

# MOHAMED SAAD, P. ENG., M. SC., PMP



Division Lead – Project Services | [msaad@modus-group.com](mailto:msaad@modus-group.com)

Mohamed (Moody) Saad brings 17 years of experience in the areas of Major Capital Program Delivery, Business and Corporate Leadership, Engineering–Procurement–Construction (EPC) Management and Project Management Office (PMO) Development. As a licensed Professional Engineer and a certified Project Management Professional Mohamed has successfully defined, developed and delivered annual corporate project portfolios of over \$350M in support of capital projects exceeding \$2B. Mohamed has also been accountable for the definition, management and delivery of Enterprise Level IT projects at one of Canada’s largest contractors.

## EXPERTISE: 17 + YEARS OF EXPERIENCE

- ▶ Project Oversight
- ▶ Risk Management
- ▶ Procurement Services
- ▶ Project Controls
- ▶ Change Management
- ▶ Commercial Risk Management
- ▶ Enterprise IT Project Delivery
- ▶ Commercial Management
- ▶ Project Management Advice & Reporting

## MAJOR PROJECTS AND SERVICES

- ▶ Provided Strategy, Project Management, and Commercial Management advisory services to Clients’ Executive Leadership Teams in the power and infrastructure sectors. Devise and deliver customized improvement initiatives and training to Project Delivery Groups on project leadership, project controls, risk management, change management, client management, and contract management.
- ▶ Built and maintained exceptional relationships, and collaborated with clients’ Executive Leadership teams regarding the delivery of their work programs. Planned and implemented a 5-year strategic plan fueling annual growth from \$100M to \$350M with full Profit and Loss (P&L) responsibility on capital projects exceeding \$2B. Led the project delivery team (peak of 65 personnel) and construction management teams (peak of 600 personnel) to successfully pursue, secure, and deliver major capital programs for multiple Canadian nuclear utilities (Ontario Power Generation, Bruce Power, and Canadian Nuclear Laboratories) using EPC and P3 project delivery models. Established and oversaw a PMO to implement a governance system (principles, policies, framework, process, and tools) aligned to the Business Unit strategy for project delivery and execution. Successfully completed major digital transformation IT projects for project management, project controls, and materials management resulting in significant improvements in efficiency, data accuracy, transparency, and senior management (internal and client) reporting and accessibility
- ▶ Major Projects: Darlington New Build Early Works and Site Preparation, Darlington 4 unit Refurbishment (Balance of Plant and Fuel Handling Programs), Darlington Emergency Power Generator 3, Darlington Emergency Power Generator 1 Replacement, Darlington Retube Waste Storage Building, Pickering Safe Storage, Darlington Turbine Controls Upgrade, CNL Heavy Water Detritiation Facility, and Bruce Power Major Component Replacement.
- ▶ Led the first EPC project (\$2.5M) for B&M’s Power Generation Region successfully to completion on time and under budget. Accountable for the safe and successful completion of EPC projects ranging from \$2M to \$40M. Led multidisciplinary teams to ensure that all assigned project personnel are coordinating their activities with other project participants and that the requirements of the Contract are being satisfied. Resolved any construction and/or contractual issues with the customer, senior management, design subcontractor(s), vendors/suppliers, regulatory authorities (CNSC, TSSA, ESA, etc.) and other stakeholder(s) as required. Built and maintained customer and supplier/vendor relationships to enhance competitiveness in the industry. Assisted in the preparation of EPC project proposals ranging from \$1M to \$40M. Prepared monthly project status reports to present to the client’s senior management, as well as closely managing change orders to ensure compliance with the contract terms and conditions.

## ENGINEERING SERVICES & SUPPORT

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- ▶ Managed standard client station installations or modifications to existing systems from the proposal phase through implementation. Provided engineering support to various Air Products groups including metals, generated gases and advanced systems, as well as the National Maintenance Organization. Prepared scopes of work detailing system design criteria and client versus Air Products installation roles and responsibilities. Conducted site evaluations for liquid oxygen, bulk hydrogen, and liquid hydrogen systems to ensure compliance with NFPA standards and local regulations, in addition to TSSA regulations. Generated installation cost estimates, bills of materials and detailed equipment layout, foundation and P&ID drawings. Prepared construction packages containing system details and drawings, budgetary information and safety checklists. Completed project closeout activities, including budget versus actual cost justification and as-built drawings.
- ▶ As owner's engineer, represented the client (City Utilities) for the construction of a 300 MW clean coal-fired electric generating plant, which included pollution control systems such as a selective catalytic reducer (SCR) system, CFB scrubber, bag house and stack. On site Boiler Contract Project Lead: enforced project scope, specifications, contract documents, adherence to work packages, as well as answered any contractors' technical queries regarding drawings, installation details/procedures, changes to approved design, and obtained information from external vendors and sub-contractors, as necessary. QA and QC duties: observed construction progress, conducted field walk downs, coordinated work between contractors and sub-contractors, ensured quality of deliverables and compliance with OSHA safety standards. Responsible for validating completion of procurement documents, issued contract document updates to contractors ITC (Instruction to Contractors), as well as Change Order Requests (CORs) and responded to contractors' questions RFI (Request for Information). Identified multi-disciplinary construction issues that could affect project budget and schedule, review the master construction schedule and construction work plans, and effectively communicated this information to the client and senior engineering management.
- ▶ Performed power plant detailed design, which included the following systems: fuel oil, boiler feed water, boiler vents and drains, circulating water, closed cycle cooling water, steam systems, air pollution control and materials handling. Designed, routed, and developed specifications for power and process piping using B31.1 and B31.3 standards, respectively. Designed and produced specifications and procurement documents, for mechanical equipment (using ASME and API standards) including storage tanks, pressure vessels, pumps, valves (manual and control), heat exchangers (both shell & tube and plate & frame) and cooling towers for industrial, utility, and chemical processing plants. Responsible for computer modeling and analysis of fluid systems, reviewing plant 3D models for interference checks and operability, and developing P&IDs and PFDs for complex mechanical systems. Ensured coordination and communication between the various engineering disciplines (process, mechanical, electrical, civil and instrumentations), as required for the accurate delivery of system designs. Lead Process Engineer for a biodiesel generation plant in Southern California. Responsibilities included: process and mechanical systems design, inter-disciplinary coordination and ensuring that project specifications and applicable codes were met. Fire protection systems design using NFPA standards included sprinkler systems, spray systems, suppression and detection systems, heat sensors and alarms.
- ▶ Assisted with composing, reviewing and modification of technical portions of various environmental assessment (EA) documents, as part of the EA team. Worked on environmental assessments dealing with nuclear power generation, including EAs for the refurbishment of the Pickering B nuclear generating station and the Bruce Power New Build. Responsibilities included: researching Generation II, III and III+ nuclear reactors (CANDU, Areva EPR, Westinghouse AP1000 PWR and GE BWR), comparing their capabilities, specifications, and safety features, and providing this information to the client and the Canadian Nuclear Safety Commission.

## CURRENT AND PAST POSITIONS

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Modus Strategic Solutions, Inc. Modus Strategic Solutions Canada Company Consultant	2023 to Present
Tetra Tech Inc. - Power Group Senior Consultant, Major Projects	2022 to Present

E.S. Fox Constructors - Nuclear Services Director of Projects	2014 to 2022
Black and McDonald Ltd. - Power Generation Region Senior Project Manager - EPC/Major Projects	2011 to 2014
Air Products and Chemicals Inc. Regional Project Engineer	2012 to 2011
Stanley Consultants, Inc. Lead Resident Engineer (Springfield, MO, USA) Mechanical Process Engineer (Muscatine, IA, USA)	2006 to 2010
Golder Associates Ltd. Junior Engineer	2006

## EDUCATION

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Executive Master of Business Administration (MBA)  
Cornell University & Queens University Dual Executive MBA program (NY,USA/ ON,CA), May 2023 Expected Graduation

M.Sc. in Project Management, Specialization in Construction & Infrastructure  
University of Liverpool (UK), 2014

Bachelor of Chemical Engineering  
Dalhousie University (Halifax), 2006

## PROFESSIONAL AFFILIATIONS

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Professional Engineer, P.Eng. - Professional Engineers of Ontario (PEO), July 2011

Project Management Professional, PMP - Project Management Institute (PMI), August 2011

International Senior Nuclear Plant Manager (I-SNPM) Training Program (OPG, WANO, and EDF Energy), April 2017

## COMMUNITY INVOLVEMENT

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Sessional Lecturer at Toronto Metropolitan University (formerly Ryerson) in the Master of Project Management in the Built Environment (MPMBE) program, part of the Faculty of Engineering and Architectural Science. (Course: PM8003 – Construction Cost and Schedule)