BACKGROUND AND QUALIFICATIONS

SUMMARY:

R. John Miner is an accomplished engineer, executive manager, educator and consultant with over forty (40) years of professional experience. He is Owner and President of *Collaborative Learning, Inc.* established in 1995, also doing business as *Collaboration Unlimited* and located in Austin and San Antonio, Texas. In this capacity, Mr. Miner provides a wide range of management and technical consulting, litigation support, and educational services. His clients include both public and private sector electric utilities, utility and technical associations, educational institutions, and law firms.

Mr. Miner provides expert litigation support on matters involving contractual disputes, electrical accidents, and compliance with both the National Electrical Safety Code (NESC - ANSI Standard C-2) and OSHA regulations applicable to electric utility distribution systems. He routinely presents seminars and short courses throughout the U.S on electrical distribution system design, construction, operation, and maintenance as well as electrical safety and the NESC.

EDUCATION:

Mr. Miner has earned the following engineering degrees from the University of Toledo, Toledo Ohio, in programs accredited by the Accreditation Board for Engineering and Technology:

Bachelor of Science in Electrical Engineering, December 1969, with honors.

Master of Science in Engineering Science, December 1972.

Mr. Miner has continued his technical and management education throughout his career through a combination of employment, formal study, self-study, and teaching others. He has served a full-time appointment on the faculty at the University of Houston's College of Technology and has been active in the national accreditation of engineering technology programs. Mr. Miner is a past Commissioner on the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology and is a past Chair of the Committee on Technology Accreditation for the Institute of Electrical and Electronics Engineers.

PROFESSIONAL REGISTRATION:

Mr. Miner is a registered Professional Engineer in two states:

Minnesota - Professional Engineer 12151 since 1976

Texas - Professional Engineer (Electrical) 36452 since 1974

PREVIOUS EMPLOYMENT:

September 2000 to August 2001 - With R. J. Covington Consulting in Austin, Texas as Executive Vice President. In this position, Mr. Miner was responsible for client relations, business development, internal organization and operations, and project management. He was also actively engaged as a principal consultant on a wide range of client projects involving business strategy formulation, general management, infrastructure development, organization development, performance management, engineering and operations.

July 1994 to August 2000 - with R. W. Beck, Inc., an international utility consulting firm, as Senior Director of Performance Management Consulting, Executive Engineer and Client Services Director of the Austin office. In these positions Mr. Miner was responsible for management and engineering consulting to electric utilities, electric utility associations and related industries throughout the U.S. Services provided include general engineering analysis and design as well as project feasibility, siting, design, financing, construction management, strategic business planning, competitive assessment, organizational development, business process re-engineering, benchmarking, performance management, and the development and delivery of technical and management education programs for electric utilities and utility associations throughout the U.S. and overseas.

October 1989 to June 1994 with Resource Management International, Inc., an international consulting firm as Principal Executive Consultant and Director, Organization Development. In these positions Mr. Miner was responsible for management consulting, operational auditing, performance measurement and improvement, operations and maintenance support, engineering analysis, and the development and delivery of technical and management training programs for electric utilities.

February 1987 to September 1989 with the City of Austin Electric Utility Department (now Austin Energy), Austin, Texas as Chief Operating Officer. In this position Mr. Miner was responsible for power generation engineering and operations, transmission and distribution planning, design, construction and operations, system control, and corporate computer resources.

PREVIOUS EMPLOYMENT (Continued):

October 1983 to January 1987 with the Rochester Public Utilities, Rochester, Minnesota, as General Manager. Functional areas reporting to Mr. Miner included the electric utility, water utility, finance and accounting, management services and public relations. Mr. Miner also served on the Board of Directors of the Southern Minnesota Municipal Power Agency, holding offices as President and Treasurer.

October 1978 to September 1983, Director, Power Division, Rochester Public Utilities with responsibility for management of the electric and steam district heating utility systems

January 1978 to October 1978, Manager of Engineering, Rochester Public Utilities, responsible for transmission and distribution engineering, power plant and mechanical engineering, drafting and records, and environmental compliance.

June 1976 to January 1978, Electrical Engineer, Rochester Public Utilities, responsible for system electrical and mechanical engineering, environmental compliance, and system records.

April 1973 to June 1976, Design Engineer with Bovay Engineers, Inc., Houston, Texas, responsible for project engineering design, economic feasibility and rate studies for rural electric, municipal utility, federal government, and large commercial clients.

January 1973 to June 1976, Assistant Professor with the University of Houston College of Technology. Engaged in the development and teaching of a four-year ABET-accredited curriculum leading to the Bachelor of Science degree in Electric Power Engineering Technology.

September 1969 to January 1973, Senior Design Engineer, Toledo Edison Company, Toledo, Ohio, with engineering and project management responsibilities on 138kV and 345kV transmission and substation projects.

PUBLICATIONS and PRESENTATIONS:

Mr. Miner has authored and co-authored a number of professional manuscripts and has delivered numerous presentations on a wide range of management and technical subjects at conferences and seminars throughout the U.S. He is recognized for his ability to translate and present complex and technical subjects in understandable terms to audiences of all types. Mr. Miner authored in 1999 and updated in 2006 (second edition) and 2013 (third edition) a book entitled *Electric Utility Basics: How Electricity Is Made, Who Delivers It, and the Changing Electric Utility Industry*. This book, which is published by the American Public Power Association, describes the impact of industry restructuring and competition on the technical and business operation of electric utility systems. Mr. Miner also authored an *OSHA Compliance Manual* for the Tennessee Valley Public Power Association and was a contributing author on the topic of electrical distribution systems for the *Handbook of Mechanical and Electrical Systems for Buildings*.



PROFESSIONAL ACTIVITIES:

- Accreditation Board for Engineering and Technology (ABET)
 Past IEEE Representative to the Technology Accreditation Commission
 Past IEEE program evaluator for electrical engineering technology
 curricula
- Institute of Electrical and Electronics Engineers, Inc. (IEEE)
 Senior Life Member
 Past Chair of IEEE national Committee on Technology Accreditation Activities
- Past Chairman, American Public Power Association (APPA) Transmission & Distribution Committee
- Past Member, Board of Directors of the APPA DEED research and development program
- Past Member, APPA Performance Management Committee
- Past Member, Management Committee of the Mid-Continent Area Power Pool (MAPP)
- Past Member, Technical Advisory Committee of the Electric Reliability Council of Texas
- Past President, Southeast Minnesota Chapter, Minnesota Society of Professional Engineers
- Management and Technical Educator to electric utilities and associations on a wide range of topics including:
 - Overhead and Underground Distribution Systems
 - Electrical Distribution Theory and Economics
 - Effective Management of Electric Field Operations
 - System Operations and Maintenance
 - National Electrical Safety Code
 - Power Quality
 - Competition and Restructuring in the Electric Utility Industry
 - Organizational Performance Management
 - Quality Systems
 - Strategic Planning
 - General Management

HONORS:

Tau Beta Pi - Engineering Honorary Society

Eta Kappa Nu - Electrical Engineering Honorary Society

Texas Public Power Association - 1989, Distinguished Service Award

National Society of Professional Engineers

Young Engineer of the Year - 1978, SE Minnesota Chapter



CONTINUING EDUCATION:

UNIVERSITY OF WISCONSIN, DEPARTMENT OF ENGINEERING PROFESSIONAL DEVELOPMENT

Course developer and instructor for the following courses:

- National Electrical Safety Code
- Effective Maintenance for Electrical Distribution Systems
- Overhead Electrical Distribution Design
- Underground Electrical Distribution Design
- Introduction to Distribution Engineering (National Rural Electric Cooperative Association University-Based Program for Early-Career Engineers)
- Distribution Reliability for Electric Utilities
- The Electric Utility Business From The Inside Out
- The New Electric Utility Business
- The Electric Utility Wires Business

AMERICAN PUBLIC POWER ASSOCIATION (APPA) UTILITY EDUCATION COURSES

- Public Power Manager Certificate Program (developer/instructor)
- Executive Development Institute (Instructor)
- Effective Management of Electric Field Operations (developer/instructor)
- Assessing & Improving the Competitive Position of Your Public Power System (developer/instructor)
- Constructing, Operating & Maintaining Underground Distribution Systems (developer/Instructor)
- Improving the Performance of Underground Distribution Systems (Instructor)
- Designing & Operating Efficient Overhead Distribution Systems (Instructor)
- Electrical Distribution (developer/instructor)
- National Electrical Safety Code (developer/instructor)
- Electricity Basics: An Update on Utility Operations and Restructuring (Instructor)
- Policymakers Workshop (Instructor)
- Advanced Policymakers Seminar
- Advanced Rate Design
- Utility Marketing Strategies
- Public Power Governing Board Members Workshop
- Cogeneration Seminar
- Forecasting Techniques for Public Power Systems
- Utility Finance and Accounting for Non-Financial Executives
- Executive Development Program
- Effective Verbal and Written Communications
- Energy Management for Commercial and Industrial Loads
- Economics of Conservation

