



**INTERNATIONAL
PROJECT EXPERIENCE**

Type of Project	Description of Services Provided	Project Location
Oil Sands Facility	Lead cost and schedule consultant retained by a group of insurance companies to evaluate the reasonableness of a \$200 million cost estimate and cost/schedule risks associated with the repair of fire damage to four electrostatic precipitators and enclosures in a large oil sands plant in Alberta. The engagement involved site visits and interviews, and the evaluation of rebuild cost and schedule estimates and supporting documentation, with particular emphasis on assumptions, construction means and methods, labor costs and productivity, field indirect costs, contingency, and expediting and delay costs. Final work products included written reports which addressed the bases for and reasonableness of the repair schedule and cost estimate, and the cost impact of several expedited repair schedule alternatives, and oral presentations to loss adjusters and insurance company representatives.	Canada
Oil Sands Facility	On behalf of the owner, performed a schedule quality assurance review and schedule risk assessment of the integrated master schedule for a \$14 billion oil sands project.	Canada
Oil Sands Facility	On behalf of the owner, performed an in-depth integrated cost and schedule risk analysis for a \$14 billion oil sands project. Added logic ties and key interface milestone details into the Level II schedule to develop a Risk Analysis Schedule. Provided an assessment as to whether the current schedule and cost forecast was achievable. Provided a “to go” risk analysis on schedule and cost for each project area as well as an assessment of the overall cost (including indirects) and schedule risks. Evaluated current trends in the schedule and cost forecast including field productivity effects. Reviewed the project control processes, provided an assessment including: evaluation of systems/flow of data from EPCs/GCs to the owner, change management processes, and contracts processes for back-charging and processing of claims. Reviewed how material quantities were being managed. Delivered recommendations to further de-risk and improve the probability of achieving project goals.	Canada



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Oil Terminal Project	On behalf of the owner, performed an analysis of causes of cost overruns incurred by the contractor on an oil terminal project in Alberta. Review and compared bid package drawings with Issued for Construction drawings, welding data, and other information to determine if the owner had a basis for disputing the contractor's costs. Participated in mediation to resolve the dispute.	Canada
Petrochemical Plant	On behalf of the insurance company, performed an analysis and prepared an Expert Report/testimony regarding an owner's alleged business interruption loss due to an unplanned shutdown of an MTBE plant in Alberta.	Canada
Petrochemical Plant	On behalf of the EPC contractor, performed an analysis of change order, delay, and loss of productivity claims on a linear alpha olefin (LAO) Project.	Canada
Petrochemical Plant	On behalf of the insurance company, performed an analysis of a \$50 million loss for property damage and business interruption resulting from cracking to a reactor vessel at a glycol process plant facility in Alberta. Prepared deposition questions and assisted loss adjusters and counsel for the underwriters with cost and schedule analyses.	Canada
Pipeline	On behalf of the owner, evaluated cost overruns and productivity issues associated with the construction of 30- and 36-inch pipelines in British Columbia and Alberta.	Canada
Pipeline	Performed an audit of a contractor's \$23 million claim and an owner's counterclaim on a pipeline project in Alberta. Reviewed contractor's cost records, schedules, contract, and claim document, and advised the owner on the strengths and weaknesses of each party's position.	Canada



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Refinery	Performed an analysis of the expediting costs associated with the \$320 million rebuild of a refinery in Alberta following a fire. This work was performed in support of the insurance company's interest on a property damage claim filed by the owner of the refinery. Analyzed the trade-offs of increased time-related costs that would have been incurred had the work not been expedited compared to the increased costs as a result of a fast track schedule. The results of the various scenarios were evaluated using Monte Carlo calculations to derive a probabilistic determination of the range of costs as a function of the variables involved in the analyses. Analyses contributed to a successful settlement between the insurance carrier and the owner.	Canada
Refinery	Analyzed damages for the owner defending numerous change order claims on an international oil refinery upgrade project. Provided critical assessments of the contractor's pricing of its change order estimates.	Canada
Roads, Highways & Bridges	On behalf of the contractor, performed an analysis of cost overruns associated with the construction of a heavy haul road in Alberta.	Canada
Smelters, Furnaces, and Calciners	On behalf of the owner, performed an audit of the EPCM and general contractor's cost records to identify potential billing discrepancies and problems on cost reimbursable contracts for a calciner expansion project.	Canada
Mineral Processing Plant	Provided Claims Prevention Training Seminars for a Mineral Processing Engineering firm in Denver, Tucson, and Mexico City. Recommended clauses to resolve potential inconsistencies, ambiguities, and conflicts. Prepared clauses for cost and schedule control procedures.	Colorado, Arizona, Mexico
Offshore Oil & Gas Production Facility	Prepared a claim on behalf of the contractor related to extra work and delays on the construction of an offshore oil platform. Assessed contractual entitlement, owner-responsibilities, and weather-related delays, and the costs associated with the extra-contractual work and delays for an international oilfield and marine services company offering full integrated services.	Egypt (Offshore)



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Heavy Rail	On behalf of the owner, developed issues packages, chronologies, and narratives regarding delays associated with the installation of communications systems on the London Underground project. Analyzed issues and schedule delays associated with the design and installation of new communications systems. Developed an as-built critical path schedule for delay analysis.	England
Gas-Fired Power Plant and Heat Recovery Steam Generators	Assisted the contractor in resolving a dispute related to design changes and late and deficient owner-supplied materials. Prepared and reviewed notice letters and provided input for negotiations. for a combined heat and power (CHP) project aimed to replace two old boilers and two steam turbines from an existing power plant. Proposed installed capacities for the project were 450MW of thermal heat and approximately 30MW of electricity. Thermal heat to be supplied to an oil refinery and a petrochemical plant within the same site, while electricity was supplied to the grid. The project also produces demineralised water.	Finland
Nuclear Power Plant	On behalf of the owner, evaluated a contractor's expert report involving a delay and disruption claim involving the replacement of emergency diesel generators on a nuclear power plant in Europe. Assessed the expert's time extension analysis, which was found to lack an assessment of the critical path of the work, and therefore the claim was rejected.	Finland
Offshore Oil & Gas Production Facility	Performed an analysis in support of an owner's claim against an international EPC contractor's performance, delays, and \$100 million cost overrun regarding a Spar production facility that was fabricated in Finland for installation in the Gulf of Mexico. Issues involve material delays, welding rework, quadrupling of labor man-hours, wet mating of hard and soft tank/truss, delay, liquidated damages, conversion of contract issues, and related damages.	Finland, Texas, and Gulf of Mexico
Hotel	Prepared a construction estimate cost analysis for the developer on a five star resort property.	Grand Cayman Islands



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Refinery	Served as Tribunal Appointed Experts for technical and schedule delay issues associated with a €18 million claim and a €145 million counterclaim on a major oil refinery upgrading and expansion project in Europe. The disputes were being resolved in ICC arbitration proceedings. Prepared Expert Reports and testified before the Tribunal.	Greece
School	Evaluated scope changes and assessed compensable damages, for an electrical and mechanical subcontractor, related to delays and disruptions encountered during the construction of a high school.	Guam
Offshore Oil & Gas Production Facility	On behalf of the owner, assessed fabrication defects on two offshore oil production facilities. Developed the supporting cost documentation to establish the quantum for the owner's claim. Prepared Expert Report for testimony in ICC arbitration in London.	Gulf of Mexico
Offshore Oil & Gas Production Facility	On behalf of a major U.S. oil company, performed an analysis of the owner's damages resulting from the delayed installation of an oil production facility due to defects in the fabrication of shackles. Identified the owner's direct costs and time-related costs from its job cost project files. Analyzed the owner's project CPM schedules to identify critical path delays associated with the work to replace the defective mooring shackles.	Gulf of Mexico
Undersea Pipeline	Evaluated the impact of a labor strike to daily productivity and progress on a pipeline lay barge, and identified other project events that may have contributed to the negative impact on the project schedule. Also provided expert testimony (at deposition) on behalf of the labor union related to these issues.	Gulf of Mexico
Pipeline and Compressor Station Project	On behalf of the compressor manufacturer, performed an analysis of delay and performance problems on a gas compressor/pipeline project resulting in liquidated damages in excess of \$50 million. This project involved ICC arbitration in Geneva, Switzerland.	India



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Refinery	On behalf of the owner, reviewed CPM schedules submitted for arbitration to verify their authenticity for use in a delay analysis by opposing expert. Prepared examination questions for counsel to cross-examine opposing expert at arbitration regarding causes of delay to the reconstruction of a refinery that was damaged by a cyclone.	India
Combined Cycle Power Plant	Prepared the detailed schedule for a multi-block combined cycle conversion project.	Indonesia
Geothermal Power Plant	On behalf of the owner, performed an evaluation of the integrity of a contractor's schedule and analysis of delay and loss of productivity claims associated with the design and construction of a new geothermal power plant project. Performed schedule quality assurance review studies of the contractor's submitted Recovery Schedule compared to its Baseline Schedule. Identified and recommended resolution of hundreds of open-end activities, problems with constraints, and critical and near-critical path problems. Contractor alleged delays associated with late drawing comments by the owner, customs clearance problems, and scope of work changes, and that the contractor had to accelerate to overcome the delays. Issues involving the schedule being "at large" were also analyzed. On behalf of the owner, performed schedule quality assurance review studies of the contractor's submitted Recovery Schedule compared to its Baseline Schedule. Identified and recommended resolution of hundreds of open-end activities, problems with constraints, and critical and near-critical path problems.	Indonesia
Chemical Plant	On behalf of the Japanese EPC contractor, prepared a claim, developed a document database, and performed an analysis of costs and schedules for a \$450 million fertilizer plant. Prepared a \$100 million claim against the owner, which was abandoned as a result of the Gulf War. Successfully negotiated one Turkish and two Korean subcontractor's claims against the Japanese prime contractor.	Iraq



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Refinery	Prepared an expert report for an ICC arbitration in London concerning a refinery project in Iraq. Prepared analyses and provided opinions regarding the delays that occurred during the project and the parties responsible for the project delays. Prepared analyses and provided opinions concerning the validity of the costs the Contractor incurred as a result of terminating its subcontracts and executing new subcontracts with replacement subcontractors.	Iraq
Wastewater Treatment Plant	The project centered on the EPC design/build of a state-of-the-art sewage treatment plant to replace an old existing and over utilized facility in order to meet the current and future needs of the city. Due to site constraints the plant involved stacking SBR's on top of each other, and building the new works parallel to maintaining the old plant prior to demolition. EU environmental regulations were critical to maintaining high standards of odor and treated water outputs. The plant ultimately failed to meet performance standards, was delayed in construction, and had operational issues for the local residential areas. Engaged to provide support in developing the main contractor's construction claims (in conjunction with the main contractor's consortium partners) against the owner and assist with resolution of insurance claims for E&O problems during the design process. This involved CPM and disruption analysis, plus coordinating outside counsel and other experts to support the contractor's position.	Ireland
Floating Production, Storage and Off-loading Facility	On behalf of the owner, performed an analysis of a Japanese contractor's \$35 million change order, delay, and loss of productivity claims on an LPG FPSO project that was fabricated in Japan and installed in Angola.	Japan and Angola



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Chemical Plant	On behalf of the EPC contractor, performed an analysis of the technical entitlement of over 400 change orders associated with an engineering and construction contractor's \$60 million claim on a magnesium oxide production plant. Determined the cause-effect relationship between the changed work and the resulting schedule impact and additional costs. Provided expert testimony at an ICC arbitration hearing in London. Contractor alleged that the FIDIC based contract provided relief under the Variations clause; the owner argued that it was a fixed price contract and no relief was available. Also analyzed cause-effect relationship of improper operation by the owner and resulting poor magnesium oxide production from the facility.	Jordan
Hospital	Prepared a \$45 million claim including delay analysis and damages calculations for an Italian construction firm who constructed two hospitals.	Kuwait
Pipeline	On behalf of the owner, performed an analysis of delay and disruption impacts incurred by a construction company on the revamp of an oil and gas gathering center. The project involved extension of and tie-ins to large diameter, high-pressure crude oil headers and collection pipelines.	Kuwait
Liquified Natural Gas (LNG) Plant	The project involved the EPC construction of a green field LNG terminal including major berthing facilities and on-shore storage, processing, and pumping services. Provided lead contract and claims support to the EPC contractor Joint Venture to ensure recovery of owner caused impacts throughout the construction process. This involved managing and defending a major claim from the international earthworks subcontractor through litigation proceedings in both the U.S. and Mexico. This involved detailed rebuttal of schedule, disruption, and damages analyses.	Mexico

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Nitrogen Plant	Performed an analysis and prepared an Expert Report in support of the owner's entitlement to claims against the EPC contractor involving the standard of care in its management of the design and construction of a nitrogen plant project. Issues involved design life requirements of the plant components, prudent industry practices performance standards, and alleged improper design by the contractor. Prepared an Expert Report and testified in arbitration.	Mexico
Offshore Oil & Gas Production Facility	Performing schedule analysis of delay claims between the general contractor performing engineering, procurement, construction, mobilization, installation and operation of an FPSO including: topsides processing equipment as well as hull and marine system, and the O&M service contractor on the FPSO to deploy in an offshore area some 10 km off the coast of Mexico at a water depth of approximately 32 m.	Mexico and China
Refinery	Reviewed and critiqued contractor-prepared change requests, prepared a preliminary evaluation of the contractor's costs to date, and performed a detailed "but-for" analysis of the project schedule to establish a reasonable completion (absent supplier-caused delays) for the \$1.6 billion expansion of a refinery.	Mexico
Chemical Plant	On behalf of the EPC contractor, performed an analysis of the delays associated with the punchlist handover work, mechanical completion, and startup/commissioning of a chemical plant. Issues involved industry norms for pre-commissioning, mechanical completion, commissioning and start-up of the project, and whether the parties followed the contractual specifications for mechanical completion and turnover of the facility.	Netherlands
Petrochemical Plant	On behalf of the owner, performed an analysis of delay and disruption claims on the engineering, procurement, and construction of an ethylene cracker project.	Netherlands



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Petrochemical Plant	Reviewed the owner's contract for the engineering, procurement, and construction of a polyethylene plant. Recommended clauses to resolve potential inconsistencies, ambiguities, and conflicts. Prepared clauses for cost and schedule control procedures. Recommended changes to project management, scheduling, and project controls provisions to improve the owner's visibility into the progress reporting on the project.	Netherlands
Airport	On behalf of the contractor, prepared a response to the owner's experts' reports, for an ICC arbitration in London, regarding the reasonableness of the bid estimate and the cost to complete the airport project.	Nigeria
Gas Plant	On behalf of the owner, provided schedule quality assurance services regarding a Gas Supply Expansion Project. Evaluated schedule metrics and appropriateness of the critical path of the baseline schedule.	Nigeria
Gas-to-Liquids (GTL) Facility	On behalf of the owner, performed an analysis of the EPC contractor's schedules for a multi-billion Gas-to-Liquids facility. Verified the schedule work scope against contract requirements. Evaluated schedule metrics, reviewed schedule logic, assessed the reasonableness of the critical path and provided recommendations for optimizing the schedule. Also evaluated a cumulative impact claim.	Nigeria
Gas-to-Liquids (GTL) Facility	On behalf of the owner, evaluated a piping module subcontractor's delay claim associated with a Gas-to-Liquids facility. Evaluated the integrity of the subcontractor's schedules and verified the impact of changes to the subcontractor's schedule. Participated with the EPC contractor and owner to achieve a settlement of the time extension and cost components of the subcontractor's claim.	Nigeria
Gas-to-Liquids (GTL) Facility	On behalf of a major U.S. oil company, performed an analysis of the integrity of a Korean contractor's EPC schedule regarding logic problems, constraints, and reasonableness of the critical path for a major petrochemical plant project.	Nigeria
Gas-to-Liquids (GTL) Facility	Evaluated the merits of a schedule delay claim submitted by a pipe fabricator on a GTL project in Nigeria and assisted the owner in settlement negotiations.	Nigeria



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Gas-to-Liquids (GTL) Facility	On behalf of the owner, performed a comprehensive audit of issues that caused substantial delay and cost overruns on a multi-billion dollar gas-to-liquids processing plant. Issues included evaluation of the man-hour and cost estimate for the project, labor productivity, effect of design changes, assessment of the EPC contractor's management performance, and government-caused problems. Delays and cost overruns were tied to issues to allocate responsibility of the parties.	Nigeria
Liquified Natural Gas (LNG) Plant	On behalf of the owner, developed the implementation of a contracting strategy for 10 MM TPY grass roots LNG liquefaction plant. Assignment included preparation of bid packages and bid evaluations for 8 LSTK contracts that covered every portion of the project. Facilitated senior shareholder meetings to arrive at the strategy and to approve its implementation.	Nigeria
Liquified Natural Gas (LNG) Plant	On behalf of the owner, performed a comprehensive "cold eyes" contract risk analysis of the EPC contract documentation, including legal and non-legal exhibits and appendices, contained in the ITT and provided a written list of recommendations with supporting justification of contractual provisions in the ITT that should be amended, deleted, and/or inserted so as to properly mitigate the client's risk against spurious and/or undue claims/change orders. Also provided written recommendations as to what impact a Project-wide incentive program would have on the contract contingency estimates.	Nigeria
Pipeline and Compressor Station Project	On behalf of the owner, performed an analysis of an EPC contractor's \$43 million claim on behalf of the owner involving hundreds of alleged P&ID changes to the FEED design of a compressor station and pipeline project, and resulting delay to the completion of the project. Analyzed the technical entitlement to the P&ID changes based on standard industry practice for design development, the owner's specifications, and the timing of the changes.	Nigeria



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Undersea Pipeline	Produced a claims and dispute prevention register specifically for contract terms and conditions and contract exhibits associated with an Offshore Gas Pipeline Project. Review of possible causes and effects, categorization of risk (high or low), and recommendation of mitigation action.	Nigeria
Gas-to-Liquids (GTL) Facility	On behalf of a major US oil company, evaluated a civil subcontractor's delay claim regarding foundation and civil works associated with a Gas-to-Liquids facility. Evaluated the integrity of the subcontractor's schedules and verified the impact of changes to the subcontractor's schedule. Participated with the EPC contractor and owner to achieve a settlement of the time extension and cost components of the subcontractor's claim.	Nigeria and Germany
Offshore Oil & Gas Production Facility	On behalf of the owner, performed an analysis of a mechanical contractor's \$7 million marine lien delay and disruption claim against a major oil company on an offshore oil production project. The claim involved the value of equipment, piping, and structural installations on two refurbished rigs.	Nigeria and Texas
Marine Port	Prepared a contractor's request for an equitable contract adjustment for changes in the scope and execution of the work required by a major redesign of marine harbor facilities for a port project.	Northern Mariana Islands
Other Government Building	Prepared a request for an equitable contract adjustment including an entitlement analysis, "windows/but-for" schedule analyses, and an evaluation of damages related to the construction of a municipal facility. Also provided expert testimony (at deposition) on behalf of the contractor related to entitlement, owner-caused impacts to the project schedule including changes in scope, damages, and the owner's assessment of liquidated damages against the contractor.	Northern Mariana Islands

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Offshore Oil & Gas Production Facility	On behalf of the owner, evaluated a contractor's \$87 million delay and disruption/loss of productivity claim resulting from alleged design changes to a semi-submersible hull and mooring system project for an offshore oil & gas production facility that was fabricated in Norway for installation in the Gulf of Mexico. Evaluated contractor's entitlement to unresolved change orders and contractor's alleged delays associated with owner interference, late owner approvals, ABS approval delays, and out of sequence work. Prepared an expert Report and testified in arbitration	Norway and Gulf of Mexico
Gas-Fired Combined Cycle Power Plant	On behalf of the owner, reviewed the EPC contractor's \$12 million <i>force majeure</i> delay claim due to heavy rain and flooding. Provided schedule delay analysis services related to the 404 MW Combined Cycle Gas Turbine Power Plant Project. Scope of work included review and analysis of the EPC contractor's extension of time claim and preparation of the client's response.	Pakistan
Hydroelectric Power Plant	On behalf of the contractor, prepared a schedule delay analysis on the construction of a hydroelectric power plant. 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.	Pakistan
Housing	On behalf of the owner, analyzed a Russian and Turkish contractor's claim for change orders, delay, and loss of productivity, and the owner's counterclaims for default due to inadequate project management performance and substandard installations of a residential community project. Developed a document database, inspected the site, reviewed contractual entitlements, and provided the owner with a basis for negotiating a settlement with the contractor.	Russia
Offshore Oil & Gas Production Facility	On behalf of the owner, evaluated its position for a claim against the EPCM contractor for mismanagement, cost overruns, and delays on the performance of a cost reimbursable contract to design and build an offshore oil & gas production facility. Performed a schedule and cost variance analysis to identify where delays and cost overruns occurred, and the allocated causes for such overruns against the owner and the contractor.	Russia



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Oil Terminal Project	On behalf of a major U.S. oil company, assessed a Korean contractor's \$75 million delay and acceleration claim on an oil terminal project. Assessed the contractor's CPM schedules, change orders, increased staffing claims, and the owner's counterclaims.	Russia
Refinery	Provided technical and project management consulting advice to the Project Management Consultant who represented the owner of a refinery in Russia that was undergoing a revamp. Additional advice included the identification of key performance indicators and EPC contracting issues.	Russia
Gas Plant	On behalf of the owner, performed analyses and prepared Expert Reports regarding schedule delays and increased costs associated with an EPC contractor's \$138 million claim on a gas plant expansion project. The work involved correction of the contractor's baseline schedule and schedule updates, assessment of impacts allegedly due to change orders, welding defects, late delivery of drawings by the owner, and contractor performance problems. Prepared time impact and as-built but-for schedule analyses to address time extension entitlement, compensable delay, and loss of productivity. Developed a chronological database and assisted the law firm with witness statements and document disclosure requests. Completed a comparative assessment between the project's radiography records for the rejected pipe joint welds, and the results that were developed from the owner's radiography expert's interpretation of the films. Evaluated the opposing experts' schedule delay and damages analyses and assessment of responsibilities for project management performance problems. Performed extensive schedule quality assurance review studies of the contractor's contemporaneous EPC project schedules to ensure that these schedules could be used for delay analysis. Identified and documented numerous problems with open-end activities, overuse of constraints, missing original scope, incorrect as-built dates, missing as-built dates, and missing logic links. The dispute was resolved prior to arbitration.	Saudi Arabia



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Gas-Fired Power Plant	On behalf of one of the consortium contractors, evaluated claims against the other consortium contractor associated with a power and desalination project in the Middle East. The power plant design involved a change from a sub-critical power block to high efficiency super critical technology. Numerous claims involving disputed variation orders involving technical design, equipment supply, and construction issues, delay, and increased costs were evaluated, and an expert report is to be submitted for arbitration.	Saudi Arabia
Power Plant – Other	Performed an analysis of disputed items including: Invitation to Bid (ITB) chapters related to the disputed items, and an evaluation of the items claimed (performed/not performed) by both parties. Undertook an analysis of Variation Orders (VOs) to determine the respective portion of work executed by the parties in VOs and their evaluation. Performed an evaluation of added costs due to extension of works – warranties, storage, and maintenance analysis. Evaluated equipment actually supplied at site at the time of withdrawal and confirmation that contractor completed most of its scope at the time of withdrawal and that the remaining items fell within owners Share of Supply. Analyzed engineering claims against the contractor and subcontractor and their sub-subcontractors performed additional engineering work due to modifications imposed by the client during the performance of the OCA and of the EPC contract, and provided expert witness services for an international arbitration.	Saudi Arabia
Offshore Oil & Gas Production Facility	On behalf of a major U.S. oil company, evaluated potential delay claims from the contractor associated with a DCS & Alarm Management Upgrade to an offshore platform in the North Sea.	Scotland



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Gas-Fired Combined Cycle Power Plant	The project centered on disputes between the major contractor and the mechanical/electrical subcontractor on alleged delay and disruption impacts during the construction of a 380 MW power facility due to alleged late information, delayed procurement, and changes. Project completion was significantly delayed and the subcontractor claimed the contractor caused the negative schedule impacts, subsequently submitting a request for an equitable adjustment (REA) and filing for arbitration. Team Leader engaged to consult on the main contractor's defense of the claim both during the contract execution works and the post completion arbitration events. This involved day-to-day contract administration, claims preparation, and overall management of claims team, outside counsel and experts.	Singapore
Liquefied Natural Gas (LNG) Plant	On behalf of the owner, performed an analysis of a \$15 million cost overrun and cumulative effect claim by an electrical subcontractor on an electrical and instrumentation building to be installed offshore on an LNG facility. The subcontractor alleged increased complexity of the work, loss of productivity and delays associated with changes to its scope of work, and subsequent acceleration. The owner alleged that the changes did not cause the alleged quantum sought by the subcontractor, and that the subcontractor underbid the work and mismanaged its resources.	Singapore and Spain
Offshore Oil & Gas Production Facility	On behalf of the owner, performed an analysis of a \$45 million delay and disruption claim by a South African contractor involving the engineering, fabrication, and erection of two oil production facilities for a major U.S. oil company. Visited the facility offshore Angola during hook-up and commissioning to evaluate the contractor's performance. Advised the client on the merits of the contractor's claim to facilitate settlement.	South Africa and Angola



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Offshore Oil & Gas Production Facility	Retained by a major U.S. oil company to evaluate the status, record keeping, schedules, and costs relative to the design and construction of hulls and topsides for two oil and gas processing offshore platforms being constructed in Korea for installation offshore Angola. The evaluation followed a visit to the contractor's fabrication yard and focused on the analysis of cost overruns, schedule delays, and entitlement, and an assessment of the potential for claims from the prime contractor.	South Korea and Angola
Offshore Oil & Gas Production Facility	On behalf of the owner, performed an analysis of an \$85 million change order and delay claim regarding an offshore Compliant Piled Tower constructed in Texas and topsides facilities fabricated in South Korea for installation offshore Angola.	South Korea, Texas, and Angola



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Chemical Plant	<p>Supplied dispute resolution services in support of a chemical company who was defending against \$150 million in impact claims made by a European EPC contractor on several polyethylene terephthalate (PET) plants. Participated in the document discovery, research, organization and coding of over 500,000 project records into an internet-based document repository. Assisted in answering interrogatories and prepared questions for fact witness depositions. Scrutinized the entitlement of alleged critical path schedule delays due to late and continuous changes, technology changes, late turnover package approvals, weather impacts, and slow agency reviews potentially affecting 15,000 schedule activities. Developed a comprehensive delay allocation model used to quantify and document critical path and concurrent delays affecting the schedules. Correlated issues to schedule activities. Employed a retrospective CPM schedule delay analysis methodology to correctly calculate entitlement for compensable delay costs and evaluate concurrent delays due to approved change orders, fact-based project issues, and weather impacts as supported by project records. Based on the findings, the contractor's claims were grossly overstated and unsupported in which the owner enjoyed a favorable settlement at a small fraction of the total dispute. Performed extensive schedule quality assurance review studies of the contractor's contemporaneous EPC project schedules to determine if these schedules were fit for delay analysis including identification and resolution of open-end activities, over use of constraints, incorrect as-built dates, missing as-built dates, missing original scope, and missing logic.</p>	Spain, Argentina, and the Netherlands
Liquified Natural Gas (LNG) Plant	<p>On behalf of the owner, performed an analysis of delays and project management performance deficiencies in defense of a \$40 million claim of an EPC contractor for additional overhead and fee on a cost reimbursable contract for the management of the design and construction of an LNG Terminal Project that was delayed over 18 months. Analyzed deficiencies in the EPC contractor's schedules, and performed an analysis of concurrent delays. Prepared the basis of a counterclaim by the owner against the EPC contractor.</p>	Spain and Italy



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Offshore Oil & Gas Production Facility	On behalf of a Swedish subcontractor, reviewed its claim against the EPC contractor for delay and loss of productivity associated with the fabrication and assembly of living quarters for an offshore oil production facility.	Sweden and Mexico
Liquified Natural Gas (LNG) Plant	On behalf of the government, evaluated the quality of the CPM schedules prepared by several international oil companies for the development of an LNG facility in Tanzania.	Tanzania
Undersea Pipeline	On behalf of the owner, performed an analysis of a claim associated with the placement of undersea oil & gas pipelines in the Gulf of Mexico. Prepared an Expert Report regarding technical issues of entitlement for cost overrun issues and substantiation of the accounting records to support the costs associated with the claim. Testified in arbitration.	Texas and Gulf of Mexico
Coal-Fired Power Plant	Prepared a detailed schedule for a two unit “hybrid” power plant consisting of fluidized bed boilers, steam turbines, combustion turbines, and heat recovery units. Also developed multi-currency project cost systems to report consistent financial information in US dollars while individual contracts fluctuated in multiple currencies.	Thailand
Gas-Fired Heat Recovery Generator	On behalf of the piping manufacturer, performed an analysis of the fabrication of piping components as an element of the fabrication and erection of Heat Recovery Steam Generators including the identification of aspects of the delay resulting from the actions of the various parties included in the project. Prepared an Expert Report which led to settlement of the matter.	Thailand and Florida
Floating Offshore Natural Gas Platform	Data analysis on a Natural Gas Floating Platform. The scope of work included analysis of Project Daily Reports, Vessel’s Master Daily Logs, Daily Work Tickets, and Contractor/ Client Correspondence.	Trinidad
Gas Plant	Assisted with the development of a Project Management Controls Unit for a natural gas company. Prepared written findings and recommendations for establishing a Project Management Controls Unit and developing a Project Management Methodology using a Stage Gate Process.	Trinidad

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Gas Plant	Evaluated the owner's project management and cost and schedule control procedures for performing major capital projects. Prepared stage gate project development procedures, and developed cost and schedule control procedures.	Trinidad
Gas-to-Liquids (GTL) Facility	Performed project management audits of a Gas-to-Liquids facility to assist with evaluating the outstanding engineering and construction scope, assess restructuring of the Project Management Team, and assist with the development of a Request for Proposal for the selection of a Project Management contractor.	Trinidad
Gas-to-Liquids (GTL) Facility	On behalf of the Receiver in a bankruptcy proceeding, performed project management audits of a Gas-to-Liquids facility to assist with evaluating the outstanding engineering and construction scope, assess restructuring of the Project Management Team, and assist with the development of a Request for Proposal for the selection of a Project Management contractor.	Trinidad
Liquified Natural Gas (LNG) Plant	On behalf of the owner, performed an analysis of the adequacy of a cost estimate and construction risks associated with the upgrade of an LNG facility.	Trinidad
Petrochemical Plant	On behalf of the owner of a large petrochemical plant project in Trinidad, evaluated numerous claims totaling US\$230 million involving delays, and cumulative impact to the project as well as whether the project achieved mechanical completion.	Trinidad
Petrochemical Plant	On behalf of the EPC contractor, performed an analysis of delay and acceleration claims on the engineering, procurement, and construction of an ammonia plant project.	Trinidad
Petrochemical Plant	Provided Claims Prevention Training Seminar for owners and contractors in Trinidad.	Trinidad
Pipeline	On behalf of the owner, performed an analysis of a French contractor's \$14 million delay and increased quantities claim on a 36-inch gas pipeline and valve station project.	Trinidad



**INTERNATIONAL
PROJECT EXPERIENCE**

Type of Project	Description of Services Provided	Project Location
Pipeline and Compressor Station Project	Reviewed owner's ITB packages, contracts, project controls procedures, and contract administration procedures, and presented a Claims Prevention Seminar. Recommended clauses to resolve potential inconsistencies, ambiguities, and conflicts. Prepared clauses for cost and schedule control procedures.	Trinidad
Pipeline and Compressor Station Project	Provided Claims Prevention Training Seminar for the National Gas Company.	Trinidad
Refinery	On behalf of the owner of a large petrochemical plant project in Trinidad, evaluated numerous claims totaling US\$230 million involving delays, and cumulative impact to the project as well whether the project has achieved mechanical completion.	Trinidad
Refinery	On behalf of the owner, performed an analysis of a major international contractor's \$22 million delay and disruption claim on a \$100 million refinery upgrade project involving new hydrotreater and sulfur recovery units. Prepared a detailed schedule delay analysis, damage analysis, and provided mediation testimony which resulted in a successful settlement of the dispute.	Trinidad
Refinery	Performed an analysis of various contractor's delay and change order claims on behalf of the owner on a major Gasoline Optimization Project, including modifications to an existing FCCU unit, a new alky-acid unit, an isomerization unit, a new heavy naphtha hydrotreater and continuous catalytic regeneration platformer unit, and offsites facilities modifications. Claim evaluations included an assessment of the integrity of the contractor's baseline and schedule updates, preparing alternative impact analysis of delays allegedly caused by scope changes as well as concurrent delays caused by the contractor, reviewing cost support for the change order amounts, recalculation of time-related costs based on delay analyses, determination of damages based on assessment of contractual entitlements under the terms of the contract, and participation during negotiations to achieve settlement of the change order claims.	Trinidad



INTERNATIONAL PROJECT EXPERIENCE

Type of Project	Description of Services Provided	Project Location
Refinery	On behalf of the owner, performed an analysis of a Canadian contractor's \$25 million delay and disruption claim against the owner of a refinery. The venue was international arbitration under Uncitral arbitration rules. The contractor's scope of work involved the construction of a new visbreaker unit, modernization of instrumentation facilities, and a revamp of a fluid catalytic cracker oil upgrading process unit. This project involved the organization of thousands of documents and assessments of alleged delays and disruption impacts identified in change orders, correspondence, meeting minutes, disruption notices, monthly progress reports, and CPM updates. The scope of work also included a detailed CPM schedule analysis and the quantification of damages. Prepared an Expert Report in international arbitration prior to settlement of the dispute.	Trinidad
Refinery	Performed schedule delay and change order analysis in support of an owner's defense of a \$10.5 million claim on upgrades to piping, boiler and flare facilities in a major international oil refinery.	Trinidad
Smelters, Furnaces, and Calciners	Created an EPC contract and contract exhibits for the owner's use in negotiating the EPC of a \$1 billion aluminum smelter. Recommended clauses to resolve potential inconsistencies, ambiguities, and conflicts. Prepared clauses for cost and schedule control procedures.	Trinidad
Undersea Pipeline	On behalf of the owner, evaluated contractors' claims for delays and cost overruns associated with two offshore gas pipeline projects.	Trinidad
University	On behalf of the owner, performed a schedule quality assessment of a CPM schedule regarding a new university building for the University of the West Indies.	Trinidad
Wastewater Treatment Plant	On behalf of the owner, performed an analysis of a \$1.7 million claim for schedule delays and disruptions during the construction of two wastewater treatment plants and barometric condenser conversions at an oil processing unit. Prepared detailed CPM schedule analyses and Expert Reports. The dispute was successfully resolved prior to the arbitration.	Trinidad



INTERNATIONAL PROJECT EXPERIENCE

Type of Project	Description of Services Provided	Project Location
Pipeline and Compression Station Project	Performed an extension of time claim review, schedule delay analysis, and forensic planning analysis for a Central Processing Facility (CPF) to collect gas received from all the concession wells fields to be compressed prior to transport via pipeline to the treatment plant. The gas pipeline was 24" of diameter and 370km length with a maximum capacity of 10 millions Sm ³ /day.	Tunisia
Refinery	Evaluated a contractor's delay and disruption claim against a major equipment supplier including a review and analysis of the as-planned and as-built schedules, preparation of a retrospective "but-for" analysis of the project schedule, and an assessment of damages relative to the expansion of a refinery.	United Arab Emirates
Refinery	Acted as the Project Management Advisor for FEED execution of a refinery hazardous waste facility and preparation of EPC contract documents.	United Arab Emirates
Chemical Plant	Prepared an Extension of Time Claim for a Japanese contractor related to the construction of civil, structural, and building design and construction work related to a chemical plant project in the UK. The contractor's execution of the work was impacted by late access to the site, additional work, and changed work.	United Kingdom
Gas-Fired Combined Cycle Power Plant	EPC design build of a 280 MW gas fired combined cycle power expansion to a refinery brown field site. Managed and directed contract administration and claims procedures team, as well as defending and negotiating a series of owner/subcontractor claims against EPC contractor. Dispute management also included preparation of a major <i>force majeure</i> weather impact claim.	United Kingdom
Nuclear Power Plant	A government controlled nuclear management company required a third party review and upgrade analyses of its bidding processes and contract conditions for the de-commissioning and new construction of nuclear power plants. Reviewed the contract/bidding documents and provide an independent risk management report covering best practices, PMBOK application, project success goals, and general procedures for upgrading contractor performance.	United Kingdom



**INTERNATIONAL
PROJECT EXPERIENCE**

Type of Project	Description of Services Provided	Project Location
Office Building	Developed procedures aimed at improving efficiency, competitiveness and profitability for an interior building consultant and contractor. Developed procedures for analyzing contractual risks on new work opportunities.	United Kingdom
Refinery	On behalf of the contractor, performed an analysis of a contractor's pipe fabrication loss of productivity claim on a project involving the upgrade to an existing refinery.	U.S. Virgin Islands
Natural Gas Liquids (NGL) Plant	Prepared CPM fragnets depicting schedule delays and analysis of productivity losses on a natural gas liquefaction project.	Venezuela
Offshore Drilling Rig	On behalf of the owner, analyzed the project schedule including engineering, procurement, fabrication, assembly, shipping, installation and commissioning activities relative to delays and disruptions to the conversion of three offshore drilling rigs into gas compression stations.	Venezuela
Refinery	Prepared a mechanical contractor's \$20 million claim for delay, additional work, labor disputes, and loss of productivity regarding a \$790 million delayed coker project at the Cerro Negro oil upgrading project. Assisted counsel in the preparation of its briefs and document discovery requests, and prepared an Expert Report which was intended for witness testimony at ICC arbitration hearings in Geneva, Switzerland; however, the case settled before the hearing was conducted.	Venezuela
Offshore Gas Compression and Wellhead Platforms	On behalf of a major U.S. oil company, performed an analysis and provided deposition testimony regarding a claim against a contractor for \$29 million in improper charges on a reimbursable contract for the fabrication of one offshore gas compression platform and two wellhead platforms.	Venezuela and Louisiana

The projects listed above were performed by our consultants in a lead/key expert role for Long International or for other consulting firms.