

## MATT CURRIE PRINCIPAL CONSULTANT

Bachelor of IT Qld University of Technology

Diploma of Financial Services - Financial Markets Australian Financial Markets Association

# PRIOR PROFESSIONAL HISTORY

2022 – Oakley Greenwood Pty Ltd - Principal Consultan	nt
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- 2021 Energy Power Systems Australia (EPSA) Caterpillar Power Generation Dealer -Markets and Growth Manager
- 2018 2021 Markets and Growth Manager Business Development Manager
- 2014 2018 Aggreko Business Development Manager
- 2013 2013 Business Development Manager Energy Developments
- 2012 2013 Commercial Analyst Energy Developments
- 2010 2012 Bank of America Merrill Lynch Vice President Power and Oil Trading (Power and HFO Trader)
- 2007 2010 BP Electricity Trader
- 2006 2007 BP Trading Analyst
- 2003 2006 AGL Trading Analyst

## **OVERVIEW**

Working as an Energy Trader and an IPP Business Development Manager, both within the NEM and offgrid, has provided me with a broad understanding of electricity markets and PPA offtake arrangements.

My roles have delivered PPA contracts with tier one miners such as Rio Tinto and Newmont as well as various tier two miners. Within these roles I have worked within the business development process from opportunity identification through economic analysis to PPA negotiation and execution.

In order to develop and win opportunities I have used my ability to build relationships with clients and analyse and understand the power supply economics of each opportunity. To do this I've employed my large network of contacts within the power sector as well as my thorough understanding of generation and transmission technology. This includes renewables such as wind and solar, batteries, reciprocating engines, turbines, switchgear, transformers and transmission equipment.

Business development is a key strength as well as relationship building, market analysis, economic analysis, PPA deal structuring, contract negotiation and competitor analysis.

My knowledge of generation hardware, particularly the capex requirements and the economics of operation, has enabled me to successfully structure, negotiate and win large deals. Following from this managing the contractual issues associated with the resulting power supply agreements.





My experience at three remote energy IPPs provides rare and valuable insights into the sector. As well as this my previous roles on grid provides me with a detailed understanding of the NEM wholesale and retail markets as well as power transmission and distribution costs.

While I now live in Melbourne, I have worked in the power sector in the UK, Singapore, Perth and Brisbane. I have very much enjoyed working with clients in the mining, oil and gas, utility, commercial and industrial sectors and wish to continue doing so. As well as this, I have worked on a number of projects in the Pacific, particularly PNG, and understand the issues specific to power supply in these regions.

For the last seven years I have worked largely from my home office on projects across Australia and the Pacific. My ability to work in this way, and successfully win projects, demonstrates my drive, self-motivation, ability to work with teams remotely and the ability to work unsupervised.

My understanding of the history of grid and islanded generation within Australia and the issues relating to each market, such as the impact of generation transient load response, provides insights not available from grid generation specialists.

### My network of relationships includes the following:

- Miners: Rio Tinto Aluminium, BHP, South32, Gold Fields, Anglo-gold Ashanti, Northern Star Resources, Newmont, Newcrest. As well as many mid-tier and small miners.
- Consulting firms: Oakley Greenwood, Cardno, Petromin, Como Engineering, GRES, GHD, Ricardo (UK), Project Consulting Services, and various WA based sole trader consultants
- Large generators: AGL, Energy Australia, Engie, Alinta, Origin, Snowy Hydro
- Renewable generators: ESCO Pacific, DP Energy, Infigen, Pacific Hydro, SIMIC, Acciona
- Investment groups: Infrastructure Capital Group (ICG)
- LNG fuel supply: Evol, Woodside and CEFA
- Pipeline gas supply: Gas Trading (Mike Lauer) and Melsom Consulting
- Battery firms: Younicos (now part of Aggreko), Tesla, Greensmith (Wartsila), SAFT, Caterpillar Ingeteam, ABB, Lishen
- EPC companies: Juwi, MPower, Circular Solutions, Canadian Solar, Conergy, Sunergise, Smart Commercial Solar
- OEM companies: Vestas, Goldwind, Sunpower, Jenbacher, Wartsila, Caterpillar, Cummins, 5B, Sunshift, and various reciprocating genset suppliers
- Government departments such as ARENA, CEFC, NAIF, Horizon Power, Western Power, Ergon, PNG Power (PPL), Victorian Government, NSW Government, UK Embassies and Consulates in the Pacific
- AEMO

#### Generation economics:

- Single axis tracking and fixed PV (mobile and permanent solutions)
- Wind turbines
- Greensmithm Younicos and Caterpillar Battery Energy Storage Systems (BESS)
- Cat diesel, dual fuel and gas gensets
- MWM (now Cat) gas gensets
- MTU gas and diesel gensets
- Jenbacher gas gensets





- Cummins diesel, dual fuel and gas gensets
- Wartsila HFO, diesel, gas and duel fuel gensets
- MAN HFO, diesel, gas and duel fuel gensets
- MAK HFO, diesel, gas and duel fuel gensets
- Siemens gas gensets
- GE medium speed diesel gensets
- Mitsubishi Heavy Industry gas gensets s
- Models modified by IPPs to improve efficiency and continuous output
- Solar turbines
- GE LM2500, TM2500 and LM6000

## Power supply economics:

- NEM power supply economics and fuel cost drivers
- Client owned vs IPP Build Own and Operate (BOO)
- Various BOO flavours such as BOOT and BOM.
- Diesel, pipeline gas, LNG and CNG supply economics and the issues associated with each fuel type
- Solar PV generation and the issues relating to cloud cover transient load response of the thermal power station at islanded stations
- Wind generation and the issues integrating with islanded gensets
- Thorough understanding of the Issues relating to OEM data sheets and observed real world heat rates
- Load factor, and the use of analysis techniques such as saw tooth efficiency graphs
- Generating at 11kV vs 415V, where the customer requires 11kV
- Waste heat recovery: exhaust and jacket water heat recovery for heating, chilling and Organic Rankine Cycle and steam turbines
- Use of batteries to improve power quality, reduce spinning reserve and energy storage
- Alternator efficiencies.



## RELEVANT EXPERIENCE

## Energy Power Systems Australia (EPSA) Caterpillar Power Generation Dealer

Markets and Growth Manager - July 2021 - Now

- Managed a national team of seven Business Development Managers focused on selling large gensets and EPC solutions ranging in size from 1.5MW to 50MW
- LPS BDM team secured our budget of AUD\$80M during FY22
- Sold AUD\$22MW worth of gas reciprocating gensets during my first year with EPSA

## Zenith Energy

Business Development Manager - June 2018 - July 2021

- Customer relationship building meetings, presentations, site visits etc
- Was part of the team that won the 6MW expansion and 4-year contract extension at Plutonic (Revenue ~21M)
- Was part of the team that won the 3MW expansion at Jundee (Revenue ~10M)
- Won Calidus, Warrawoona 18 MW 7 year PPA with client in WA
- Won Red 5, King of the Hill 33 MW 10 year PPA with client in WA
- Won Newmont, Tanami Stage 2 24 MW generation and 8MVA/8MWh BESS system with client in NT
- Negotiated commercial terms, worked with legal to draft tolling/PPA contracts.
- Built a substantial BD pipeline > 1000MW thermal capacity across Australia and the Pacific
- Built a substantial renewable generation BD pipeline > 300MW solar and wind capacity across Australia and the Pacific
- Negotiated PPA terms.
- Performed project economic scenario analysis, including competitor analysis for opportunities
- Managed large complex BOO tenders.
- Built and implemented the company Discounted Cash Flow (DCF) PPA pricing model
- Financial modelling of pipeline gas, LNG, CNG, diesel and HFO engine and turbine generation opportunities
- Wrote and presented Investment Committee papers presented to the Investment Committee comprising the CEO and CFO.
- Commercial opportunity analysis and assessment
- Identified adjacent opportunities Zenith should look at to grow its business beyond mining islanded power PPA contracts
- Competitor analysis



## Aggreko

Business Development Manager - January 2014 - June 2018

- Customer relationship building meetings, presentations, site visits etc
- Was part of the team that won the 20MW RTA Amrun 15 year PPA (Revenue ~\$105M)
- Was part of the team that won the 20MW RTA Gove five-year rental agreement (Revenue ~43.8M)
- Was part of the team that won the 20MW Gold Fields Granny Smith Gold Mine 10 year PPA (Revenue ~\$87.6M)
- Was part of the team that won the 7.3MW PV and 2MW/1MWh BESS renewable and CMD expansion at Granny Smith extended the contract to 14 years. (Revenue ~\$65M)
- Negotiated commercial terms.
- Built a substantial brownfield generation BD pipeline > 85MW thermal capacity across Australia and the Pacific
- Built a substantial hybrid generation BD pipeline > 25MW solar capacity across Australia and the Pacific
- Worked on large complex PPA tenders.
- Built and implemented a discounted cash flow PPA pricing model
- Provided advice on how to change the Aggreko rental model to compete in the islanded IPP market
- Identified Aggreko's competitive advantages within this market
- Provided advice on PPA contract key terms particularly heat rate guarantees and liquidated damages
- Financial modeling of pipeline gas, LNG, CNG, diesel and HFO engine and turbine generation opportunities
- Opportunity financial modelling
- PPA negotiation
- Senior management white papers and presentations
- Pipeline development
- Commercial opportunity analysis and assessment
- Assessment of opportunities identified by consultants
- Competitor analysis
- Customer analysis

### **Energy Developments**

Business Development Manager Mar 2013 - Dec 2013

Commercial Analyst May 2012 - Mar 2013

Customer relationship building and management





- Was part of the team that won the pipeline related 8MW expansion to the Sunrise Dam Gold Mine PPA (Revenue ~\$42M)
- Worked on a number of PPA tenders on stations of various sizes up to 90MW.
- Preparation and presentation of board papers to senior management
- Customer presentations
- Financial modeling of pipeline gas, LNG, CNG and diesel engine and turbine generation opportunities
- Modeling transmission line, gas pipeline, LNG and CNG infrastructure opportunities
- Economic modelling of various renewable energy opportunities including: solar, wind, combined solar thermal and waste heat recovery
- Commercial opportunity analysis
- Competitor analysis
- Customer analysis
- Remote energy market analysis
- PPA, GSA, GTA and LNGSA contract analysis, markup and review

### **Bank of America Merrill Lynch**

Vice President - Power and Oil Trading (Power and HFO Trader) - May 2010 - May 2012

- Power and Heavy Fuel Oil (HFO) market commodity trading
- Options trading
- Power station project funding
- Develop relationships with counterparties particularly generators and HFO physical suppliers
- Power and oil market economic modeling
- Trading market analytics
- Refining margins
- Regional supply and demand modeling
- Refinery outage and expansion analytics
- Shipping analytics
- Modeling the Japanese power market to produce oil, LNG and coal consumption forecasts.
- Provide a weekly overview of LNG demand and supply in the Asian region.
- Develop NEM trading strategies, including interregional settlement residue auctions
- Analysis of potential exotic electricity contract deals
- Analysis of physical generation opportunities
- Fundamental NEM demand/supply analytics





### BP

Electricity Trader - Dec 2007 - April 2010

- Australian electricity market commodity trading
- Options trading
- Develop relationships with counterparties particularly generators
- Develop and execute trading strategies.
- Develop and execute strategies relating to interregional settlement residue auctions
- Develop shaped and flexing swap pricing models.
- Fundamental demand/supply analytics of both power and carbon markets
- Weather analytics
- Financial modeling of potential gas fired generation assets in the Asian region

#### BP

Trading Analyst - July 2006 - November 2007

- Worked within the team tasked to provide trading analytics across power, crude and refined products traded by BP in the Asian region.
- Provided analytics on the Australian National Electricity Market (NEM).
- Provided analytics on the impact of oil products, particularly fuel oil, on power markets in the Asian region.
- Analysis of Australian power related futures and OTC markets.
- Analysis of weather forecast data.
- Developed Variance Covariance and Monte Carlo VaR models of the power portfolio.
- Developed Black Scholes library of functions to aid in calculating the real-time delta position of the Australian Power portfolio.

### AGL

Trading Analyst - May 2003 - July 2006

- Financial market analytics.
- Develop trading strategies.
- M&A, worked within the team of five who purchased the Southern Hydro assets for AGL (\$1.5bn assets.)
- Fundamental market analytics including the daily analysis of generator behaviour, binding network constraints and transmission outages.
- Analysis of historic market data including spot price, generator behaviour, and demand.
- Valuing interconnector trades and non-firm contracts.
- Position reporting across contracts and generation.





- Analysis of the behaviour of various exotic contracts
- Develop trading decision support tools

# OTHER EXPERIENCE

## Schneider Electric - Energy and Sustainability Services

Senior Energy Consultant (NEM) - June 2014 - June 2015

- Solar and Wind Farm Merchant Generation Studies
- Commercial and Industrial Client Solar Generation Economic Studies
- PPA terms and conditions advice
- Embedded generation economic studies
- Advice on using embedded generation as callable generation
- Hedging Advice to Renewable Generators
- Retail Portfolio Hedging Advice
- Using vanilla swaps and caps as an alternative to expensive Whole of Meter Swaps
- Financial modeling
- Business development building a pipeline of wholesale electricity market projects and long term clients
- Client management Major industrial and wholesale electricity clients
- Wholesale Electricity Risk Management For major industrial clients

## SKILLS

- Large network on contacts within the east and west coast power sector. (Both on and off-grid.)
- Building and managing a Business Development opportunity pipeline for islanded powerstations
- Building relationships with influential staff within potential clients
- Detailed understanding of the mining, oil and gas and electricity utility sectors
- Detailed understanding of on and off grid power supply economics
- Very strong economic and financial modelling capability
- Corporate finance capital investment decision making process particularly within the mining sector
- Competitor analysis
- Contract negotiation
- Opportunity customer economic assessment
- Development of board and white papers
- IPP PPA contract management
- Commercial terms and conditions analysis on various contract types





- o PPA
- o GSA
- o LNGSA
- o GTA
- Detailed understanding of the economics of reciprocating engine, turbine, solar and wind generation
- Fuel supply economics: gas pipelines, LNG, CNG, diesel and HFO
- Understanding of the economics of battery storage
- Detailed understanding of the economics of the required Balance of Plant (BOP)equipment such a switchgear, transformers, transmission lines and control systems
- Have had exposure to the building of new power stations at both EDL (Macarthur River) and Aggreko (Granny Smith, Gove, Amrun and BHP Olympic Dam)

