- Regulatory Challenges of Horizontal Restructuring, 26th Annual Conference of the Institute of Public Utilities, Williamsburg, VA, 12/94
- Regulators on Retail Wheeling, Fitch Research Special Report, Fitch Investors Service, Inc., New York, NY, 10/94
- What Its Like to be a Utility Regulatory Commissioner, NARUC Biennial Regulatory Information Conference, Columbus, OH, 9/94
- Assessing The Workability Of Competition In Utility Industries, NARUC Annual Regulatory Studies Program, East Lansing, MI, 8/94
- Telecommunications: The Next American Revolution, Contributed to Chapter Seven (Universal Service) of the National Governors' Association Report, Washington, DC, 7/94
- Do We Need New or Different Regulatory Bodies? New Authorities? KMB Video Conference Reinventing State Regulatory Structures in the Convergence Era, St. Petersburg, FL, 5/94
- International Activities of Utility Affiliates When and Where is Regulation Needed? American Bar Association Seventh Annual Conference on Electricity Law and Regulation, San Antonio, TX, 3/94
- Presentation and Q and A Interview with Financial Analysts, Regulatory Research Associates, Inc., New York, NY, 3/94
- Analyzing Mergers in Markets in Competitive Transition, Annual Conference of the Southern Economic Association, Washington, DC, 11/92 (Published in NARUC Biennial Information Conference Proceedings, Columbus, OH, 12/92)
- Public Utility Regulation, Annual Conference of the Southern Economic Association, Washington, DC, 11/92
- Developments in Transmission Access in Electricity Markets, Southeastern Electric and Gas Utility Conference, University of Georgia, Atlanta, GA, 10/92
- Analyzing Market Power in Electric Utility Mergers, NARUC Biennial Information Conference, Columbus, OH, 9/92
- Electricity Markets and All Resource Options: Beyond Integrated Resource Planning EMA, EDF, NEES, PG&E, and SRC, sponsors, San Francisco, CA, 2/92

Applying Antitrust Principles in the Electric Utility Industry: Market Definition in Utility Mergers Advanced Workshop in Regulation and Public Utility Economics, Rutgers University, San Diego, CA, 7/90

REGIONAL PRESENTATIONS OR PAPERS

- Panelist, ERCOT-SPP A.C. Interconnection, Report of the Synchronous Interconnection Committee, Gulf Coast Power Association, Fall Regional Conference, Austin, TX, 10/98
- Chair, Retail Access: Making a Difference for New Marketing or Production Technologies, Gulf Coast Power Association, Fall Regional Conference, Austin, TX, 10/98
- Economic Benefits to Texas of AC Interconnection between ERCOT and SPP: Comments on the SIC Report, co-authored with Robin Kittel, P.E., on behalf of Enron Power Marketing, Inc. n.d. (1998)
- Analyzing Market Power, Training Seminar for Commissioners and Staff, Public Utility Commission of Texas, Austin, TX 1/98
- An Economic Analysis of Issues to be Arbitrated Under Section 252 of the Telecommunications Act of 1996, An Economic White Paper on behalf of MCI Telecommunications Corp. by August H. Ankum, PhD, Steve R. Brenner PhD, Richard Cabe PhD, Nina W. Cornell, PhD, Sarah Goodfriend PhD, A. Daniel Kelley PhD and Terry L. Murray, Washington, DC, August 28, 1996
- Yes, Regulators Are Still Out There State Regulation, Moderator, Texas Association of Long Distance Telephone Companies, Twelfth Annual Conference and Trade Exhibition, Austin, TX, 4/95
- Trends and Directions at the Public Utility Commission, Texas Renewables 94 Conference, Austin, TX, 11/94
- Universal Service Fund, Five State Regulatory Conference, Tulsa, OK, 10/94
- Telecommunications Planning Efforts in Texas, UT System Office of Telecommunication Services, Telecommunication and Networking in Higher Education, Austin, TX, 10/94
- Regulatory Structure Roundtable, Oklahoma Corporation Commission Telecommunications Symposium, Stillwater, OK, 7/94
- The Role of Regulators in an Increasingly Competitive Electric Industry, Fall Conference of the Gulf Coast Cogeneration Association, Austin, TX, 9/94
- Public Utility Commission of Texas -- Who We Are and What We Do, University of Texas at Dallas, Richardson, TX, 5/94
- Regulatory Trends at the Public Utility Commission, Texas Industrial Energy Consumers Annual Meeting, Houston, TX, 5/94
- The Information Economy and Global Competitiveness: Are We All (or Soon to be)
 Accountants Now? Texas Society of Certified Public Accountants, Austin, TX, 4/94
- Update on the Public Utility Commission of Texas, Senior Citizens Alliance, Ft. Worth, TX, 4/94
- *Update on Public Utility Commission of Texas*, Travis County Bar Association's Administrative Law Section, Austin, TX, 3/94
- Interview Goodfriend Speaks Out on Merits of Competition, Measured Phone Service, Special Interest Groups, Economic Development Rates, Other PUC Issues, Texas State Agencies Newsletter, Vol. 2, No. 16, 2/26/94
- Energy Policy Act Implementation in Texas, Fall Conference of the Gulf Coast Cogeneration Association, Austin, TX, 10/93

PROFESSIONAL ACTIVITIES

National Regulatory Research Institute, Board of Directors 1993 - 1995 National Association of Regulatory Utility Commissioners, Committee on Communications 1993 - 1995

National Association of Regulatory Utility Commissioners, Chair, Staff Subcommittee on Strategic Electric Issues 1992 - 1993

Center for Public Utilities, Advisory Council 1995

American Economic Association

American Bar Association (Associate)

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