LONG INTERNATIONAL

KENNEY W. MCNABB, MBA

Mr. McNabb is a Senior Executive Consultant with Long International and has more than 30 years of experience related to the design and build of industrial chemical manufacturing facility projects, projects to execute complex cross-functional corporate initiatives, and projects to navigate and execute acquisitions/divestitures and subsequent transitions. He has expertise in manufacturing projects including all phases of engineering, project planning, functional coordination, procurement, and construction. Mr. McNabb is also proficient with industrial control systems, automation, and integration of plant floor to business systems. He has performed owner due diligence evaluations of acquisition targets, corporate restructuring for industrial automation modernization, and forensic analysis of contractor performance. Moreover, he is experienced with the selection of appropriate contracting strategies, contract development (project, engineering, procurement, construction, transition services, continuing services), contract administration, claim analysis, risk prioritization, constructability, turnover and commissioning. Facets of this work include contract analysis, control estimates, unit price and lump sum estimates, cost variance analysis, rigorous change order management, overhead and indirect cost analysis, and the evaluation of bid error claims.

Mr. McNabb has lived and worked in five countries on four continents and was personally involved in the planning, execution, contract negotiation, and resolution of project problems. He has been involved with projects ranging in size from small plant-support improvements to world-scale international facilities, both wholly owned and joint venture. Mr. McNabb oversaw project management for a Fortune 300 Asia Pacific chemical company. He also became skillful at facilitating interaction among owner, contractor and subcontractor teams, and normalized executive expectations. Mr. McNabb has been called upon to coach contractors through difficult labor situations for the benefit of the project at hand, and has firsthand experience in the U.S., Mexico, Spain, Argentina, and China quantitatively analyzing cost, damage, and schedule claims for chemical plant design and construction, both concurrently with execution and retrospectively. In addition, he has expertise negotiating settlements of cost, damages, and schedule claims as part of day-to-day project management, to close out projects, and as part of arbitrations. As part of Long International's Project Management, Engineering, and Construction Issues Analysis Team, he performed a detailed analysis of change order, delay, and disruption issues on a LNG project in Australia.

EDUCATION

M.B.A., Global Executive, Duke University, 2003
B.S., Electrical Engineering, University of Tennessee, *cum laude*, 1988

PROJECT EXPERIENCE

Mr. McNabb's project-related experience spans a wide spectrum. He served as an Engineering Manager, Checkout Coordinator, Construction Manager, Project Manager, Project Director, Director of Engineering, and Construction Director. Representative U.S. and international projects include:

- Direction of chemical brownfield and greenfield projects, including project management, owner project team management, and major engineering and construction contractor project teams.
- Management of a maintenance organization for a US$1 billion manufacturing facility, and restructure of mechanic coverage to increase efficiency while decreasing headcount and cost.
- Leadership of stage-gate reviews of projects at FEL1, FEL2, FEL3, and detailed engineering stages.

- Negotiations with the Ministers of Labor and Energy in Argentina and Spain, respectively.
- Management of teams to execute projects for best achievable reliability and plant life, and for proof of concept lowest cost industry standard facilities.
- Development of architecture for and management of a multi-year program to centralize capital budgeting and prioritization for industrial automation across 50 global sites.
- Formulation of an owner/contractor EPCM agreement for a new technology facility with an emphasis on placing risk with its natural owner to the maximum extent possible. Consequently, each party was less defensive because each understood and was familiar with expectations.
- Creation of Transition Services Agreements (TSA) for a US$500 million divestiture of manufacturing assets at multiple sites in six countries on three continents.
- Creation of Continuing Services Agreements (CSA) for services to be provided by a seller to a buyer following a divestiture.
- Formulation of Service Agreements whereby the owner provided engineering services to a Chinese joint venture (JV) of which they were a partner. The agreements guided owner engineering input and oversight of Chinese contractors, resulting in billable hours and invoices to the JV.
- Leadership of projects in various contract constructs: cost plus, cost reimbursable, unit rate, and Lump Sum Turnkey (LSTK).
- Oversight of root cause and cause/effect analysis to determine responsibility for particular events or occurrences, including boundary management issues at interfaces of owner/constructor, owner/ engineering, engineering/constructor, and supplier/constructor/engineering/owner, among others.
- Negotiation of closeout change orders and residual claims from large chemical plant projects.
- Formulation of an engineering and construction audit plan and trained auditors to evaluate Chinese JV project.
- Creation of an audit plan and training for auditors to examine industrial automation facilities globally.
- Development and evaluation of contracting strategies, bid evaluations, and bid award procedures.
- Assessment of bidders and approved supplier lists.
- Creation and analysis of contract terms and conditions, exhibits and specifications.
- Development, implementation and assessment of constructability and project performance reviews.
- Analysis of project schedules, both concurrent with execution and retrospectively.
- Identification and evaluation of engineering and construction changes and their impact on cost and schedule.
- Performance of root cause analysis of cost and schedule claims and evaluated performance relative to project agreements.
- Experience with an array of project types and well-versed at aligning the optimal contract type to the goals of the project(s) at hand.
- Mediation and coordination of negotiations between owners and constructors to resolve construction warranty related claims via acceptance of work, structured rework, or agreed liquidation settlement. This work involved detailed assessment of the owner's complaint, and subsequent mapping of the issue upstream to identify causes and responsibility.

- Creation and submission of expert opinions addressing quality of work, completeness of work, construction warranty, and liquidated damages for same.
- Author of documents and training for owners and constructors to guide the turnover/commissioning process in a way that maximizes efficiency, protects the interests of owner and constructor, and prevents warranty claims. Utilized a stage-gate approach to develop contracts, specifications, and work plans to ensure consistent understanding of expectations, and the means and methods to be used to test for completeness.

PROFESSIONAL EXPERIENCE

Long International, Inc.
Kingsport, Tennessee (September 2018 to Present)

As a Senior Executive Consultant with Long International, Mr. McNabb provides expert services in all facets of contract dispute analysis and resolution. Moreover, he provides mediation, arbitration and litigation support and expert testimony regarding engineering, project planning and execution, construction management, project management, owner's stage-gate processes, service-provider contracts, and owner presence and interaction with contractors throughout a project. Mr. McNabb is also recognized as an expert in industrial process automation architecture and facility modernization programs. As part of Long International's Project Management, Engineering, and Construction Issues Analysis Team, he performed a detailed analysis of change order, delay, and disruption issues on a LNG project in Australia.

Eastman Chemical Company – Corporate Industrial Automation Modernization Program
Fifty-two sites worldwide (June 2014 to March 2018)

Mr. McNabb was responsible for creating the corporate structure necessary for modernization of industrial automation assets and resources to support the worldwide US$10 billion company across 52 sites. His duties included capital allocation changes, creation of an exhaustive asset inventory, development of a risk-based business centric approach to prioritize projects, a review to retain only critical suppliers, and implementation of an audit program to ensure effective and pragmatic strategy adherence. Mr. McNabb's efforts resulted in modernization to enable Industry 4.0 and successful related digitalization initiatives. In addition, he eliminated functional boundaries that impeded information flow, specifically boundaries among automation, IT, procurement, and business.

Eastman International Management Company – Asia Pacific Engineering, Construction, and Project Management
Shanghai, China (June 2011 to June 2014)

As Director, Asia Pacific Engineering, Construction, and Project Management, Mr. McNabb led the establishment of an engineering and construction leadership presence for the Fortune 300 chemical company in China. His duties involved drafting agreements pursuant to which the US company and Chinese partners would conduct business related to over US$300 million E&C activities in JV manufacturing facilities. Some projects involved adapting existing designs for use in China, while others encompassed relatively new technology with iterative FEL cycles. FEL stage gate reviews and fitness for use reviews of deliverables from Chinese Design Institutes were critical in maintaining control of project costs and schedules. Additionally, Mr. McNabb and his organization were not only responsible for submitting and defending claims to the partner for reimbursement of services performed on behalf of the JV,

but also tasked with evaluating and analyzing claims from E&C contractors for their services. The latter included substantial claims for delay reimbursements that the contractor asserted were not its fault. Consequently, Mr. McNabb performed a detailed analysis of the contractor's execution plan, subcontractor structure, change order control, planning and control of quantities of civil material, piping, and electrical material and labor. He proved that the contractor had opportunities to avoid the delays and was responsible for causing 95 percent of the delays. From his involvement in the JV activities, Mr. McNabb gained a deep understanding and appreciation for the complex path necessary for heavy industrial investment in China, including the numerous regulatory filings, permits, and tedious sequencing. This complex path applies to both heavy manufacturing and commercial design and construction. Mr. McNabb was tasked with leading a project buildout of a 9-story building in Shanghai that required consolidating 6 locations into one to accommodate 500 people.

Eastman Chemical Company – Program Manager, Acetylated Wood Platform
Kingsport, Tennessee (June 2008 to June 2011)

Mr. McNabb lead the design and construction aspects of a first of its kind project after Eastman initiated a venture to launch a new product. Mr. McNabb commenced a review of initial cost and schedule estimates and discovered that some were unacceptable due to a lack of alignment of expectations between the CEO and project leadership. The expectation was to speedily create a facility that would prove the concept in the commercial market while investing as little as possible. Mr. McNabb selected a team, drafted an EPCM agreement reflecting the principles of the project, and led a joint team to success. The project set records for many company metrics, primarily cost and schedule, and enabled the market to be tested with the lowest investment possible. Over 30 subcontracts were involved, and the incentives and expectations of each harmonized well with others present on site to ensure that all parties understood the same message.

Eastman Chemical Company – Manager, Corporate Program Office
Kingsport, Tennessee (June 2005 to June 2008)

As Manager in the Corporate Program Office, Mr. McNabb worked alongside the most talented project managers and coordinated complex initiatives related to Eastman's growth platforms. He was involved in cross-functional projects and met monthly with the CEO to provide updates on initiatives across all businesses and obtain feedback for strategic planning. During this period, Mr. McNabb consulted as a core member on multiple acquisition and divestiture teams from initial contact through transition services.

Eastman Chemical Company – Manager, Polymers Maintenance
Kingsport, Tennessee (June 2002 to June 2004)

Mr. McNabb led 150 personnel performing maintenance on nearly US$1 billion in manufacturing assets. Under his leadership, staffing levels decreased while productivity and safety increased. He was successful in these efforts as Mr. McNabb balanced owner roles and utilization, implemented long-term contracts, and initiated short-term contract resources.

Eastman Chemical Company – Manager, Contract Services
Kingsport, Tennessee (June 2000 to June 2002)

As Manager, Contract Services, Mr. McNabb was responsible for administering the services contracts for numerous service providers at a site with roughly 2,000 contractors and a combined annual budget of over

US$100 million. These contractors performed services for engineering, construction, excavation, IT support, fire protection, housekeeping, pest control, printing, equipment rental and repair, insulation, abatement, security, and various manufacturing equipment operations. This landscape involved a consistent flow of contract negotiations, renewals, and claims. Mr. McNabb performed an expedient and efficient analysis of claims to prevent them from being accepted blindly or without consideration. In fact, efficient and abrupt claims disposition served as a deterrent for further submittals.

Eastman Chemical Company – Polymer Manufacturing and Utilities
Kingsport, Tennessee (June 1998 to June 2000)

Mr. McNabb led an initiative to improve efficiency and productivity for the numerous expense and small capital projects associated with over US$1 billion of manufacturing and utilities assets. Over the course of two years, Mr. McNabb ensured that necessary and priority work was visible, it was executed on schedule, and staff levels were lowered by 33 percent from their previous level.

Eastman Chemical Company – Engineering and Construction Manager – Zarate, Argentina PET Facility (Engineering in Madrid, Spain)
Zarate, Buenos Aires, Argentina (June 1994 to June 1998)

Mr. McNabb led the engineering effort to transfer a large amount of detailed information to the contractor for the LSTK project. In Argentina, he met with numerous local, regional, and federal officials as agreements were executed for power and natural gas supply to the site. Argentina had recently privatized its electrical infrastructure and Eastman was the first to request a large connection under the new regime. Mr. McNabb conducted negotiations with energy suppliers and transporters, which subsequently led to discussions with the Secretary of Energy. Ultimately, Eastman became the first GUMA, or grand user of power under the new system with very favorable rates. Construction was challenging with numerous labor outages due to strikes rooted in LSTK contractor agreements with subcontractors. Eventually, many claims were filed by the contractor against the owner. Mr. McNabb participated in the successful multi-year defense against those claims. The defense involved forensic schedule analysis to demonstrate material gaps in the contractor's understanding of how to create an integrated project schedule and gaps in its knowledge of how industrial construction is conducted at the craft level. This facility was modeled after the previous one in Mexico, with the difference being that the Mexico facility was adjacent to a partner that provided all services. The Mexico facility was a true greenfield project with neither power nor water to the site.

Eastman Chemical Company – Engineering Manager, Cosoleacaque Mexico PET Facility
South Carolina, Mexico City, Mexico (June 1992 to June 1994)

Mr. McNabb served as a consultant on this project overseeing project automation and controls. Shortly thereafter, he was tasked with developing the checkout/turnover plans for this cost reimbursable engineering unit rate construction job. The turnover planning involved interviewing manufacturing leaders to understand how the plant would be functionally tested, transforming that knowledge into turnover systems, then guiding the contractor to assign identifiers to equipment such that a database could generate reports of what equipment comprised each identified system. This created the roadmap to startup by serving as a goal for construction forces to complete the plant by systems rather than finishing everything contemporaneously. This approach leveled the workload on the owner's checkout and startup team and ultimately was the most efficient path to Class 1 product. As the Engineering Manager, Mr. McNabb closed

out the engineering offices in South Carolina and Mexico City, negotiated lingering change orders and claims by the contractors, and analyzed those claims in-depth to counterclaim damages or alleged harm.

Primester Cellulose Acetate Flake Facility, Eastman-Rhone Poulenc Joint Venture
Kingsport, Tennessee (June 1991 to June 1994)

Mr. McNabb was tasked with overseeing the more than US$300 million greenfield joint venture between Eastman and Rhone-Poulenc to produce 150Mlb/year of Cellulose Acetate flake. He was responsible for all process instrumentation and controls design basis provided to the contractor as an FEL3a package. He oversaw the transition of the automation design basis to the contractor's office and was resident in its office overseeing instrumentation, controls, power design and procurement throughout the detailed design process. Mr. McNabb later transitioned to the field where he led the electrical and instrumentation checkout team comprised of owner resources and a specialty contractor. The efficiency and quality of the checkout established a new standard for both the owner and EPC contractor.

Tennessee Eastman Company – Industrial Process Instrumentation and Control Systems Design
Kingsport, Tennessee (1988 to 1990)

Mr. McNabb began his professional career designing process instrumentation systems and specifying instrumentation for specific chemical manufacturing applications. His work evolved into programming industrial PLC systems and DCS control systems. The design process included specification of the hardware and software consistent with the needs of the control strategies of the unit operation. Subsequently, software development enabled an operable system that was commissioned following construction and was fine-tuned to meet the needs of the manufacturing area. This period created an appreciation for the fundamentals of project management, schedule development and adherence, and quality of workmanship.

PUBLICATIONS AND SPEAKING ENGAGEMENTS

"Creating Industrial Automation Modernization Programs," *Yokogawa Electric Corporation Americas Conference*, Orlando, FL, September 2018.

"Preparing for Joint Venture Projects in China," *Independent Project Analysis Conference,* Shanghai, China, 2012.

EXPERT REPORT PREPARATION

2019 Drafted and submitted expert opinions addressing quality of work, completeness of work, construction warranty, and liquidated damages for same. Subject matter comprised technology packages, automation, electrical, and mechanical work between an international Fortune 500 owner and a large private North American constructor as well as a European technology provider and third-party engineering services provider. The analysis considered the commitments of each party, as reflected in contracts and specifications, and the degree to which each met those commitments for a given issue, including the degree to which owner's intent was conveyed to engineering and effectively propagated through design, engineering work products, construction specifications, procurement specifications, and checkout/commissioning protocols.