

Navigate with a trusted guide



QSI Consulting, Inc.

Professional Consultation for Regulated Network Industries

- **Network Industry Specialists**
- **Litigation/Regulatory Support**
- **Economic & Financial Modeling**
- **Management Consulting**

A Trusted Guide In Today's Rapidly Changing Marketplace



Regulated network industries like communications and energy are complex – technological, regulatory and competitive risks abound. It is for that reason that a trusted, professional team of experienced consultants can significantly improve your organization's ability to react quickly and effectively.

QSI's consultants have more than 150 years of combined, hands-on, industry experience with both corporate and government stakeholders. Likewise, QSI's consultants cover the landscape of professional expertise necessary to succeed; *e.g.*, economics, accounting, engineering, managerial, etc.

It is no coincidence that a wide array of industry participants entrust QSI consultants to pursue their interests. QSI's client list includes cable companies such as Comcast and Level 3, wireless companies such as T-Mobile and Bell Canada Mobility, energy companies such as BC Hydro and Toronto Hydro, numerous state utility commissions, consumer advocate groups, and state and federal agencies such as state attorneys general and the U.S. Department of Defense.

Please take a few minutes to look through this brochure to better understand how QSI can help you.



Our Services Include

**Economic & Financial
Modeling**

**Litigation, Regulatory &
Legislative Support**

Damages

Tax Analysis

Tariff Services

**Business Model
Development**

Due Diligence

**Operations Support
System Analysis &
Development**

Regulatory Compliance

**Revenue Assurance &
Billing Reconciliation**

**Witness & Technical
Training**



CORPORATE PROFILE



QSI Consulting, Inc. (QSI) is a privately-held consulting firm specializing in the economics of regulated network industries, including telecommunications and energy. QSI provides a wide-array of solutions to clients, ranging from day-to-day technical, business and regulatory assistance such as tariff and rate analysis and case management, to more complex solutions including expert witness services, tax analysis, damages, and economic cost modeling to better understand the internal cost structure of multi-product, network-based firms.

QSI employs some of the most experienced and trusted experts in the industry. QSI's experts are often called upon to provide expert testimony before regulators, legislators and the courts. QSI's experts have testified in hundreds of proceedings before state public utility commissions across the United States and Puerto Rico, the Federal Communications Commission, and numerous courts. These experts, backed by an experienced research and data analysis team, assist QSI clients in navigating the maze of regulations and compliance issues and finding innovative revenue enhancement and cost efficiency opportunities.

QSI serves a diverse list of clients, including telecommunications companies, energy companies, equipment vendors, federal agencies, state public utility commissions, state attorneys general, consumer advocates and non-profit industry organizations. The fact that QSI provides solutions to the companies operating in the regulated telecommunications and energy spaces as well as to the governmental agencies responsible for regulating those companies is a testament to the quality and objectivity of QSI's practice.

Our History

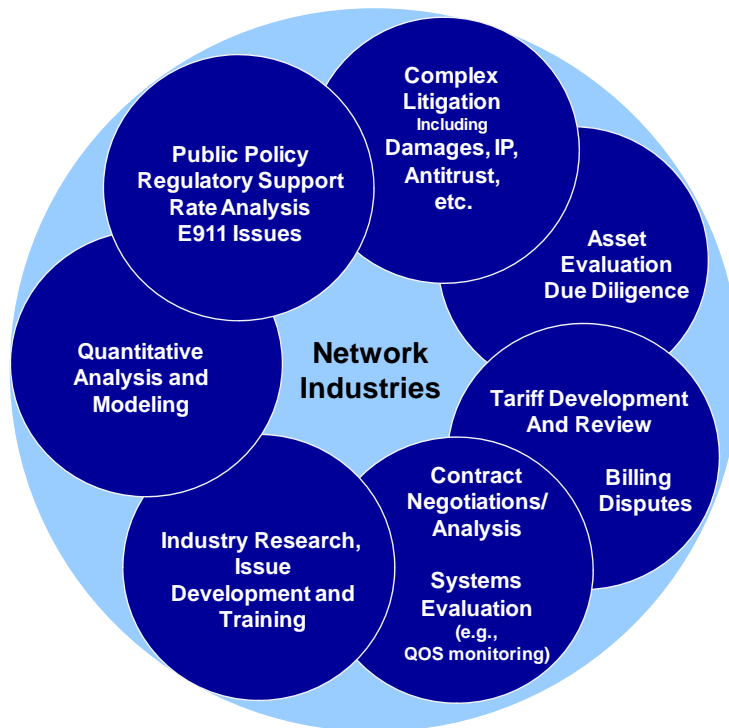
QSI was founded in 1999 by Michael Starkey (President) and August Ankum, Ph.D. (Senior Vice President - Chief Economist). In the early years, QSI's practice focused primarily on establishing rational telecommunications rates and policies following enactment of the federal Telecommunications Act of 1996. Since that time, the telecommunications industry has changed dramatically and QSI has adapted accordingly. QSI now provides services to clients in nearly all aspects of the communications industry covering the spectrum of traditional and emerging communications technologies (wireline, wireless, cable, Internet Protocol, etc.). In recognition of the increasing cross-industry convergence between communications and energy, QSI also assists clients in the energy industry. While the scope of our services and client-base has expanded, QSI remains dedicated to providing industry-leading, high-quality services at reasonable rates.

Our Services

QSI's major practice areas revolve around the economic, operational and regulatory aspect of the communications and energy marketplaces.

QSI has assisted clients in nearly every aspect of operational effectiveness, including the development of the initial business plan, due diligence, technological and network evaluation, service delivery, vendor management and operational support system evaluation and implementation.

QSI consultants are also there when unexpected events arise, *i.e.*, litigation, changes in the regulatory structure or advances in technological innovation. If your organization requires assistance with nearly any aspect of your participation in the communications or energy markets, QSI has experience that can help.



Our Clients

QSI provides solutions to all types of market participants ranging from the largest corporate players, their customers, as well as the government agencies that regulate the interaction between those companies and customers. QSI's broad range of clients gives it not only a wide breadth of experience but also a well-rounded, up-to-date perspective on issues important to network industries. Below is a sampling of our clients and a brief description of the services we most often provide.



WIRELESS COMMUNICATIONS CARRIERS

QSI has assisted wireless carriers with establishing interconnection rates for wireless services, dispute resolution, market analysis, and spectrum auction policy.

Bell Canada	Mobi PCS	Quebecor Media (Videotron)
Rogers Communications	Shaw Communications	T-Mobile
Western Wireless	Centennial Wireless <i>n/k/a AT&T</i>	

WIRELINE COMMUNICATIONS CARRIERS

QSI provides its wireline clients with a wide variety of services including: (1) expert policy advice and testimony, (2) business consulting services, (3) cost of service expertise and economic modeling, (4) advocacy before government agencies and lawmakers, (5) cost modeling, (6) patent disputes, and (7) damages analysis.

360 Networks	Accent Integrated Networks	Bermuda Telephone Co.,
Cbeyond	Socket Telecom	ClearTel Communications <i>n/k/a Birch Comm.</i>
Coon Creek Telephone Co.	Core Communications	Lucre Communications
Covad Communications	Dash Carrier Services <i>n/k/a Bandwidth.com</i>	El Paso Networks
Eschelon/Integra Telecom	GlobalCom	Level 3 Communications
PAETEC Communications <i>n/k/a Windstream</i>	Iowa Telecom	Sage Telecom
NuVox Comm. <i>n/k/a Windstream</i>	One Communications <i>n/k/a EarthLink Business</i>	Peerless Network
Saturn Telecom Services <i>k/n/a EarthLink</i>	TDS Metrocom	tw telecom
WorldNet Telecom.	XO Communications	Zayo Bandwidth

ENERGY COMPANIES

QSI's consultants have a broad range of utility expertise used to provide assistance to clients in many different areas of the utility marketplace. QSI assists its utility clients in market analysis, product and business development and business model transition, etc.

BC Hydro	El Paso Energy	Energy Projects
Toronto Hydro	Washington Gas Light Co.	Wyoming Industrial Energy Consumers

EQUIPMENT MANUFACTURERS

QSI provides telecommunications equipment manufacturers with strategic advice regarding upcoming service/regulatory trends and general market intelligence.

Siemens Corporation Structus Technologies

CABLE MULTIPLE SYSTEM OPERATORS (“MSOS”)

QSI assists Cable MSOs in growing and protecting their telecommunications services business and infrastructure.

Armstrong Cable	Bright House	Charter Communications
Comcast Corp.	Cox Communications	Time Warner Cable
Midcontinent Communications		

LAW FIRMS, ATTORNEYS

QSI provides telecommunications and general litigation expertise (including damages assessment and witness training) to a large number of law firms either directly, or through their respective clients.

Bingham McCutchen	Bryan Cave	Davis Wright Tremaine
Dickstein Shapiro Morin & Oshinsky	Kelley Drye & Warren	Holland & Hart
Moss Barnett	Petrie Bauer	Proskauer Rose
Sidley & Austin	Davis Polk	Doffermyre Shields Canfield & Knowles

TRADE ASSOCIATIONS

QSI provides a wide variety of services to a number of industry associations ranging from competitive telecommunications carriers to pay telephone providers. QSI’s assistance is most often provided in the form of expert policy and legislative advice, advocacy and expert testimony.

American Public Communications Counsel	CompSouth	Illinois Pay Telephone Association
Michigan Payphone Association	Ohio Public Communications Association	Wisconsin Pay Telephone Association

FEDERAL AGENCIES, STATE REGULATORS & OTHER PUBLIC ORGANIZATIONS

QSI assists regulatory commissions and public agencies in meeting the many challenges afforded by a utility marketplace in transition. QSI’s services include market analysis, expert policy advice and testimony, representation in regulatory forums, providing technical and witness training, anti-trust analysis, and technical support in complicated litigation/negotiations.

US General Services Administration	US Department of Defense and Federal Executive Agencies ¹	Colorado PUC ²
Colorado Office of Consumer Counsel	Connecticut DPUC	Connecticut Attorney General
District of Columbia PSC ³	Hawaii PUC	Idaho State Tax Commission
Illinois Department of Revenue	Maine PUC	Maryland Office of Public Counsel
Maryland Public Service Commission	Massachusetts Department of Revenue	Nebraska PSC
New Mexico Attorney General	New Mexico PRC ⁴	New York DPS
Oregon Department of Revenue	Oregon PUC	South Dakota PUC
Tennessee Department of Revenue	Texas Public Counsel	Utah Public Service Commission
Utah Officer of Consumer Services	Vermont Department of Public Service	Wyoming Energy Commission

¹ On March 16, 2011 QSI Consulting, Inc. (“QSI”) was awarded Contract No. GS00Q11NSD0041 by the United States General Services Administration (“GSA”). Currently capped at \$5 million over 5 years, the GSA contract enables QSI’s consultants to support the GSA’s mission of maintaining reasonably priced, quality telecommunications services for the use of the United States Government.

² Public Utility Commission (“PUC”) generally denotes a state utility regulatory agency responsible for ensuring that the rates and services provided by utility service providers are just, reasonable and of high quality.

³ Public Service Commissions (“PSCs”) also regulate state utility services (see description of PUC above).

⁴ Public Regulation Commission (“PRC”). See PUC and PSC above for a description of this agency’s responsibilities.

Wyoming PSC

Our Approach

QSI employs a *Project Management* approach to consulting in which QSI's Project Managers (1) analyze the requirements of a given project, (2) develop a "critical path" analysis tasked with organizing and managing several work steps and personnel necessary to complete the project, (3) define deliverables and due dates and (4) staff the project with the industry's most experienced and creative team of professionals. QSI is committed to our clients' satisfaction with the value proposition of our work. Expertise and experience are not enough; a good consultant must ensure that the client receives economic value associated with the consulting dollars they spend.



THE QSI TEAM



www.QSIConsulting.com

QSI's professional consultants provide its clients with hundreds of years of combined expertise in economics, finance, public policy, regulation, marketing, product development, business planning and computer modeling. QSI draws from each of these disciplines and the substantial experience of its consultants when it defines a project-specific team aimed at delivering the most value-laden solutions. In addition, QSI's consultants bring substantial work experience from the utility industry, state regulatory commissions, national carrier associations, academia and a number of other professions. The following list provides a general overview of QSI's consultants and their professional experience. More in-depth information about each consultant and his/her experience may be viewed on our website at www.QSIConsulting.com.

MICHAEL STARKEY
President

Mr. Starkey is a founding partner and currently serves as the President of QSI Consulting, Inc. Mr. Starkey's consulting career began in 1996 shortly before the passage of the Telecommunications Act of 1996. Since that time, Mr. Starkey has advised some of the world's largest companies (e.g., AT&T, MCI, Time Warner, Covad Communications, Siemens Corporation) on a broad spectrum of issues. Mr. Starkey's experience spans the landscape of competitive telephony, including interconnection agreement negotiations, mediation, arbitration and strategies aimed at maximizing new technology. Mr. Starkey's experience is often called upon in his capacity as an expert witness. Since 1991, Mr. Starkey has provided testimony in more than 100 proceedings before approximately 35 state commissions, the FCC and courts of varying jurisdiction. Mr. Starkey is a recognized expert in the area of economic costing for telecommunications networks and has constructed, critiqued and/or reviewed telecommunications costing models for the industry's largest companies.

Prior to founding QSI, Mr. Starkey founded and served as the Senior Vice President of Telecommunications Services at Competitive Strategies Group, Ltd. (CSG) in Chicago, Illinois. Prior to that, Mr. Starkey served as an executive and analyst for numerous state regulatory commissions, including the Missouri, Illinois and Maryland state commissions.

Mr. Starkey holds a B.S. in Economics from Southwest Missouri State University. He has also attended numerous industry seminars and training courses.

AUGUST ANKUM, Ph.D.
Senior Vice President

Dr. Ankum is a founding partner of QSI, serves as Senior Vice President and is the firm's Chief Economist. Dr. Ankum is a practicing economist and consultant specializing in both domestic and international telecommunications issues. Before co-founding QSI, Dr. Ankum worked directly with a number of the country's largest communications clients in his own practice. Prior to that, Dr. Ankum served as Senior Economist for MCI Telecommunications Corporation's Public Policy Division, and before that as a Manager in the Regulatory and External Affairs Division of Teleport Communications Group, Inc. (later purchased by AT&T). In his capacity with both MCI and TCG, Dr. Ankum provided expert testimony regarding the economics of telecommunications and public policy in contested proceedings across the country. Dr. Ankum specializes in competitive telephony issues pertaining to removing barriers to

entry in local telecommunications markets. Dr. Ankum began his career in telecommunications with the Texas Public Utility Commission, where he served as the Commission Staff's Chief Telecommunications Economist.

Dr. Ankum received a Ph.D. in Economics from the University of Texas at Austin, a M.A. in Economics from the University of Texas at Austin, and a B.A. in Economics from Quincy College in Illinois.

TIMOTHY GATES
Consultant Emeritus

Mr. Gates was a QSI partner and served as Senior Vice President, managing some of QSI's largest clients. While Mr. Gates retired in 2012, he still consults on key issues on an as needed basis.

Before joining QSI, Mr. Gates held key management positions over a 15-year period with MCI, Inc.'s Law and Public Policy Group. Mr. Gates focused on telecommunications issues ranging from costing, pricing, alternative forms of regulation, local entry, and universal service to strategic planning, legislation, and merger and network issues over a telecommunications career spanning 25 years. He had extensive experience working with attorneys, analysts, external consultants, regulators, lobbyists and company executives on issues associated with the convergence of competition, technologies, services and companies. Mr. Gates developed policy positions and advocated those positions on energy and telecommunications issues before regulatory commissions and legislatures across the nation. During his tenure with MCI, Mr. Gates managed its many external consultants and the associated budget. He testified in more than 250 proceedings in 47 states and Puerto Rico and before the FCC and the Department of Justice. Mr. Gates was widely recognized in the telecommunications industry as one of the most talented witnesses and witness trainers.

Before joining MCI, Mr. Gates was employed by the Texas Public Utility Commission as a Telephone Rate Analyst in the Telecommunications Division's Engineering Department. Prior to joining the Texas staff, Mr. Gates was employed by the Oregon Public Utility Commission as an Economic Analyst in the Telecommunications Division. Mr. Gates also has experience in the energy industry, having worked with the Bonneville Power Administration (United States Department of Energy), where he was employed as a Financial Analyst. Mr. Gates also spent 10 years in the forest industry in the Northwest, where he held numerous positions of increasing responsibility for International Paper, Weyerhaeuser and the Oregon Department of Forestry.

Mr. Gates holds a Masters of Management Degree with an emphasis in finance and quantitative methods from the Atkinson Graduate School of Management at Willamette University. He also holds a Bachelor of Science Degree in Forest Management from Oregon State University.

WARREN FISCHER, C.P.A.
Chief Financial Officer

Mr. Fischer is a QSI partner and currently serves as Chief Financial Officer in QSI's Telecommunications Division. Mr. Fischer has over 18 years of experience in the telecommunications industry and joined QSI after five years of service within AT&T's Local Service & Access Management and Wireless Services divisions. During his telecommunications career, Mr. Fischer has focused his attention largely on TELRIC pricing, local market entry, Section 271 compliance, Section 251(f)(1) rural exemption issues, access and universal service reform issues, the financial performance of rate of return companies, billing disputes, and damages assessment.

Mr. Fischer is an experienced and effective expert witness who has provided expert testimony and reports in over 30 proceedings before 22 state utility commissions, federal courts, and other administrative agencies. Mr. Fischer is an active Certified Public Accountant who is licensed in the States of Colorado and California. Mr. Fischer's professional experience as a C.P.A. includes two years in public practice with Deloitte and Touche LLP and over 20 years of managing financial analysis, reporting and forecasting processes for various multi-national corporations.

JAMES WEBBER
Senior Vice President

James Webber is a QSI partner and serves as Senior Vice President. He has approximately 19 years of experience within the public utility and regulatory fields during which time he has successfully managed projects for a number of the nation's most notable telecommunications carriers including, for example, AT&T, MCI, One Communications, PAETEC and XO. Mr. Webber's consulting engagements typically include governmental affairs, litigation, business analysis and planning, and/or vendor management.

Prior to joining QSI, Mr. Webber served in a number of management positions within the telecommunications industry including, for example, as the Director of External Affairs for ATX/CoreComm and as a District Manager for AT&T's Law and Government Affairs and Local Services and Access Management

organizations. In addition to his experience within the telecommunications industry, he served at the Illinois Department of Energy and Natural Resources, where he was involved with energy use and DSM forecasting, pollution mitigation strategies and other environmental issues.

Mr. Webber has been qualified as an expert and provided testimony over 100 times regarding contract disputes, cost of service, economic damages, interconnection agreements, pricing and public policy issues before state and federal regulatory agencies and courts throughout the United States.

Mr. Webber holds a M.S. in Economics and a B.S. in Business Administration and Economics from Illinois State University.

PATRICK PHIPPS
Vice President

Patrick Phipps is a QSI partner and currently serves as Vice President. Mr. Phipps has been with QSI since 2003, during which time he has provided clients with expert testimony, reliable research, negotiation/arbitration support, policy and rate analysis, merger/acquisition analysis, compliance advice, tariff services, and business case analyses. Prior to joining QSI, Mr. Phipps was employed by the Illinois Commerce Commission, where he began his career as a rate analyst in the Telecommunications Division and later served as Policy Advisor to an Illinois Commerce Commissioner. As an analyst, Mr. Phipps provided expert testimony on wide-ranging communications issues, and as a policy advisor, he provided advice and analysis to commissioners on policy and procedural matters related to the regulation of network industries, including communications, energy and transportation.

Mr. Phipps holds a M.A. in Economics from the University of Illinois and a B.S. in Economics from Illinois College.

OLESYA DENNEY, Ph.D.
Senior Consultant

Dr. Denney serves as a Senior Consultant in QSI's Telecommunications Division and provides its clients with superior quantitative, econometric modeling and research skills. Dr. Denney's telecommunications carrier began at AT&T in its Local Services and Access Management group. Her responsibilities included data analysis, forecasting, cost modeling, access issues and universal service reform issues. Dr. Denney's professional experience includes academic research

in the area of environmental and resource economics, and teaching advances economic courses at Oregon State and Novosibirsk State (Russia) universities.

Dr. Denney holds a Ph. D. and M.S. in Economics from Oregon State University as well as a B.S. in Economics from Novosibirsk State University in Russia.

SCOTT LUNDQUIST
Consultant to QSI

Mr. Lundquist, a consultant to QSI, performs strategic and regulatory analysis, project management, and client support services for projects in telecommunications regulation and economics. Prior to joining QSI in June 2007, Mr. Lundquist served as a Vice President and Partner at Economics and Technology, Inc. (ETI). Over the course of his twenty-five year career in the field, Mr. Lundquist has developed a specialized expertise in key areas of modern telecommunications regulation and policy, including service costs and pricing, network interconnection and unbundling, implementation of competition policies, incentive regulation, and next-generation broadband and wireless services.

Mr. Lundquist has served as an expert witness on these issues in over thirty-five proceedings before twenty state public utility commissions. He regularly works with a wide range of clients including competitive services providers, consumer advocates, and regulatory commission staff. He has also advised regulatory agencies and foreign ministries on modern regulatory practices, and has developed and undertaken on-site training programs for regulatory staff.

Mr. Lundquist received his Bachelor of Arts degree in Psychology and Social Relations from Harvard College, Cambridge, Massachusetts.



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