A technology provider (the “Developer”) entered into a joint venture with a national oil company (the “Owner”) to design, engineer, construct and operate the first ever natural gas processing facility (the “Project”) using the Developer’s patented technology. The facility was to be located at the Owner’s site, and the Developer was to serve as project manager.

Unfortunately, after three years of work, the estimated final cost of the Project was several times the original budget, and the mechanical completion date could not yet be definitively estimated. There were also questions about whether the plant would ever be able to perform as specified under the contract between the parties. The Project was brought to a halt following disagreements between the parties as to who was at fault, and who should bear the costs of delay. The Owner alleged that the Developer’s poor pre-project planning and poor project management were the key causes. The Developer claimed that issues such as local labor disruptions, lack of available and skilled manpower, general industry cost escalation, and local weather disruptions were the prime causes, and all were beyond its control. The parties agreed to go to arbitration over the dispute.

Baker & O’Brien was engaged to review and analyze the Project records and provide an expert opinion on: (1) whether the project management decisions were supported by prior project management steps and information; (2) the actual local labor disruptions and how these affected progress and cost; (3) the probable impact to the Project of lack of manpower – particularly for key positions; (4) the probable impact to the Project of general construction cost escalations in the process industries; and (5) if the local weather during the construction period was atypical and how this may have affected Project progress and costs.

We inspected the facilities and reviewed all work reports. Based on these findings, plus our experience with project management and project execution, we submitted a technical expert report to the arbitration tribunal. We also commented on a report submitted by the opposing party’s expert. Our consultants gave oral testimony at the arbitration hearing.
Insurance claims for business interruption are commonly the result of lost production due to events such as hurricanes, power outages, or failures of a manufacturer’s own equipment. However, production disruptions can also arise from the inability to obtain feedstock components critical to the production process. In an example of this type of “upstream” event, a manufacturer of polyethylene terephthalate (PET) suffered lost production when its sole supplier of purified terephthalic acid (PTA) suffered an equipment failure. PET is the clear plastic resin used in the manufacture of water and soft drink bottles. PET is made from ethylene glycol and PTA, which are combined to form pellets of PET for further conversion into plastic containers. Thus, PTA is a critical component in the PET manufacturing process.

Baker & O’Brien was engaged to provide an opinion on the magnitude of the PET producer’s losses. The two main areas we focused on were: (1) costs incurred by the PET producer to acquire alternative feedstock; and (2) lost sales and profits associated with lower PET production. Our consultants reviewed pertinent documents and calculations associated with the claim and prepared an expert report covering our findings. Our report included a detailed review of the PET manufacturer’s inventories, scheduling and logistics for alternative PTA supply, as well as lost sales directly attributable to the incident. One of our consultants was deposed regarding our work. The case was settled prior to trial.

Insurance Subrogation, North America
By Dan Finelt

Resin Producer’s Reliance on a Single Supplier Leads to Business Interruption

Insurance claims for business interruption are commonly the result of lost production due to events such as hurricanes, power outages, or failures of a manufacturer’s own equipment. However, production disruptions can also arise from the inability to obtain feedstock components critical to the production process. In an example of this type of “upstream” event, a manufacturer of polyethylene terephthalate (PET) suffered lost production when its sole supplier of purified terephthalic acid (PTA) suffered an equipment failure. PET is the clear plastic resin used in the manufacture of water and soft drink bottles. PET is made from ethylene glycol and PTA, which are combined to form pellets of PET for further conversion into plastic containers. Thus, PTA is a critical component in the PET manufacturing process.

The failure of a key heat exchanger at the PTA supplier’s facilities resulted in almost two months of downtime and a declaration of force majeure to its customers. As a result, the PET producer—who relied exclusively on the supplier’s PTA—also suffered a significant business interruption event and filed a claim with its insurer. The insurer brought a subrogation claim against the PTA supplier.

Baker & O’Brien was engaged to provide an opinion on the magnitude of the PET producer’s losses. The two main areas we focused on were: (1) costs incurred by the PET producer to acquire alternative feedstock; and (2) lost sales and profits associated with lower PET production. Our consultants reviewed pertinent documents and calculations associated with the claim and prepared an expert report covering our findings. Our report included a detailed review of the PET manufacturer’s inventories, scheduling and logistics for alternative PTA supply, as well as lost sales directly attributable to the incident. One of our consultants was deposed regarding our work. The case was settled prior to trial.

Insurance Subrogation, North America
By Bill Jackson

Sorting Through Repair Costs Following a Process Unit Explosion

Alkylation is a process used by refiners to produce a high-octane gasoline blendstock (alkylate). In the alkylation process, light hydrocarbons are chemically combined to produce the final product. Most alkylation units use some form of acid to catalyze (i.e., bring about or speed up) the chemical reactions. One process uses hydrofluoric acid (HF) which is a highly effective catalyst. However, because the reactions occur in the vapor phase and HF is highly toxic, the utmost caution must be exercised in its use. Any incidents involving HF alkylation units are considered to be extremely serious, since a release of HF may be life threatening to process personnel, first responders, and nearby residents.

An accidental HF release at an alkylation unit brought with it a significant quantity of light hydrocarbons, which reached an ignition source and caused an explosion and fire. Fortunately, the incident was quickly contained, and there were no injuries to personnel. However, there was substantial property damage to the alkylation unit and ancillary equipment. As part of a subrogation claim by the insurance company against a vendor, a disagreement arose as to which work items were true “repairs” and which fell into the category of “betterments” (improvements beyond normal repair), especially process improvements aimed at preventing a future release of HF.

Baker & O’Brien was engaged to review the validity of the sizeable repair costs. Our consulting team visited the site to review records and drawings describing the incident and the extent of the damage. We then evaluated project records, including contracts, engineering drawings and sketches, purchase orders, invoices, and communications. From that review a “score card” was developed, which summarized the repair costs and categorized costs as justified and as questionable. Our report was used by the parties in successful settlement discussions.
Consulting Support for Complex Commercial Disputes

When faced with complex commercial disputes in the energy–related industries, clients often turn to Baker & O’Brien for its independent and objective support. For over 20 years, the firm’s consultants have employed their engineering knowledge, industry experiences, and commercial acumen to provide assistance on a wide range of matters. Our project experience includes disputes involving operational incidents, standards of care, asset valuation, commercial supply terms, product quality, large engineering and construction projects, and intellectual property.

Our clients include many of the world’s largest law firms, insurance providers, and operating companies. Law firms rely upon Baker & O’Brien to evaluate technical and commercial aspects of a case and provide expert testimony. Our analyses, conclusions, and expert testimony have been heard by judges, juries, and arbitration panels around the world. On insurance matters, clients rely upon Baker & O’Brien's assistance for investigation of industrial accidents and quantification of resultant property damage and business interruption losses. We are also called upon to assist insurers in subrogation actions by evaluating causation theories and claims for damages.

We welcome the opportunity to discuss our qualifications in more detail as they relate to your specific area of interest.

Baker & O’Brien, Inc. is an independent, professional consulting firm specializing in technology, economics, and management practice for the international oil, gas, chemical, and related industries.

www.bakerobrien.com