



Michael J. McGill

*Utility Scale Electric System Analysis
Natural Gas Market Analysis
Compressed Air Energy Storage System Analysis*

SUMMARY

Michael McGill has over 30 years of experience in the electricity and natural gas industries with emphasis in technical and commercial aspects of business development, project development, gas storage, electricity storage (using air pressure), energy purchasing and marketing, sales, and regulatory compliance. Mr. McGill has worked with The *Hydrodynamics* Group for the past 10 years on the development of Compressed Air Energy Storage (CAES) and natural gas storage in the Republic of Georgia.

EDUCATION

University of Louisville, 1971, B.E. Mechanical Engineering
University of Louisville, 1976, M.E. Mechanical Engineering
University of Louisville, 1977, MBA

PROFESSIONAL EXPERIENCE

Principal, Electricity and Air Storage Enterprises, LLC (“EASE”): Leading partner for business development activities in a professional services group. Develops and presents compressed air energy storage project strategies to market participants and companies investigating potential electricity and gas storage investments. Projects under continuing discussion are in Iowa, Texas, Louisiana, Michigan, Illinois, Colorado, West Virginia, Montana, Spain and Ireland. For several CAES projects, EASE developed the strategy to select and qualify the underground reservoir and recommended the evaluation team for geological assets; negotiated contracts for seismic surveys and reservoir testing; developed plans to secure regulatory approvals and to acquire land and storage rights expeditiously; conducted infrastructure analysis and initiated property acquisition.

Associate of *Hydrodynamics* for the development of a strategic natural gas storage facility in Republic of Georgia. Developed economic justification, quantification of financial benefits to Georgia, risk analysis, compressor and pipeline performance specifications and cycle optimization. This US\$100 million aquifer-based storage system is the first storage operation to be undertaken in Georgia; it is strategically vital to efforts of the Government of Georgia to secure and maintain the commercial benefits and to accommodate the physical delivery of the entire allocation of gas supply available through its contracts with the owners of the Baku-Tbilisi-Erzurum (South Caucasus) Pipeline. Work product resulted in endorsement of the project by the US Trade and Development Agency and the European Union.

Independent consultant to a major tire and rubber company in Ohio. Conducted economic evaluation of powerhouse facilities and due diligence analysis of a prospective buyer of the coal-fired boilers, steam turbines, generators, chillers and distribution facilities comprising the powerhouse facilities. Based on these analyses (conducted jointly with CWR Energy, Inc. of Houston, Texas) and our recommendations, client selected a more qualified buyer and a superior business structure to reduce power and heat costs and improve reliability with reduced long-term commercial risk.

Vice president, business development, CAES Development Company, L.L.C: Led business development effort for compressed air energy storage projects. Advised Board of Managers on strategic and development issues and implemented its tactical decisions. Originated development plans; directed regulatory planning and governmental relationships; acquired land, storage rights, water and fuel; negotiated fuel and water transport and storage. Organized and executed project plans and commercial aspects of marketing and operating strategies. Developed strategies and plans for storage cycle to optimize utilization and maximize value.

Vice president, electric development, TPC Corporation/PacifiCorp.: Expanded company's strategic logic of salt cavity gas storage to applications for electricity storage and evaluated economics of other media, jurisdictions and sites. Negotiated equipment supply agreements and devised facility plan and cycle design for proposal to serve TVA storage requirements for gas and electricity.

Mission Energy Fuels Company and Mission Energy Oil & Gas Company: Managed \$500 million investment in oil and gas assets. Managed operating and development projects and relationships with counterparties for acquisitions of producing properties and fuel strategies for power plants; negotiated and supervised fuel supply arrangements, including transportation and storage services. Initiated investigation of imported LNG to serve power projects in eastern U.S. Led due diligence team in acquisition of ownership in assets comprised of the prime domestic properties from Getty Oil; ownership was increased over time from the initial 10% to 49%. Four Star Oil and Gas Company was a prolific producer of cash. Advised leveraging the asset to make the investment a prodigious producer of earnings, which the company did. Negotiated gas purchases and administered purchase of 850 MMcfd of gas used in nine states to fuel power generating facilities. Managed fuel transport and storage directly, with partner companies and in support of plant staffs. Negotiated terms of purchase of producing assets in British Columbia, Texas, Alabama and offshore Louisiana. Production included conventional natural gas, coalbed methane and incidental oil.

Manager, natural gas marketing, Transco Exploration Company: Negotiated sales and supervised delivery of 440 MMcfd of natural gas produced by the company from offshore Texas and Louisiana and several onshore areas. Additional 400 MMcfd of sales included non-operator partners' shares of production. Led formation of a consortium of producers to justify construction of new pipeline in Texas offshore.

Other Positions

- Senior gas sales engineer, Sohio Petroleum Company.
- Gas agent, Shell Oil Company
- Senior regulatory planning engineer, El Paso Marine Company.
- Manager, market services, Louisville Gas & Electric Company..
- Member, Gulf Coast Power Association.
- Member, Texas Renewable Energy Industries Association.