



## **TRUMAN D. KING, P.E.**



Truman D. King, P.E., a Principal with Long International, has over 35 years of experience in engineering, procurement, and construction operations in the mining, oil and gas, refining, and real estate development industries. He has successfully completed assignments in the U.S., Middle East, Europe, and the Caribbean. Mr. King was a Senior Project Manager for Worley Parsons, where he managed the Front End Engineering Design and acquisition of Process Design Technology for US \$500 million expansion of an oil refinery in the UAE to produce clean diesel fuel. He has also managed oil & gas, refining, power distribution, marine, and other engineering projects and provided analysis and resolution of contractor's claims. Mr. King has extensive knowledge of the owner's and contractor's project management responsibilities on EPC turnkey projects. He has successfully analyzed claims involving mismanagement, defective engineering, delay, disruption, and disputed change orders.

### **EDUCATION**

B.S., Mining Engineering, Colorado School of Mines, 1971

Graduate studies at the Colorado School of Mines, 1973-74, M.S. program, including Slurry Pipeline Transportation, Rapid Excavation and Tunneling, and Management of Mining Operations.

### **PROFESSIONAL REGISTRATION**

Registered Professional Engineer, Colorado (No. 13871)

### **PROFESSIONAL AFFILIATIONS**

Project Management Institute

### **TECHNICAL EXPERIENCE**

Representative U.S. and international technical experience includes:

- Construction claims analysis and negotiation of settlements with an emphasis on the assessment of technical issues and project management performance.
- Management of mining, oil and gas, oil shale, land development, and commercial and residential construction operations for both owners and contractors.
- Project engineering for mining and oil and gas projects, mining engineering and mine economics studies, foundation and structural design.
- Turnarounds of poorly performing organizations, and implementation of computer-based integrated financial control, procurement and scheduling systems.
- Development of project and company-wide management plans and procedures.
- Development and training of professional technical and administrative staff.



- SEC due-diligence investigations for mineral properties, oil terminals, real estate and other business acquisitions.
- Development of financial analyses for mineral projects.
- Business development and establishment of joint ventures.

## **PROJECT EXPERIENCE**

Representative U.S. and international project experience includes:

### **Oil & Gas, Refining, Power, Industrial, and Environmental**

- World GTL-TL Gas to Liquids Project – Provided Project Management consulting services for improvement of project management systems and controls for a 2,200 BPSD natural gas to ultra-low sulphur diesel project in Trinidad.
- Devils Tower Spar - On behalf of the paint manufacturer, performed an analysis of delay claims resulting from mismanagement, delays, and rework by an EPC contractor and the owner for an offshore oil and gas production SPAR installed in the Gulf of Mexico. Component fabrication was performed in Indonesia and Mexico, and assembly was done on the U.S. Gulf Coast.
- Cerro Negro Upgrader Project – Analysis of claims and counterclaims involving the construction of a \$790 million delayed coker complex in Venezuela, focusing on project management problems and support of legal arguments.
- Cordova Energy Center Project – Analysis of claims and counterclaims involving the design and construction of two heat recovery steam generators in Cordova, Illinois.
- Nikiski Cogeneration Project - Performed an analysis of change orders, delays, acceleration, and loss of productivity impacts associated with the relocation of an existing gas-fired turbine generator and the construction of a new heat recovery steam generator in an existing industrial plant. This project involved the defense against the contractor's claim and preparation of the owner's liquidated damages counterclaims. Testified in mediation, which resulted in a successful settlement of the dispute.
- Delta Energy Project – Monitoring of back-charge, delay, and contract issues associated with the construction of three heat recovery steam generators using waste heat from gas-fired turbine generators on a new power plant project in California.
- Manchief Power Station Project – Analysis of a contractor's man-hour and cost overruns compared to contract budgets to establish basis for delay and loss of productivity claims on the installation of two gas fired turbine generators and associated steam heat recovery facilities on a new power plant project in Colorado.
- Coughlin Power Station Unit 6 & 7 Repowering Project – Analysis of delay and disruption claims on the installation of three heat recovery steam generators as part of a retrofit power plant project in Louisiana.
- International PET Chemical Plants - Analysis of the owner's defense against over \$100 million in change order, delay, and loss of productivity claims by an engineering & construction firm against a U.S. based chemical company on PET chemical plants in Spain, Argentina, and The Netherlands. Prepared an internet repository document database containing over 200,000 documents, and provided ICC arbitration support in preparation for expert witness testimony.



- Refinery Upgrade Project - Analysis of delays and loss of productivity impacts regarding a Canadian contractor's US \$25 million delay and loss of productivity claim on a refinery project in Trinidad. This project involved the organization of thousands of documents and assessments of alleged impacts identified in change orders, correspondence, meeting minutes, disruption notices, monthly progress reports, and CPM schedule updates. This project involves the upgrade of a fluid catalytic cracking unit, a new Visbreaker unit, and modifications to the instrumentation system throughout the refinery.
- Evaluated a claim by the Operator of a chemical storage facility associated with delays and cost overruns caused by scope changes and Hurricane impacts. Operator alleged that the cost of the facility significantly increased as a result of owner-caused changes and impacts from Hurricanes Katrina and Rita, and that the owner agreed to compensate the Operator for the Hurricane impacts. The owner alleged that the Operator mismanaged the project, and that the delays and cost increases were primarily caused by other problems not related to the Hurricanes.
- Offshore Oil & Gas Project - On behalf of the owner, performed an analysis of cost overrun claims resulting from mismanagement, delays, and rework by an EPC contractor for an offshore oil and gas production SPAR installed in the Gulf of Mexico. The fabrication of the soft tank/truss was performed in Texas and the fabrication of the hard tank was performed in Finland.
- Offshore Oil & Gas Production Platform – On behalf of the paint manufacturer, analyzed delay claims on this deep water Gulf of Mexico SPAR to separate delays caused by the owner or general contractor from any potential delays that may have been the responsibility of the paint manufacturer. The fabrication of the Hull was performed in Indonesia; Topsides Decks, Buoyancy Cans and Suction Piles in Mexico; and Topside equipment, piping, electrical and installation on the U.S. Gulf Coast.
- Geothermal Power Plant – On behalf of the owner, analyzed the general contractor's delay and extra cost claims for this Geothermal power plant expansion in Indonesia. Findings led to favorable settlement terms for the owner in Mediation.
- Insulation Manufacturing Plant – On behalf of the owner, performed an assessment of the project management performance of the EPC contractor, who had filed a \$25 million delay and disruption claim for recovery of unpaid invoices on a reimbursable project in Canada.
- Central Seawater Injection Project, Phase 1 – Managed the engineering, equipment procurement, and construction phases of a \$100 million international lump sum turnkey water flood project. Facilities included water treatment, pipelines, and high-pressure injection pumping system.
- Central Seawater Injection, Phase 2 and Effluent Water Injection, Phase 1 Projects – Managed front-end engineering design, lump sum turnkey contract preparation, and initiated the international procurement action for these \$160 Million combined value projects. Work included expansion of Phase 1 facilities and collection, treatment and injection of produced water from three oil gathering centers.
- Upgrading Desalter/Dehydration Plant at Gathering Center 15 – Managed the front-end engineering design and initiated sole-source procurement action for this \$28 million facility upgrade project.
- Ratqa Power Project – Managed the complete engineering design for the power system for the Ratqa oil field in North Kuwait.
- Small Boat Harbor Breakwater Extension – Managed the construction of a marine breakwater extension for a tugboat harbor in Mina Ahmadi, Kuwait.
- Gathering Center 15 – Analysis and resolution of construction contractor claim for compensation due to alleged delay caused by owner.
- KOC Facilities Survey – Managed field surveys of all Kuwait Oil Company oil and gas production facilities. This project was designed to produce as-built documents for updating the company's engineering data base to include all work quickly done after wartime reconstruction.



- Green Diesel Project – Managed the Front End Engineering Design and acquisition of Process Design Technology for a \$500 million expansion of an oil refinery in the UAE to produce clean diesel fuel.
- GHX II Project – Directed the engineering design and major equipment procurement for a \$100 million ARCO oil and gas separation facility on Alaska’s North Slope. The sealiftable, modularized components, part of a \$1.5 billion gas handling expansion project, included 250,000 BPD oil and 1.2 billion SCFD natural gas handling capability. Completed project optimization phase on schedule and within budget. Contained project costs while maximizing plant capacity.
- Southern Area Oil and Gas Expansion Program – Managed the engineering and procurement for portions of the \$1.3 billion expansion of gas/oil separation facilities for Saudi Aramco in Saudi Arabia.
- Avon, Bakersfield, Duncan and El Dorado Refineries – Designed and implemented Federal RCRA and state required groundwater monitoring and mitigation programs at four oil refineries in California, Oklahoma, and Arkansas. Also obtained permits for a major gas pipeline through an environmentally sensitive area near San Francisco.
- Asset Acquisition Project – Performed SEC due diligence investigations for acquisition of a conglomerate of oil reserves, mineral properties, and developed commercial property, keying on regulatory compliance.
- Prepared a schedule delay analysis on the construction of a hydroelectric power plant in Pakistan. Delays were caused by site access delays, an increase in the structures and excavation quantities, structural steelworks delivery delays, and delays in the construction of a railway bridge.

## **Mining**

- Sand Wash Oil Shale Project - Managed mining and materials handling for this proposed \$4 billion synthetic fuels project near Vernal, Utah. Defined production plant parameters, selected contractors, hired professional staff, completed preliminary design, and developed permit documentation. Sized pilot-scale mine facilities, completed detailed design, obtained permits, and established management systems for production plant construction.
- Bear Creek Mine – Performed financial analyses for new minerals projects and turn-around planning to improve existing uranium mine and plant operations.
- Mount Taylor Project – Project engineering and construction supervision for a \$250 million uranium project in New Mexico. Coordinated engineering design and permit acquisition, selected contractors, and directed construction of plant facilities and mine shafts.
- Henderson Mine – Coordinated engineering and construction for this \$250 million underground molybdenum mine. Supervised construction contractor and supervised a 23-man mine development crew.

## **Real Estate Development, Residential and Commercial Construction**

- Developed and/or built residential projects in Douglas County, Lakewood, and Aurora, CO.
- As Operations Vice President, completed land development from raw ground to finished lots, infrastructure and major arterial roads, and construction of homes in California.



**PROFESSIONAL EXPERIENCE**

**Long International, Inc.**

*Littleton, Colorado (May 1999 to Present)*

As a Principal with Long International, Mr. King provides project management, claims analysis and dispute resolution services to the construction industry. He is skilled in the assessment of technical issues and evaluations of project management performance of owners and construction contractors on engineering, procurement, and construction contracts for the process plant, mineral processing, and industrial projects. He has analyzed construction schedules and project documentation to identify delay and disruption issues, determine the causes of construction delays, and equitably allocate responsibility for delay-related costs.

**Parsons Corporation, Energy and Chemicals Division (now WorleyParsons)**

*Pasadena, California (1990 to 1992), Kuwait and Italy (1996 to 1999) and UAE (2005 – 2006)*

Senior Project Manager, The Ralph M. Parsons Company. Directed engineering design, major equipment procurement, and construction for \$100 million plus water treatment, pipelines, and pumping for an oil field water-flood project in Kuwait. Managed the company's engineering and procurement office in Italy during 1997-1998. Completed work on time and within budget. Also managed power, marine, and other multi-discipline engineering projects. Provided analysis and resolution of contractors' claims.

As a member of the Project Management Team for Saudi Aramco on a \$1.5 billion expansion of oil and gas processing facilities in Saudi Arabia, completed preliminary design of a 55 MBOD Gas & Oil Separation Plant. Directed the engineering design and major equipment procurement for a \$110 million oil and gas separation facility on Alaska's North Slope. The sealiftable, modularized plant components include a 250,000 BPD oil and 1.2 Billion SCFD natural gas handling capability. Completed project optimization phase on schedule and within budget, including land use and air permit technical packages.

Also served as Project Manager under a Project Management Consultancy agreement with the Abu Dhabi national oil refining company (Takreer) for a \$500 million expansion of an oil refinery in the UAE designed to produce clean diesel fuel (the Green Diesel Project). The first two phases of the project included the Front End Engineering Design and acquisition of proprietary Process License Technology with international Licensors.

**Carmel Companies; Carmel Homes, Inc.**

*Denver, Colorado (1993 to 1996)*

Vice President, Construction and Land Development. Starting as land development consultant, expanded duties rapidly to include management of all construction, purchasing, product development, and customer service operations. Hired all key staff members and field supervisors. Expanded operations from one to three active projects, set production records, and implemented FAST system financial controls. Achieved record financial performance.

**Watt Industries; Watt America, Inc.**

*Santa Monica, Torrance, and Santa Clarita, California (1987 to 1990)*

Vice President, Operations. Directed \$150 million in residential development and construction operations in Southern California. Established and managed the planning, engineering, purchasing, and construction functions of this company. Expanded operations from a single site to six within two years. Doubled production rates while containing costs and improving finished product quality. Evaluated financial potential of proposed acquisitions and managed due diligence reviews.



**King Development, Inc.**

*Parker, Colorado (1983 to 1987 and 1992 to 1993)*

President, King Development, Inc. Established this Colorado company and provided management services for development of residential projects. Marketed and successfully completed a wide range of construction projects and related services, including building design, foundation and structural engineering, structural rehabilitation, and construction.

**Tosco Corporation**

*Denver, Colorado and Los Angeles, California (1980 to 1983)*

Project Manager. Managed two phases of a large oil shale project in Utah (\$4 billion planned value). Designed pilot mine plant, defined production plant parameters, completed preliminary design, and prepared permit documents.

Manager, Environmental Projects. Designed and implemented Federal RCRA and state required groundwater monitoring and mitigation programs at four oil refineries in California, Oklahoma, and Arkansas. Drilled monitoring wells, established vadose zone monitoring, and identified groundwater and solid waste remediation requirements. Obtained permits for a major gas pipeline through an environmentally sensitive area near the San Francisco Bay. Work included monitoring programs, biological studies, mitigation measures, an environmental assessment, and negotiations with the Bay Area Conservation District, Corps of Engineers, Department of the Navy, and the EPA. Performed SEC due diligence investigations for corporate acquisitions, keying on regulatory compliance for oil terminals, mineral properties and raw real estate.

**Union Pacific Corporation, Rocky Mountain Energy Co.**

*Denver, Colorado (1979 to 1980)*

Senior Engineer. Performed new minerals project financial analysis and turn-around planning for improving existing plant operations. Developed advocacy documents to support the company's position versus EPA on development of mineral reserves on Federal land.

**Harrison Western Corporation**

*Lakewood, Colorado (1977 to 1979)*

Project Manager. Directed engineering and design of mine plant facilities for uranium and oil shale projects in several states. Completed consulting and onsite construction supervision assignments.

**Gulf Oil Corporation; Gulf Mineral Resources, Inc.**

*Denver, Colorado and Grants, New Mexico (1974 to 1977)*

Senior Engineer. Project management, engineering and construction supervision for a \$100 million uranium project in New Mexico. Coordinated engineering design and permit acquisition, selected contractors, and directed construction of facilities and mine shafts.



**Colorado School of Mines Research Institute**

*Golden, Colorado (1973 to 1974)*

Research Engineer. Performed research studies in slurry pipeline transportation, rock mechanics, and mineral property evaluations.

**American Metals Climax; Climax Molybdenum Co.**

*Empire, Colorado (1971 to 1973)*

Engineer and Shift Boss. Coordinated engineering and construction for a \$250 million underground molybdenum mine. Supervised construction contractor and supervised a 23-man development crew.

**PUBLICATIONS AND SPEAKING ENGAGEMENTS**

Faculty, “*Assessment of Problems Associated with Poor Project Management Performance*” – Lorman Seminar, Houston 2005.