Francis J. Murphy
Network Engineering Consultants, Inc.
Five Cabot Place, Suite Three
Stoughton, MA 02072
781.344.7206

SUMMARY

President of a telecommunications consulting company with almost 30 years of administrative, operations, marketing and technical experience covering regulatory issues, pricing, costing, central office operations, test center operations and customer premises installation and maintenance operations. Demonstrated success in founding, organizing and managing successful consulting company and staff of highly experienced engineers and regulatory personnel. Proven record of corporate and team leadership, customer service, problem identification and resolution.

EXPERIENCE

President of Network Engineering Consultants, Inc., Stoughton, Massachusetts, 1997 to present. Founded Network Engineering Consultants in 1997 to work with major telecommunications clientele throughout the United States and in Australia. Company specializes in Regulatory Compliance, and Technical Engineering with Cost Modeling Analysis and more.

Independent Consultant to the Telecommunications Industry 1995 to 1997.

NYNEX TRG, Boston, Massachusetts 1990 to 1995

Staff Director - Pricing and Costing

(1990 to 1995)

Responsible for cost justification in support of interstate access service rates and Federal Communications Commission (FCC) filings and reporting rate of return information to the FCC.

Integral part of the Billed Party Preference (BPP) Docket Management Team solely responsible for identifying the cost (\$120 million) to NYNEX to implement BPP as well as developing industry wide BPP implementation cost analysis (\$2.0 billion), and presenting same to the FCC on an Ex Parte basis. Solely responsible for the cost support associated with NYNEX's Open Network Architecture (ONA) and 800 Database filings.

Managed the special access non-recurring rate restructure filing project. This project involved the development of a new non-recurring rate structure and rates for both NYNEX New England and NYNEX New York, the development of appropriate costs, and the coordination of all filing related activities from initial internal approval to customer/stakeholder socialization and implementation. The filing was highly successful as evidenced by timely FCC acceptance and no customer/stakeholder intervention.

NEW ENGLAND TELEPHONE COMPANY, Boston, Massachusetts 1970 to 1990

Manager - Special Service Center

(1988 to 1989)

Responsible to plan, design and implement a new test center for special service circuits that consolidated five existing test centers while simultaneously managing a staff of 60 people operating the largest of the five existing Special Service Centers (SSC).

Totally responsible for planning, designing and implementing a 20,000 square foot test center. This included real estate issues, furniture design/selection, communication and test system planning/implementation, labor relations coordination and the physical move itself. Project was completed on schedule and within budget.

Achieved outstanding service results while managing SSC by exceeding the corporate commitment to excellence objectives. The SSC installed 99.3% of all new customer service orders on time and reduced average service outages from 6 hours per case to 4 hours per case.

Manager, Installation and Maintenance

(1985 to 1987)

Responsible for managing an organization of approximately 120 people including management, technical and clerical personnel performing installation and maintenance functions on special service and high capacity digital services at customer locations throughout greater Boston with an annual budget of approximately \$20 million. Through the development and implementation of various programs and measurement plans (training, productivity measurement, safety, absence control, personnel development) all major objectives were significantly exceeded. Examples include average installation time reductions from 3.6 hours per job to 2.3 hours per job with 98.6% on time installations. This result was achieved despite year over year installation volume increases of 25% and concurrent staff reductions. Simultaneous decreases in year over year maintenance volumes of 10% and decreases in average repair times from 2.6 hours per case to 2.2 hours per case reflect significant improvements in both quality and productivity.

Staff Manager - Metropolitan Special Services Division

(1984)

Responsible for administration/management of Division office staff reporting directly to Division Manager. The Metropolitan Special Services Division had overall responsibility for all special services and digital high capacity services provisioning and maintenance operations throughout eastern Massachusetts with an organization of approximately 1,000 people and an annual budget of \$120 million. Responsibilities included the development and tracking of the annual budget as well as the development and tracking of services objectives and results. The Division under ran its budget and met all major service objectives. Received outstanding evaluation for this assignment.

Manager - Toll Test Operations

(1981 to 1983)

Responsible for central office Toll Test operations in the Brookline and Malden areas. Responsibilities included the central office wiring and overall testing and maintenance of switched circuits, special service circuits and interoffice carrier systems in approximately 12 different central offices with an organization of approximately 70 technical, clerical and management personnel.

Supervisor - Toll Test Operations

(1974 to 1980)

Responsible for the supervision of approximately 12 Central Office Technicians performing wiring, testing and maintenance activities on switched circuits, special service circuits and interoffice high capacity carrier systems. Promoted to Manager's position after seven years of demonstrated high performance levels achieving quality service results.

Toll Test Technician

(1970 to 1973)

Hired, with no related experience, as Central Office Technician after completing military obligations. Promoted to Supervisor after 3 years of demonstrated aptitude and performance in wiring, testing and maintaining switched circuits, special service circuits and high capacity interoffice carrier systems.

EDUCATION

Bachelor of Arts – Business Management Boston College, 1986.

Selected Regulatory Testimony, Position Papers, and Ex Partes

BEFORE STATE JURISDICTIONS:

Deposition Regarding Avoided Costs Before the California Public Utilities Commission, on Behalf of Pacific Bell, Docket Nos. R.93-04-003, I.93-04-002, May 30, 1996

"Declaration of Francis J. Murphy Before the State of California Public Utilities Commission" on Behalf of Pacific Bell, Regarding the Hatfield Model Version 2.2.2, March 18, 1997

"Supplemental Declaration of Francis J. Murphy Before the State of California Public Utilities Commission" on Behalf of Pacific Bell, Regarding the Hatfield Model Version 2.2.2, April 15, 1997

"Direct Testimony of Francis J. Murphy on Behalf of GTE Northwest Incorporated, Subject: Hatfield Model, Version 3.1" Before the Washington Utilities and Transportation Commission, Docket Nos. UT-960369, -70, -71, April 25, 1997, Including: "An Engineering Critique of the Hatfield Model, Version 3.1 Presented on Behalf of GTE Northwest Incorporated Before the Washington Utilities and Transportation Commission" With T. Guarino, J. Schaaf, April 25, 1997

"An Engineering Critique of the Hatfield Model, Version 3.1 Presented on Behalf of GTE Northwest Incorporated" Before the Idaho Public Utilities Commission, With T. Guarino, J. Schaaf, May 6, 1997

"Declaration of Francis J. Murphy Before the State of Washington Utilities and Transportation Commission" Docket Nos. UT-960369, -70, -71 May 12, 1997

"An Engineering Critique of the Hatfield Model, Version 3.1 Presented on Behalf of GTE Southwest, Incorporated" With T. Guarino, R. Cellupica, June 6, 1997

"Supplemental Testimony of Francis J. Murphy Before the State of Washington Utilities and Transportation Commission, Subject: Fasset/TICM" Docket Nos. UT-960369, -70, -71, June 13, 1997

"Direct Testimony of Francis J. Murphy on Behalf of GTE California Incorporated" July 1, 1997, Including: "Analysis of the Hatfield Model Release 3.1" Presented on Behalf of GTE California Incorporated, With T. Guarino, R. Cellupica, July 1, 1997

"Supplemental Testimony of Francis J. Murphy Before the New Mexico State Corporation Commission, Subject: Previously Submitted Engineering Critique" Docket No. 96-411-TC, July 9, 1997

"Rebuttal Testimony of Francis J. Murphy Presented on Behalf of GTE Hawaiian Telephone Company Incorporated, Subject: Analysis of Hatfield Data" Docket No. 7702, August 28, 1997, Including: "An Engineering/Cost Analysis of the Hatfield Model, Version 3.1 Presented on Behalf of GTE Hawaiian Telephone Company Incorporated" With T. Guarino, R. Cellupica, Docket No. 7702, August 28, 1997

"Reply Testimony of Francis J. Murphy on Behalf of GTE Northwest Incorporated, Subject: AT&T's Non-recurring Cost Model, Version 1.2" Before the Public Utility Commission of Oregon, Docket Nos. UT 138, UT 139, November 7, 1997

"Rebuttal Testimony of Francis J. Murphy and Timothy J. Tardiff Presented on Behalf of GTE South Incorporated, Subject: Analysis of the Hatfield Model, Version 4.0" Before the Public Service Commission of South Carolina, Docket No. 97-239-C, November 17, 1997, Including:

"Analysis of the Hatfield Model Release 4.0 Presented on Behalf of GTE South Incorporated" With G. Duncan, T. Tardiff, R. Mohammed, C. Dippon, A. Banerjee, K. Model, R. Cellupica, T. Guarino, November 17, 1997

"Analysis of the Hatfield Model Release 4.0 Presented on Behalf of GTE Southwest Incorporated" [New Mexico] With G. Duncan, T. Tardiff, R. Mohammed, C. Dippon, A. Banerjee, K. Model, R. Cellupica, T. Guarino, November 21, 1997

"Analysis of the Hatfield Model Release 4.0 Presented on Behalf of Contel of Minnesota, Inc. D/B/A GTE Minnesota" With G. Duncan, T. Tardiff, R. Mohammed, C. Dippon, A. Banerjee, K. Model, R. Cellupica, T. Guarino, November 24, 1997

"Analysis of the Hatfield Model Release 5.0 Presented on Behalf of Contel of Minnesota, Inc. D/B/A GTE Minnesota" With G. Duncan, T. Tardiff, R. Mohammed, C. Dippon, A. Banerjee, K. Model, R. Cellupica, T. Guarino, January 23, 1998

"Analysis of the Hatfield Model Release 5.0 Presented on Behalf of GTE South- North Carolina" With G. Duncan, T. Tardiff, R. Mohammed, C. Dippon, A. Banerjee, K. Model, R. Cellupica, T. Guarino, January 30, 1998

"Declaration of Francis J. Murphy Before the State of Alabama Public Service Commission, Montgomery, Alabama" Docket No. 25980, In Regards to the Implementation of the Universal Service Requirements of Section 254 of the Telecommunications Act of 1996, February, 1998

"Analysis of the Hatfield Model Release 5.0 Presented on Behalf of GTE Southwest Incorporated" [New Mexico] With G. Duncan, T. Tardiff, R. Mohammed, C. Dippon, A. Banerjee, K. Model, R. Cellupica, T. Guarino, February 9, 1998

"Rebuttal Testimony of Francis J. Murphy on Behalf of GTE Alabama, Inc. and Contel of the South, Inc." Before the Alabama Public Service Commission, Docket No. 25980, February 13, 1998, Including: "Analysis of the Hatfield Model Release 5.0" Presented on Behalf of GTE Alabama Inc. and Contel of the South Inc. With G. Duncan, T. Tardiff, R. Mahammed, C. Dippon, A. Banerjee, K. Model, R. Cellupica, T. Guarino, February 13, 1998

"Analysis of the Hatfield Model Release 5.0 Presented on Behalf of GTE of California Inc. D/B/A GTE Nevada" With G. Duncan, T. Tardiff, R. Mohammed, C. Dippon, A. Banerjee, K. Model, R. Cellupica, T. Guarino, February 20, 1998

"Rebuttal Testimony of Francis J. Murphy on Behalf of GTE South, Incorporated, Subject: Analysis of the Hatfield Model, Version 5.0a" *Before the Public Service Commission of South Carolina, Docket No. 97-239-C, March 2, 1998, Including:* Analysis of the Hatfield Model Release 5.0a Presented on Behalf of GTE South Incorporated" *With G. Duncan, T. Tardiff, R. Mohammed, C. Dippon, A. Banerjee, K. Model, R. Cellupica, T. Guarino, March 2, 1998*

"Rebuttal Testimony of Francis J. Murphy on Behalf of GTE Southwest Incorporated, Subject: Analysis of the Hatfield Model, Version 5.0a" Before the Public Utility Commission of Texas, March 18, 1998

"Direct Testimony of Francis J. Murphy on Behalf of GTE Midwest Incorporated, Subject: Analysis of the Hatfield Model, Version 5.0a" Before the Nebraska Public Service Commission, Docket No. C-1633, April 8, 1998, Including: "Analysis of the Hatfield Model Release 5.0a Presented on Behalf of GTE Midwest Incorporated" With G. Duncan, T. Tardiff, R. Mohammed, C. Dippon, A. Banerjee, K. Model, R. Cellupica, T. Guarino, April 8, 1998

"An Analysis of the Hatfield Model Release 4.0 Presented on Behalf of GTE California Incorporated" With G. Duncan, T. Tardiff, K. Model, C. Dippon, J. Kim, R. Cellupica, T. Guarino, May 1, 1998

"Supplemental Testimony of Francis J. Murphy on Behalf of GTE Southwest Incorporated" Before the Public Utility Commission of Texas, USF Proceeding, Docket No. 18515, June 5, 1998

"Supplemental Reply Testimony of Francis J. Murphy on Behalf of GTE Southwest Incorporated, Subject: HAI 5.0a" Before the Public Utility Commission of Texas, USF Proceeding, Docket No. 18515, June 10, 1998

"Second Supplemental Direct Testimony of Francis J. Murphy on Behalf of GTE Southwest Incorporated" Before the Public Utility Commission of Texas, USF Proceeding, In the Compliance Proceeding for Implementation of the Texas High Cost Universal Service Plan, Docket No. 18515, June 30, 1998

"Response Testimony of Francis J. Murphy Before the State of Washington Utilities and Transportation Commission, Subject: Hatfield Model, Version 5.0A" Docket No. UT-980311(A), August 3, 1998, Including: "An Analysis of the HAI Model Release 5.0a Presented on Behalf of GTE Northwest Incorporated" With G. Duncan, T. Tardiff, K. Model, C. Dippon, J. Kim, R. Cellupica, T. Guarino, August 3, 1998

"Rebuttal Testimony of Francis J. Murphy Before the State of Washington Utilities and Transportation Commission, Subject: Hatfield Model, Version 5.0A" Docket No. UT-980311(A), August 24, 1998

"Response Testimony of Francis J. Murphy on Behalf of GTE Florida Incorporated, Subject: Analysis of the HAI Model, Version 5.0a" Before the State of Florida Public Service Commission, September 2, 1998, Including: "An Analysis of the HAI Model Release 5.0a, Presented on Behalf of GTE Florida Incorporated" With G. Duncan, T. Tardiff, K. Model, C. Dippon, J. Kim, R. Cellupica, T. Guarino, September 2, 1998

"Supplemental Testimony of Francis J. Murphy on Behalf of GTE Northwest Incorporated" Docket No. UT-980311(a), September 9, 1998

"Direct Testimony for Hearing on September 25, 1998 of Francis J. Murphy on Behalf of GTE Southwest Incorporated" Before the Public Utility Commission of Texas, USF Proceeding, In the Compliance Proceeding for Implementation of the Texas High Cost Universal Service Plan, Docket No. 18515, September 10, 1998

"Supplemental Testimony of Francis J. Murphy Before the State of Washington Utilities and Transportation Commission, Subject: AT&T Data Requests" Docket No. UT-980311(A), September 11, 1998

"Rebuttal Testimony for Hearing on September 25, 1998 of Francis J. Murphy of Network Engineering Consultants, Inc. on Behalf of GTE Southwest Incorporated" Before the Public Utility Commission of Texas, USF Proceeding, In the Compliance Proceeding for Implementation of the Texas High Cost Universal Service Plan, Docket No. 18515, September 16, 1998

"An Analysis of the HAI Model Release 5.0a Presented on Behalf of GTE Midwest Incorporated" With G. Duncan, T. Tardiff, K. Model, C. Dippon, J. Kim, R. Cellupica, T. Guarino, September 25, 1998

"Reply Testimony of Francis J. Murphy on Behalf of GTE California Incorporated, Subject: OANAD Collocation Phase" Before the State of California Public Utilities Commission, Docket Nos. R.93-04-003/I.93-04-002, January 11, 1999

"Response Affidavit of Francis J. Murphy on Behalf of GTE North Incorporated" Before the Michigan Public Service Commission, Regarding AT&T's Non-recurring Cost Model, Case No. U-11832, May 27, 1999

"Rebuttal Testimony of Francis J. Murphy on Behalf of GTE, Subject: FCC USF Model and HAI Model" Before the Public Utility Commission of Oregon, Docket No. UM 731 Phase IV, January 12, 2000

"Direct Testimony of Francis J. Murphy on Behalf of GTE Northwest Incorporated, Subject: FCC Model Platform and Input Flaws" Before the Idaho Public Utilities Commission, Docket Nos. GNR-97-22, GNR-T-00-2, March 8, 2000

"Reply Testimony of Francis J. Murphy on Behalf of GTE Northwest Incorporated, Subject: FCC Model and HAI Model 5.2 Flaws" Before the Idaho Public Utilities Commission, Docket Nos. GNR-T-97-22, GNR-T-00-2, May 24, 2000

"Reply Testimony of Francis J. Murphy on Behalf of Pacific Bell" Before the Public Utilities Commission of the State of California, In the Matter of Avoided Costs of Resale, Docket Nos. R.93-04-003, I.93-04-002, July 10, 2000

"Rebuttal Testimony of Francis J. Murphy on Behalf of Verizon Maryland Inc." Before the Public Service Commission of Maryland, In the Matter of the Provision of Universal Service to Telecommunications Consumers, Case No. 8745, May 21, 2001

"Surrebuttal Testimony of Francis J. Murphy on Behalf of Verizon Maryland Inc." Before the Public Service Commission of Maryland, In the Matter of the Provision of Universal Service to Telecommunications Consumers, Case No. 8745, June 11, 2001

"Rebuttal Testimony of Francis J. Murphy on Behalf of Verizon Maryland Inc." Before the Public Service Commission of Maryland, In the Matter of the Investigation into Rates for Unbundled Network Elements Pursuant to the Telecommunications Act of 1996, Case No. 8879, September 5, 2001

"Surrebuttal Testimony of Dr. Timothy J. Tardiff and Francis J. Murphy on Behalf of Verizon Florida Inc." Before the Florida Public Service Commission, In re: Investigation into Pricing of Unbundled Network Elements, Docket No. 990649B-TP, March 18, 2002

"Supplemental Surrebuttal Testimony of Dr. Timothy J. Tardiff and Francis J. Murphy on Behalf of Verizon Florida Inc." Before the Florida Public Service Commission, In re: Investigation into Pricing of Unbundled Network Elements, Docket No. 990649B-TP, April 22, 2002

"Reply Declaration Of Francis J. Murphy On Behalf Of SBC California Bell Telephone Company" Before The Public Utilities Commission Of The State Of California, Application of Pacific Bell Telephone Company (U 1001 C) for the Commission to Reexamine the Costs and Prices of the Expanded

Interconnection Service Cross-Connect Network (Filed February 28, 2002) Element Costs Pursuant to Ordering Paragraph 11 of D.99-11-050, Application 02-02-034 and Applications

BEFORE THE FEDERAL COMMUNICATIONS COMMISSION:

"Dial Around Study" Ex Parte Presentation given to the Federal Communications Commission, CC Docket No. 92-77 Billed Party Preference, October 6, 1994

"Analysis of the Hatfield Model 5.0" Ex Parte Presentation given to the Federal Communications Commission, With T. Tardiff, CC Docket Nos. 96-45, 97-160, February 20, 1998

"Cost Model Platforms and the Design of the Federal USF Mechanism" Ex Parte Presentation given to the Federal Communications Commission, With D. Weller, Docket Nos. 96-45, 97-160, May 6, 1998

Affidavit in Support of Petition for Reconsideration of the Fifth Report and Order, December 17, 1998

Affidavit in Support of Applications for Review, January 15, 1999

Affidavit in Opposition to Comments, January 25, 1999

Affidavit in Support of GTE's FOIA Requests, January 30, 1999

"Expert Report Summarizing GTE's 251 (d) (2) Comments" Prepared by Network Engineering Consultants, Inc. April, 1999

"Rebuttal Testimony of Francis J. Murphy on Behalf of Verizon Virginia Inc." Before the Federal Communications Commission, In the Matter of Petition of WorldCom, Inc. Pursuant to Section 252(e)(5) of the Communications Act for Expedited Preemption of the Jurisdiction of the Virginia State Corporation Commission Regarding Interconnection Disputes with Verizon Virginia Inc., and for Expedited Arbitration, CC Docket No. 00-218, In the Matter of Petition of Cox Virginia Telecom, Inc. etc., CC Docket No. 00-249, In the Matter of Petition of AT&T Communications of Virginia Inc. etc., CC Docket No. 00-251, August 27, 2001

"Supplemental Rebuttal Testimony of Francis J. Murphy on Behalf of Verizon Virginia Inc." Before the Federal Communications Commission, In the Matter of Petition of WorldCom, Inc. Pursuant to Section 252(e)(5) of the Communications Act for Expedited Preemption of the Jurisdiction of the Virginia State Corporation Commission Regarding Interconnection Disputes with Verizon Virginia Inc., and for Expedited Arbitration, CC Docket No. 00-218, In the Matter of Petition of Cox Virginia Telecom, Inc. etc., CC Docket No. 00-249, In the Matter of Petition of

AT&T Communications of Virginia Inc. etc., CC Docket No. 00-251, November 16, 2001

BEFORE THE AUSTRALIAN COMMUNICATIONS AUTHORITY:

"Affidavit Commenting on the "ACA USO Forward Looking Technologies Study"

PRESENTATIONS AND SPEAKING ENGAGEMENTS

"Universal Service: The FCC's Cost Model and Its Regulatory Implications" Speaker and Faculty Member at Law Seminars International's Telecom & E-Commerce Seminar, September 23, 1999

"Overview of Communications Marketplace & Network" Continuing Legal Education Presentation prepared and presented by Network Engineering Consultants, Inc. for Preston, Gates, Ellis & Rouvelas Meeds, LLP, September 14, 2000

"Overview of Communications Marketplace & Network" Continuing Legal Education Presentation prepared and presented by Network Engineering Consultants, Inc. for Hunton & Williams, October 17, 2000