

Edward G. Lochrie

Significant Experience

Mr. Lochrie brings more than 35 years of telecommunications engineering experience to the Utility Telecom Team. As a telecommunications engineer for 23 years with Tri-State Generation and Transmission Assoc., he was responsible for the planning and design of power utility telecommunications systems including mobile radio, microwave, fiber optic, and SCADA systems. Prior to that, he was the principle engineer responsible for the design and implementation of state-wide microwave, mobile radio and dispatch networks for the State of Alaska. He served for many years as state and regional frequency coordinator for both APCO and UTC, gaining experience in frequency spectrum issues, interference analysis, regulatory compliance and FCC licensing procedures.

Joining Utility Telecom in 2004, Mr. Lochrie works with various utility clients throughout the US participating in the planning and design of various communications systems, investigating radio interference problems, conducting frequency searches, obtaining frequency coordination and providing FCC licensing services.

Experience Prior to Utility Telecom

- **Senior Telecom Engineer** Tri-State Generation & Transmission Assoc., Inc. **1981-2004**
Responsible for the design, installation and integration of telecommunications facilities in a power utility environment. Performed detailed system design engineering including, path studies, site selection, performance analysis, equipment specification, proposal writing, negotiation and budget management, of complex telecommunications systems. Also responsible for comprehensive planning of new systems, as well as analyzing and evaluating the maintenance and operation of existing communications systems.
Accomplishments include the conversion of the system-wide microwave system to digital operation, design and implementation of a new digital UHF mobile radio system and dispatch center, design and installation of an OC-48 SONET backbone network and the implementation of an emergency HF-SSB communications system linking power plants to the dispatch center.
- **Chief Communications Eng'r** State of Alaska, Div. of Communications **1972-1981**
Responsible for the planning, design and operation of state-wide communications systems serving various State agencies. Duties include communications planning, systems engineering, performance analysis, equipment specification, bid evaluation and equipment procurement. Systems include microwave, telephone, mobile radio, HF radio, supervisory control and data networks.
Accomplishments include developing the State's first microwave network providing microwave, telephone and mobile radio coverage for most of the State's highway system. Also, designed and implemented comprehensive mobile radio systems, including communications control centers providing vital public safety communications.
- **Field Engineer/Technician** Motorola Communications & Electronics, Inc. **1972**
Responsible for engineering of VHF, UHF, and microwave radio communication systems. Duties include system design, propagation and RFI studies, antenna system engineering and site selection.
- **Electronic Technician** Communications Engineering, Inc. **1970-1971**
Responsible for the maintenance of radio communications equipment, including VHF and UHF mobile radio, common carrier radiotelephone, microwave and data systems. Performed field engineering for projects requiring extensive troubleshooting or the development of circuit modifications for special control and signaling applications.

- **Radio & Microwave Technician** Continental Telephone of Nevada **1965-1970**
Responsible for installation and maintenance of point-to-point microwave, multiplex, mobile telephone, and VHF mobile radio systems. Conducted a program to make technical changes for up-dating and improving performance.

Current Position Senior Consultant

Education

- Certificate of Telecommunications, Master's Degree Program , University of Denver, University College, Denver, Colorado
- Graduate Courses in "Advanced Communications Engineering", University of Alaska, Senior College, Anchorage, Alaska
- Capitol Radio Engineering Institute, Washington, D. C. Home study program, electronic engineering technology, communications engineering major; graduated 7-68.
- Electronics Engineering, California State Polytechnic University, San Luis Obispo, California

Other

- License & Certificates
Certified Telecommunications Engineer, National Association of Radio and Telecom Engineers
General Radio-Telephone License, Federal Communications Commission.
Amateur Radio Operator License, Extra Class, KL7ED.
- Professional Organizations
Institute of Electrical and Electronic Engineers
 - Senior Member, Colorado Section
 - Past Alaska Section Chairman (1975)
 - Past Chairman for professional activities (1977)
 - Chairman of Publications for 1985 National VTS Conference.Utilities Telecommunications Council
 - Past Financial Chairman, Rocky Mountain Region
 - Past Financial Chairman for 1990 Annual Meeting
 - Regional Frequency Coordinator