



PERRY INTERNATIONAL, LTD.

CHRISTOPHER J. SABLE

EXPERT SCHEDULE DELAY ANALYST & SCHEDULER

- 28 years of international project experience.
- Global experience with responsibility for providing retrospective schedule delay analyses for projects in Africa, the Americas, Australia, and the Middle East.
- An experienced planner and schedule delay analyst with hands-on field experience in construction management, CPM schedule development and implementation, project schedule risk analysis, construction project auditing, construction claims analysis and settlement negotiation, and arbitration and litigation support.
- His qualifications include preparation and updating of CPM schedules, forensic schedule analysis, claims, change order analyses and resolution, arbitration and mediation preparation, managing expert consultants, document control and field supervision, subcontractor scope development and monitoring, productivity analysis and cost estimating.
- He has been the schedule delay analyst for some of the world's largest construction project disputes in international arbitration including the Panama Canal, Gorgon LNG and Pluto LNG Australia projects, and Freeport LNG project in the USA.

EDUCATION

- BSc Science, Civil Engineering, Clemson University 1994
 - PMI Institute
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EXPERIENCE BY COUNTRY

- Australia
- Canada
- Nigeria
- Panama
- Saudi Arabia
- Trinidad and Tobago
- Qatar
- USA

PROJECT EXPERIENCE

- Airports and runways/airfields
- Bridges
- Cement storage facilities
- Chemical processing plants
- Commercial buildings
- Highways
- Hospitality facilities
- Institutional buildings
- Laboratory
- LNG, FPSO projects
- Medical buildings
- Mines
- Military base support facilities
- Museums
- Multifamily housing
- Oil & Gas supply and refineries
- Offshore gas and oil platforms
- Port, locks and canal
- Power projects (peaker, combined cycle, fossil fuel)
- Rail projects
- Schools
- Steam assisted gravity drainage oil sands extraction projects
- Tank farm
- Theme parks
- Tilt-Up Construction Warehouse buildings
- Terminals



EXPERT EXPERIENCE – CHEMICAL MANUFACTURING PROJECTS

Chemical Processing Facility

Saudi Arabia - Sadara Chemical Complex in Jubail Industrial City. On behalf of the Owner, performed an analysis of the Contractor's delay and disruption claim against the Owner. The scope of analytical work included a detailed CPM forensic schedule analysis to determine cause and responsibility for delay and acceleration.

EXPERT EXPERIENCE – OIL & GAS PROJECTS

Liquid Natural Gas

Australia - Gorgon LNG Project. On behalf of the Owner, performed an analysis of the Contractor's change orders, progress schedule, sub-contractor performance and contracts, and various contract documents on the \$54 billion 15mta Gorgon LNG project in Australia for KJVG/Chevron. The scope of work included a detailed CPM schedule analysis on extension of time, disruption and acceleration claims. Provided a project schedule risk analysis using qualitative and quantitative risk measurement methodologies, prepared and presented executive summaries, and conducted executive briefings of findings to company executives. Managed outside consultant(s) for arbitration hearing(s).

Australia - Pluto LNG Project. On behalf of the Owner, performed analysis of the Contractor's change orders, progress schedule, sub-contractor performance and contracts, and various contract documents on the \$10 billion 4.3 mta Pluto LNG project in Australia for the Owner (Woodside). Developed a claim against the Contractor and outlined the Owner's risks and culpability for liability.

USA – Freeport LNG, Freeport, Texas. On behalf of the Owner, performed an analysis of the Contractor's change orders, progress schedule, sub-contractor performance and contracts, and various contract documents on the \$14.5 billion 20mta Freeport LNG project in Freeport, Texas for Freeport LNG. The scope of analytical work included a detailed CPM schedule analysis of an extension of time claim arising due to a Force Majeure event, a detailed analysis of a disruption and acceleration claim arising due a separate Force Majeure event, and development of a loss claim for the delays to Startup (DSU) for submission to insurers. Reviewed the Contractor's schedule prior to the delay events to determine merit and accuracy of the schedule and if not correct, corrected it to represent true project completion information based upon project records.



Natural Gas

Nigeria - Gas Supply Expansion Project (GSEP). On behalf of the Owner, performed a schedule quality assurance review of the Engineering, Procurement, Prefabrication, Modularization, Installation, and Construction (EPIC) elements of the Level III Option A & B schedules for the Gas Supply Expansion Project (GSEP).

Nigeria - Escravos Gas Project—Phase 3B. On behalf of the Owner, performed an analysis of the Contractor's US\$186 million delay and disruption claim against the Owner for the installation of approximately 130 km of subsea pipeline carrying gas by-products connecting to nine (9) respective offshore platforms offshore in Nigeria. The scope of analytical work included a detailed CPM forensic schedule analysis to determine delay and acceleration, and responsibility. Prepared expert and rebuttal reports for litigation.

Trinidad and Tobago - Natural Gas Floating Platform. On behalf of the Owner, performed a forensic schedule and claims analysis. The scope of analytical work included a detailed CPM forensic schedule analysis to determine delay and acceleration responsibility and assist to prepare counterclaim against a Contractor's claims.

Oil Sands

Canada - Sunrise Oil Sands Project, Alberta. On behalf of the Contractor in international arbitration, prepared a retrospective schedule delay analysis and expert report. The US\$2 billion project consistent of two plants each producing 30,000 barrels per day (BPD).

Canada – Tank farm project in Alberta. On behalf of the Owner, performed a forensic schedule and claims analysis. The scope of analytical work included a detailed CPM schedule analysis to determine delay and acceleration responsibility based upon the law of the contract and assist with preparation of counterclaim against the Contractor's claims.

Oil Platforms

Australia - Montara FPSO, Well Head Platform, and Sub-Sea Project. On behalf of the Contractor, prepared an integrated commissioning schedule and provided on-site scheduling for the connection of an FPSO vessel to the Well Head Platform located northwest of Darwin, Australia. The scope of work included continual development and maintenance of the integrated commissioning schedule. Provided analyses of project schedule risks through qualitative and quantitative risk



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models, prepared and presented executive summaries and conducted executive briefings of findings to company executives.

USA – Semi-Submersible Offshore Platform. On behalf of the Owner, performed a forensic schedule and claims analysis on a semi-submersible platform fabricated in Norway and installed in the Gulf of Mexico, USA. The scope of analytical work included a detailed CPM schedule analysis to determine delay and acceleration responsibility based upon the law of the contract and assist with preparation of counterclaim against the Contractor's claims.

Oil Refinery

Trinidad and Tobago – Gas to Liquid Plant. On behalf of the Owner, performed an analysis of project status on a Gas-to-Liquid plant. Three distinct process sections for this plant were SynGas Manufacture, FT reactors and Product Work-up. The Product Work-up created Ultra Low Sulfur diesel, Naphtha and LPG. The scope of analytical work included analysis of missing scope of work to complete the plant and development of restart-up schedule for the project.

Trinidad and Tobago – Petroleum Refinery. On behalf of the Owner, performed an analysis of the Contractor's change orders against the owner for a petroleum refinery. The project consisted of a C5C6 Isomerization Complex, new heavy naphtha Hydrotreater and Continuous Catalytic Regeneration (CCR) Platformer Unit, C3C3 Alkylation Unit, Sulphuric Acid Regeneration Plant, Fluidized Catalytic Cracking Unit (FCC Upgrade), Gas Concentration Unit (GCX), LPG Caustic Merox (Extractive) Treater, and the offsite facilities modifications. The scope of analysis work included a detailed CPM forensic schedule analysis to determine delay, added scope and acceleration responsibility. Performed change order negotiations with the Contractor. Developed liquidated damage claims and counterclaims against the Contractor. Implemented project controls procedures to analysis the Contractor's progress.



EXPERT EXPERIENCE – MINING PROJECTS

Open Pit Mine

Australia - Roy Hill Iron Ore Mining Project. On behalf of the Contractor, reviewed current project controls standards as set out in the contract and provided recommendations to implement. Reviewed current development of contract schedule and provided recommendations forward.

EXPERT EXPERIENCE – POWER PROJECTS

Combined Cycle

USA - 4x2 Combined Cycle Power plant in Romoland, California. On behalf of the Contractor, prepare the Contractor's US\$21 million delay and disruption claim against the Owner of 4x2 combined cycle power plant. The scope of analytical work included a detailed CPM forensic schedule analysis to quantify delay and acceleration and determine responsibility.

USA - 4x2 Combined Cycle Power plant in Fairfield, Texas. On behalf of the Owner, performed an analysis of the Contractor's US\$8 million delay and disruption claim against the Owner. The scope of analytical work included a detailed CPM forensic schedule analysis to quantify delay and acceleration and determine responsibility.

USA - 4x2 Combined Cycle Power plant in Eunice, Louisiana. On behalf of the Owner, performed an analysis of the Contractor's US\$9 million delay and disruption claim against the Owner. The scope of analytical work included a detailed CPM forensic schedule analysis to quantify delay and acceleration and determine responsibility.

USA - 3x1 Combined Cycle Power plant in Baytown, Texas. On behalf of the Owner, performed an analysis of the Contractor's US\$22 million delay and disruption claim against the Owner. The scope of analytical work included a detailed CPM forensic schedule analysis to quantify delay and acceleration and determine responsibility.

USA - 2x1 Combined Cycle Power plant in Redding, California. On behalf of the Owner, performed an analysis of the Contractor's US\$8 million delay and disruption claim against the Owner. The scope of analytical work included a detailed CPM forensic schedule analysis to quantify delay and acceleration and determine responsibility.



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USA - 1x1 Peaker Power plant in Yuba City, California. On behalf of the Owner, performed an analysis of the Contractor's US\$0.9 million delay and disruption claim against the Owner. The scope of analytical work included a detailed CPM forensic schedule analysis to quantify delay and acceleration and determine responsibility.

USA - 4x2 Combined Cycle Power plant in Athens, New York. On behalf of the Owner, performed an analysis of the Contractor's delay and disruption claim against the Owner. The scope of analytical work included a detailed CPM forensic schedule analysis to quantify delay and acceleration and determine responsibility.

USA - 2x1 Combined Cycle Power plant in Boston, Massachusetts. On behalf of the Owner, performed an analysis of the Contractor's delay and disruption claim against the Owner. The scope of analytical work included a detailed CPM forensic schedule analysis to quantify delay and acceleration and determine responsibility.

USA - 3x1 Combined Cycle Power plant in Philadelphia, Pennsylvania. On behalf of the Owner, performed an analysis of the Contractor's delay and disruption claim against the Owner. The scope of analytical work included a detailed CPM forensic schedule analysis to quantify delay and acceleration and determine responsibility.

USA - 2x1 Combined Cycle Power plant in San Jose, California. On behalf of the Owner, provided scheduling and project control services for a geothermal power plant.

Canada - 3x1 Combined Cycle 300MW Power plant in Calgary, Alberta. On behalf of the Owner, performed an analysis of the Contractor's delay and disruption claim against the Owner. The scope of analytical work included a detailed CPM forensic schedule analysis to quantify delay and acceleration and determine responsibility.

EXPERT EXPERIENCE – INFRASTRUCTURE PROJECTS

Canal

Panama - Expansion of the Panama Canal, Third Set of Locks Project. On behalf of the Owner, performed an analysis of the Contractor's delay and disruption claim for earthwork and concrete defects.



Rail

Australia – Expansion Ferry Grove Station Carpark Upgrade – Queensland Rail in Brisbane, Queensland. Performed an analysis of the Contractor’s delay and disruption claim against the Owner of the carpark upgrade station on the Queensland Rail system. The scope of the analytical work included a detailed CPM forensic schedule analysis to quantify delay and acceleration responsibility for causation in order to negotiate with the Contractor an equitable resolution.

Roads

USA – Highway interchange expansion project Falcon, Colorado. On behalf of the Contractor, provided CPM scheduling and project controls services for highway contractor on a US\$14 million project.

USA – Highway expansion project in Westminster, Colorado. On behalf of the Owner, performed an analysis of delay and disruption claim brought by the contractor of a highway widening project. The scope of analytical work included a detailed CPM forensic schedule analysis to quantify delay and acceleration and determine responsibility.

USA – Courtney Campbell Causeway project in Tampa, Florida. On behalf of the Owner, performed an analysis of a delay claim on the engineering and construction of the causeway project.

USA – Palm Beach International Airport Interchange Project. On behalf of the Contractor, retained as lead scheduler responsible for providing the Contractor’s baseline and update schedules on the US\$100 million project. Services included preparation of the Contractor’s claim against the Owner for unforeseen conditions, owner delays, and loss of productivity.

EXPERT EXPERIENCE – BUILDING PROJECTS

Cement Silo Storage Facility

USA – The Cement Storage Company Project in Mobile, Alabama. On behalf of the Contractor of this US\$1 million project, retained as Project Engineer responsible for providing contractor baseline schedule, scheduling and project controls support, change order requests, and site supervision.



High Rise Condominiums

USA – Highrise Condominium Projects in Miami and West Palm Beach. On behalf of the Contractor for the two US\$40 million highrise projects, provided project controls including master planning and scheduling support.

Laboratory

USA – Fort Gillem Medical Laboratories in Atlanta, Georgia. On behalf of the Contractor of this US\$2.5 million project, provided scheduling and project controls support.

Luxury Multi-Family Housing

USA – Celebration City Luxury Apartment Homes in Celebration, Florida. On behalf of the Contractor of this US\$5 million project, provided scheduling and project controls support.

Military Base Support Facilities

Qatar – Blatch-Preston Complex Project in Doha, Qatar. On behalf of the Contractor, prepared delay analysis, expert report, and rebuttal report for settlement negotiations. The Blatch-Preston Complex Project was a dormitory facility with warehouse facilities on the AL UDEID AIR BASE.

MRI Medical Facility

USA – Specialist MRI Medical Clinic in Austell, Georgia. On behalf of the Contractor, retained as Assistant Project Manager responsible for scheduling, project controls support, change order requests, and site supervision.

Museum

USA – High Museum of Art Expansion Project in Atlanta, Georgia. On behalf of the Contractor of this US\$10 million project, provided scheduling and project controls support.



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School

USA – Dade County High School in Miami, Florida. On behalf of the Contractor of this US\$3 million project, provided scheduling and project controls support.

Tilt-Up Construction Warehouses

USA – Various Tilt-Up Construction Warehouse projects in Atlanta, Georgia. On behalf of the Contractor, retained as Assistant Project Manager responsible for scheduling, project controls support, change order requests, and site supervision.

Theme Parks

USA – Universal Studios Site Expansion Project in Orlando, Florida. On behalf of the Contractor, retained as Estimator and Field Engineer responsible for estimating of civil works, scheduling, project controls support, change order requests, and site supervision of hotel expansion project including addition of two multi-level parking garages and new theme park.

USA – Disney World Blizzard Beach Water Park Project in Orlando, Florida. On behalf of the Contractor, retained as Estimator and Field Engineer responsible for estimating of civil works, scheduling, project controls support, change order requests, and site supervision for construction of theme park.

USA – Disney World Animal Kingdom Theme Park Project in Orlando, Florida. On behalf of the Contractor, retained as Estimator and Field Engineer responsible for estimating of civil works, scheduling, project controls support, change order requests, and site supervision for construction of theme park.