

# **BROADLEAF CAPITAL INTERNATIONAL PTY LTD**

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## *Specialists in Strategic and Project Risk Management*

### **ACTIVITIES IN THE ENERGY SECTOR**

Broadleaf has undertaken a range of assignments in the energy sector. We have conducted organisational risk and opportunity reviews for two major electricity generating companies in Australia, that encompassed:

- Opportunity and risk identification workshops in each major operating division and at corporate level;
- Formulation and refinement of corporate risk management strategies for the businesses;
- Development of organisational risk management procedures to support the strategies;
- Subsequent applications of the risk assessment process and procedures to consolidate risk management practices in detailed operational areas.

Subsequent activities for one of the organisations have included:

- Detailed risk assessments in the regional divisions;
- Operational audit of the implementation of the risk management process, including a review of the use of risk management database software.

We undertook corporate opportunity and risk assessments as part of core business process improvement initiatives for a large offshore oil and gas development company in the Middle East. This built on assessments we conducted for all the company's business and support units, using the company's business risk management processes, which we also developed. We also prepared project risk management guidelines, linked to the corporate processes, and applied them to a range of significant projects, including a major reinstrumentation of all the company's offshore and onshore production and processing operations.

We provided peer review and advice on the design and implementation of corporate risk management processes in a coal mining and export company.

We developed practical procedures for assessing risk in the new business activities of a deregulated electricity distribution company.

We have also undertaken quantitative risk analyses and capital evaluations for large energy and related projects, including:

- Construction cost and schedule risk analyses for hydroelectric development projects;
- Risk analysis of strategic options for crossing the Yukon River with a gas pipeline;
- Risk engineering reliability analysis of an Arctic LNG pipeline, processing and storage facility;
- Cost estimate and schedule risk analysis for the expansion of a refinery crude unit, to be completed within a scheduled shut-down period;
- Quantitative risk analysis of the cost estimate for an electricity sub-station construction project bid;
- Quantitative review of energy supply risks for a large industrial gas consumer.

We regularly perform qualitative risk assessments, training and associated activities for energy-related businesses. Most of this work involves facilitation and close cooperation with in-house project teams:

- Business development options for a potential investor in a power coal mine;
- Commercial bidding risks associated with an electricity sub-station design and construction project;
- Coal seam methane drainage and LNG plant risk and hazard assessments;
- Oil refinery crude unit expansion;
- Oil refinery site hazards and business risks;
- Risk analysis methods for assessing construction and operating costs of multi-structure offshore oil platforms;
- Risk assessment and risk management training associated with fly ash disposal from a coal-fired power station and disposal of the waste in an open-cut mine void for site remediation;
- Risk management training, based on an electricity sub-station and distribution lines;
- Risk management training, based on a cogeneration boiler system design and installation project.

Some of our clients include:

- Alaska Power Authority
- Alberta Utilities Consortium
- Caltex Australia and Ampol Refineries Limited
- Delta Electricity
- EnergyAustralia (formerly Sydney Electricity)
- Gulf Canada Resources
- Integral Energy (formerly Prospect Electricity)
- Lend Lease Capital Services
- Northwest Alaska Pipeline Company and Fluor Engineers
- Pacific Power
- PetroCanada
- Rolls Royce Industrial Power
- Snowy Hydro
- Solid Energy New Zealand
- Zakum Development Company

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