

SARAH FAIRHURST Partner

M.A., Natural Science (honours 2.1) University of Cambridge United Kingdom

MBA, Final stages of completion Henley Management College, United Kingdom

Sarah Fairhurst has a wide range of international experience in the electricity and gas sectors and brings strong analytical qualifications combined with commercial experience and pragmatism to advise clients on commercial contract analysis, development and drafting of transition contracts, power procurement & asset valuation and energy market design. She has lived and worked in Australia, New Zealand and Asia and has extensive experience in these markets.

Ms Fairhurst has particular expertise in the design and implementation of commercial and transition contracts for the sale of electricity and gas – often in projects where the interface between commercial interests and Government policy objectives collide. A typical project would involve designing a new type of contract to meet a specific need, such as the advice to Western Power regarding their power procurement process. In this project, Ms Fairhurst used her extensive PPA expertise combined with an understanding of electricity market development to design and negotiate a new type of power purchase agreement to manage the specific risks facing Western Power entering the new WA market.

She has been working with PSALM in the Philippines since 2008 to structure a process for selling the output of existing PPA's into the WESM: this proposed transaction is unique and requires a blend of PPA knowledge, tender design, financial modelling and commercial understanding. Each asset has required a different structure, to account for variations in fuel, plant condition or specific IPP contract terms and to optimize the value to PSALM from the sale process. To date, more than 3000MW of capacity has been privatized, raising over USD3 billion in revenues.

She has also worked on the Malaysian electricity market, developing a detailed 'Roadmap' of how the industry might develop for a major utility in Malaysia and undertaking various projects to review and advise on the PPA's that currently exist within the Malaysian market and how the market might develop more competitive tendering arrangements for power procurement in the future.

Other recent projects have involved evaluating power assets for sale in Singapore, the Philippines and Australia under various sale processes in 2008. This has involved analysis of electricity market outcomes in the merchant environments; valuation of PPA's and assessment of retail market opportunities.

Ms Fairhurst has particular expertise in the design and implementation of commercial and transition contracts for the sale of electricity and gas. These include both physical and financial contracts. She led the working group that designed and implemented the vesting contracts in the South Australian electricity market, the West Australian electricity market and was a key member of the Consortium that designed and implemented the vesting contracts in the Korean market. In addition, she has advised the National Energy Regulator in South Africa and advised in Singapore on commercial transition contracts. In addition to electricity contracts, Ms Fairhurst had extensive involvement in developing and drafting the gas vesting contracts put in place as part of the South Australian restructuring. All of these processes involved balancing Government policy objectives and desires for market power mitigation with commercial realities and the need to ensure companies remained viable.

Ms Fairhurst was extensively involved over a four-year period in the restructuring of the South Australian electricity market and led the work for PHB, who had been appointed Lead Advisor to the Department of Treasury and Finance on their "New Gas Options for South Australia" process. This process ensured a new gas supply into South Australia. Ms Fairhurst has recently been part of a team reviewing the Western Australian electricity reform proposals and working with Western Power on interim implementation options.

Ms Fairhurst has been involved in a number of projects to attract new infrastructure into Australia. She has been involved for over a year with a process to tender for a baseload power station in Western Australia, working with Western Power Corporation to design the power purchase contract, conduct negotiations with bidders and design the evaluation process for the project. She had a pivotal role in the design of the Pelican Point electricity and gas agreements in South Australia, as well as working on the tender process and evaluating the bids. She was the main advisor on the tender for new gas supplies that ultimately resulted in the construction of the SEAgas pipeline from Victoria to South Australia – which met the State objectives for this process and has been constructed commercially with no Government subsidy. Other projects have involved advising a private sector entity entering into a joint venture with a state-owned retail business. This has involved reviewing trading and hedging strategies and asset valuation.

Ms Fairhurst has also worked on gas projects in Australia. Example projects include: Support for the valuation, acquisition and financing of a major gas pipeline transaction in Australia; strategic analysis of the players in the gas market; a review of the potential for inter-fuel and inter-regional arbitrage between gas and electricity at both retail and wholesale levels; a review of the various carriage options available under the National Gas Access Code, a report comparing the current Australian gas market to the UK and US markets during their 'Dash for Gas' phase and development of a number of modelling tools which analyse the Australian gas market.

Ms Fairhurst has also undertaken analysis for a number of Governments and regulators in Australia regarding gas and electricity retail price regulation post deregulation. This has involved advising on efficient contracting strategies in the market; appropriate pass through of wholesale costs and risks and analysis of retail margins. Ms Fairhurst has also advised on a number of regulatory and restructuring projects for utilities and Governments in the Asia-Pacific region. Ms Fairhurst has also been involved in strategic reviews of the electricity and gas markets for potential new entrants and has undertaken various competitor and strategic analyses of participants in the market for companies interested in merger opportunities.

Previously, Ms Fairhurst worked for six years with PowerGen International, undertaking project due diligence, negotiating PPA and fuel supply agreements, working with partners and lenders and advising on company strategy for a number of new power projects and acquisitions of existing stations in Germany, Hungary, India, Thailand and Australia. A key part of this role was the preparation of bid documents for tenders in Australia and elsewhere.

REPRESENTATIVE ASSIGNMENTS

- Financial Advisor to PSALM for the IPPA process from 2008 2010. Designed the commercial structure for this transaction, oversaw the financial and market modelling of the assets, assisted PSALM with the marketing, process and evaluation of the bids.
- Project manager for a number of asset valuation projects in Asia, including valuation of the TUAS project during the Singapore privatisation; the Quezon project for a number of sales of shares in this asset; Callide and Millmeran projects (for a sale of a share in the owner of these assets).
- Oversaw the Asian component of a large project run out of the USA for a US-based utility looking at a market entry strategy for a new smart grid technology globally. Identified the most prospective Asian markets for entry and proposed a strategy for how to implement this entry.
- Designed and implemented the WA Vesting contracts for the WA Office of Energy to the scope defined by the OOE. Oversaw the operation and modelling of the contracts for 4 years.
- Advised Western Power Corporation (WPC) prior to the disaggregation of WPC for two years on the operation, contracting and evaluation of the PP2 process that ultimately resulted in the construction of the NewGen Kwinanna power station.
- Advised TNB on a number of projects, including developing a detailed 'Roadmap' of how the industry might develop undertaking various projects to review and advise on the PPA's that currently exist within the Malaysian market and how the market might develop more competitive tendering arrangements for power procurement in the future.

EMPLOYMENT HISTORY

1998-2001, PA Consulting, PHB Hagler Bailly, and Putnam, Hayes & Bartlett

Hagler Bailly merged with Putnam, Hayes & Bartlett to form PHB Hagler Bailly in 1998. PA Consulting then acquired PHB Hagler Bailly in October 2000.

2000 – 2001, Principal Consultant, PA Consulting

2000 – 2000, Principal, PHB Hagler Bailly

1998 – 2000, Senior Consultant, Putnam, Hayes & Bartlett (based in Melbourne, Australia)

- Lead Advisor to the South Australian Government on their "New Gas Options for South Australia" process, which included formulating the strategy for attracting new gas pipelines into the state, followed by implementing the strategy.
- Advisors to the Victorian Government's energy taskforce.
- Economic advisors to the South Australian Government in the privatisation of their electricity assets.
- Management of the negotiation and drafting of electricity vesting (hedging) contracts in South Australia (which underpin the structural reform in South Australia and the viability of the newly created electricity companies there).
- Development of gas vesting contracts in South Australia to underpin the viability of a newly created gas trading company.
- Development of a retail electricity sales agreement to underpin the development of new gas-fired electricity generating station in South Australia.
- Review of the Cross-Ownership legislation in Victoria which resulted in recommendations being legislated by the Victorian Government.
- Review of the structure of the Queensland electricity market.
- Review of the new Ancillary Service arrangements in the NEM.
- Strategic analysis of several key private-sector gas/electricity companies in Australia for a potential new entrant to this market.
- Advice to key industries bodies regarding Government policy objectives related to the energy industry.

POWERGEN INTERNATIONAL

1996 – 1998, Senior Commercial Negotiator, PowerGen International, Asia Pacific(based in Kuala Lumpur, Malaysia)

Managed PowerGen's business development activities in Queensland. This included:

• Development of the business development strategy for Queensland, including resource allocation; budgeting; negotiation of joint development agreement with partner;

- Initiation of a potential gas-fired project in Townsville, including negotiations with gas suppliers and potential electricity purchasers; and
- Management of the consortium's response to the Queensland Government's Surat Basin Initiative – this involved liaising with partners, developing the proposal, briefing relevant local Government officials, submitting a number of bids to the Government, negotiation with Government representatives, competitor analysis and so on.

1995 – 1996, Commercial Manager, PowerGen International (UK)

Managed the commercial project development and due diligence for the successful \$4.2 billion bid for Yallourn Energy (a 1450MW brown coal-fired power station and associated mine) in Victoria, Australia. This included:

- Management of the market review and modelling the Victorian pool;
- Oversight of the commercial due diligence for the bid;
- Analysis of current and potential future contracts;
- Persuasion of potential partners and banks to join the consortium;
- Interfacing with the technical, financial and legal areas in valuing and bidding for the station; and
- Advising the Project Director on bid tactics.

Developed PowerGen's business development strategy for Australasia. This included:

- Management of a complete review of the electricity market in Australia, including modelling future market prices, generation levels and competitor activities;
- Appointing and liaising with consultants to add value to the strategic process;
- Initiating a "war-gaming" approach to simulate future market activities;
- Managing a review of the potential legal and regulatory implications of possible strategies; and
- Development of the planned budget and subsequent monitoring of expenditure for the region.

1993 – 1995, Commercial Analyst, PowerGen International (UK)

Significant involvement in a development project in Uttar Pradesh, India. This included:

- Negotiating a draft PPA;
- Initial negotiations on a draft coal supply and coal transportation agreement;

- Advising the EPC contract negotiators in areas linked to the other project agreements; and
- Reviewing the credit support arrangements for the project co-operating with partners, bankers and advisers to achieve a bankable project structure.

Managed the commercial due diligence for the successful acquisition of a combined heat and power station in Hungary, which included:

- Reviewing the industry structure and proposed Energy Law; and
- Instructing and assisting advisers on evaluation of existing contracts and initial investigations into a potential extension of the plant.

Carried out "due diligence" analysis on various Power Purchase Agreements and fuel supply contracts in the UK, Europe, Asia and India. These included:

- Analysis of revenue expectations from PowerGen's successful acquisition of the Mibrag mining complex in Germany;
- Initial evaluation of the Thai PPA upon which the successful PowerGen bids for a coal fired project was based; and
- Due diligence on the contract agreements underpinning PowerGen's CCGT project in Gujarat, India.

PowerGen Energy Management Centre

1992 – 1993, Commercial Analyst, PowerGen's Energy Management Centre (UK)

Analysis of competitor activities, bidding and marketing strategies in the UK electricity pool.

Caminus Energy

1989 – 1992, Electricity Consultant, Caminus Energy (UK)

Caminus Energy is a UK energy consultancy providing economic and strategic advice to large electricity companies and policy advice to the UK Government and the Commission of European Communities on energy industries world-wide. In this role, Ms Fairhurst worked on a wide range of projects, including:

- Advising the UK Office of Electricity Regulation during the first pool price review;
- Developing and applying analytical tools to understand and report the dynamics and behaviours seen in the early UK pool (including generator gaming);
- Undertaking a number of UK pool scenario and price forecasting modelling exercises;
- Advising an Electricity Retailer on the its regulation strategy;

- Advising a nuclear electric company on decision analysis models which could be used to assess externalities in the non-thermal electricity generation business;
- Advising a Norwegian gas producer on possible entry strategies into the UK gas market;
- Advising the Energy Directorate of the European Commission on strategies to reduce carbon dioxide emissions in the EC; and
- Undertaking a comprehensive review of the likely costs and economic feasibility of potential renewable generation options in the UK.