



CONTINUING EDUCATION in Electricity Financial Markets

Gabriele Charotte/Fairfax Photos

AFMA has three workshops tailored specifically for electricity market participants seeking professional competence development relevant to their market.

Developed for the industry, by the industry, each workshop examines a specific aspect of this market and provides participants with a number of opportunities to practice and apply what they have learned.

Markets in Focus: Electricity Financial Markets

6.5 CE Hrs

This entry-level workshop outlines the basics of how the financial markets in electricity derivatives work, examining the financial products available for managing risks arising from the spot market.

Risk Management in Electricity Markets

6.5 CE Hrs

The workshop builds on the knowledge of financial products gained by attending MIF-ERM but focuses on the risk perspectives of electricity markets — particularly volume risk — how these can be quantified, and how portfolios are built to manage them.

Pricing and Trading in Electricity Financial Markets

7 CE Hrs

This course examines pricing techniques and considerations for electricity financial market products for frontline practitioners, as well as examining core trading strategies available for speculation or hedging.

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Markets in Focus: Electricity Financial Markets

OVERVIEW

The purpose of this full-day workshop is to introduce you to the function and features of Australia's electricity financial markets. If you are new to a role that exposes you to this market, or you would just like to build a better understanding of how this market operates then this workshop will help.

By discussing the basics of the spot market and explaining how risk arising in this market can be managed via financial market products, you will gain an appreciation of how these two areas interact. The workshop will also identify typical participants and the drivers of their participation, and explain the financial market deal cycle. Finally, it will examine current trends, particularly in regulation, and their potential impact on the market.

WORKSHOP TOPICS INCLUDE:

- spot market basics
- how risk arising in the spot market can be managed via the financial markets
- what financial market products can be used
- how the financial market works: deal cycle
- an overview of regulation and compliance in electricity financial markets.

ATTENDING THIS WORKSHOP WILL EQUIP YOU TO:

- discuss the electricity physical market, including market structure and participants, regulation, spot market pricing and spot market risk.
- explain the core purpose of electricity financial markets, their structure and participants
- discuss the features of electricity derivatives used to manage the risk experienced by market participants, and undertake some basic calculations to see how they work
- explain the mechanics of deal execution to settlement
- examine the impact of regulatory reform on this market, emphasising current developments.

Participants will be guided through contemporary examples and provided with multiple opportunities to apply the knowledge and skills they are learning.

PRE-REQUISITE KNOWLEDGE

While there is no pre-requisite knowledge for this course, those seeking more in-depth training on general financial markets knowledge should consider enrolling in our online *Fundamentals of Financial Markets and Regulation* course.

We note many participants elect to attend all three electricity market workshops in a row. We only recommend this if you have some experience in the market; you may find in fact that attending two of the three (targeted to your level of experience) will be more rewarding.

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Risk Management in Electricity Markets

OVERVIEW

This workshop builds upon the knowledge gained in Markets in Focus — Electricity Financial Markets to examine some of the unique or boutique risks faced by electricity market participants (such as volume or forward price risk) and how the financial markets can measure and manage them. It will also discuss the finer points of constructing a hedge portfolio, risk quantification considerations and implementing risk management via governance.

TOPICS DISCUSSED INCLUDE:

- the risks that arise through both the physical and financial market
- how each risk can be managed through governance policies and the financial market
- what financial market products can be used to manage risk, particularly volume and forward price risk
- what to consider when constructing a hedge portfolio, based on your risk management objectives
- how participants manage their portfolio through unexpected events
- portfolio risk quantification — including VaR, EaR and CFaR.

ATTENDING THIS WORKSHOP WILL EQUIP YOU TO:

- identify risks to gross margin levels and how to address them
- assess volume, forward price and cash flow risk management via financial market products use
- establish trading activity parameters
- evaluate the governance frameworks available
- monitor and assess risk.

Participants will be guided through contemporary examples and provided with multiple opportunities to apply the knowledge and skills they are learning.

PRE-REQUISITE KNOWLEDGE

This workshop assumes that you have the pre-requisite knowledge equivalent to having attended the *Markets in Focus — Electricity Financial Markets* workshop, i.e. a solid understanding of the spot market and the financial products available to manage spot risk, and the fundamentals of how the electricity financial market deal cycle works. This knowledge will not be re-capped in the *Risk Management in Electricity Markets* workshop.

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Pricing and Trading in Electricity Financial Markets

OVERVIEW

This workshop is aimed at those in frontline electricity financial markets roles seeking to further develop their professional competence in the techniques available for analysing derivatives and trading strategies in the electricity financial market.

TOPICS DISCUSSED INCLUDE:

- pool price and forward price models
- pricing interactions and dynamics
- pricing the transfer of risk
- electricity swap pricing methodologies
- electricity option pricing techniques
- implementing and calibrating models
- practical trading issues
- trading strategies for hedging or speculation.

ATTENDING THIS WORKSHOP WILL EQUIP YOU TO:

- develop and assess models for spot and forward prices and calibrate them
- assess the dynamics of the forward curve and the ramifications of its behaviour
- determine fair value for a range of standard and non-standard financial derivatives such as swaps and options
- examine the potential impacts of carbon price-type mechanisms on prices
- evaluate the range of trading strategies available for defined risk management outcomes
- analyse the characteristics of given trading strategies — credit, cash flow and liquidity considerations.

Participants will be guided through case studies, examples and provided with multiple opportunities to apply the knowledge and skills they are learning.

PRE-REQUISITE KNOWLEDGE

This workshop assumes that you have the pre-requisite knowledge equivalent to having attended the *Markets in Focus — Electricity Financial Markets* and *Risk Management in Electricity Markets* workshops, i.e. a solid understanding of the electricity spot market, the financial products available to manage its unique risks, and the fundamentals of constructing a portfolio for hedging. This knowledge will not be re-capped in this workshop, which focuses on pricing these instruments and trading strategies for speculation or risk management. Market experience of 2-5 years is advisable.

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About the Presenters

ANGUS MACLEOD is the founder and Managing Director of Energy Edge Pty Ltd. Energy Edge is a company that specialises in energy and environmental market risk management services and business activities. Angus has over seven years experience in the Australian electricity market. His initial experience in the electricity sector was as adviser to Shell Coal Power Marketing in establishing and implementing their electricity risk management and trading function prior to it being acquired by InterGen Australia. Since that time Angus has had six years experience as Manager Trading at CS Energy. Complementing Angus's experience in the electricity market is a further seven years experience in domestic and international financial and commodity markets and over four years as an auditor for Deloitte. Angus has experience in front and middle office roles across a range of markets including base metals, precious metals, foreign exchange, equity and interest rate markets.

DR ELLIOT TONKES is a foundation member of the Energy Edge team. As Director, Risk and IT Analytics, Elliot has worked on a wide range of energy and environmental consulting and advisory projects since the establishment of Energy Edge. Prior to joining Energy Edge Elliot had three years experience in the Australian electricity market as the Chief Analyst at CS Energy. During this time Elliot lead small teams to perform forecasting, risk quantification, pricing and analysis of derivatives and structured financial products, strategy evaluation, project valuation, system development and software implementation. Elliot has also had over five years in teaching and research roles with a focus on financial mathematics, as Assistant Professor in Mathematics at Bond University and Mathematics Lecturer at the University of Queensland. Elliot has had a wide range of professional publications accredited to his name.

NICK DENMAN has over seven years' experience in the Australian electricity, gas and environmental markets. Nick brings a wide range of skills suited to participants in the energy market, having performed Middle and Back Office roles and gained exposure to Front Office activities in the electricity and gas sector. Nick has also performed contracting roles with several electricity generation companies particularly in the areas of market analysis, derivative pricing, development and review of pricing systems, Mark to Market activities including hedge effective accounting, Hedge effectiveness tools and system development, Value at risk, Credit at Risk and other risk methodologies, Trading and risk management system design, implementation and testing. Nick has obtained a Masters of Philosophy (Australian Postgraduate Award, Australian Research Council) and a Bachelor of Science (Honours 1 with University Medal in Mathematics) from the University of Queensland.

TIM DUTTON has more than seven years experience working in the Australian electricity market. During this time he has held the roles of Treasury Manager, and then Senior Energy Trader at CS Energy covering such areas as energy and environmental products trading through to managing the back office, credit and corporate treasury functions. He subsequently joined Energy Edge, a consulting company that specialises in energy and commodity risk management and commercial advice. Supplementing this experience, Tim has also worked for five years in international equity derivative markets, and was an auditor with PriceWaterhouse for more than three years.

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REGISTRATION FORM

PERSONAL DETAILS

☐ Dr ☐ Mr ☐ Ms

Name _____ Surname _____

Position _____

Company Name _____

Address _____

City _____ State _____ Postcode _____

Country _____

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Are you an AFMA Member Yes / No

FEE

MARKETS IN FOCUS – ELECTRICITY FINANCIAL MARKETS

<input type="checkbox"/> Member	\$825.00 inc GST
<input type="checkbox"/> Non-Member	\$1,034.00 inc GST

RISK MANAGEMENT IN ELECTRICITY MARKETS

<input type="checkbox"/> Member	\$990.00 inc GST
<input type="checkbox"/> Non-Member	\$1,243.00 inc GST

PRICING & TRADING IN ELECTRICITY FINANCIAL MARKETS

<input type="checkbox"/> Member	\$1,265.00 inc GST
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PACKAGE RATE: Any two workshops or more, total cost can be reduced by 10%.

This document becomes a Tax Invoice for GST purposes upon completion and payment. Please photocopy and retain for your records.

WORKSHOP DATE

Please refer to www.afma.com.au for latest clinic dates & times.

_____ date of workshop

☐ Markets in Focus – Electricity Financial Markets

☐ Risk Management in Electricity Markets

☐ Pricing & Trading in Electricity Financial Markets

METHOD OF PAYMENT

Attach cheque made payable to AFMA or provide credit card details below:

☐ Visa ☐ Mastercard ☐ American Express ☐ Diners Club

Please note a surcharge applies of 2.75% for American Express and 3.72% for Diners Club.

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All enquiries and applications should be directed to:

Tel: (61 2) 9776 7914

Fax: (61 2) 9776 4488

Email: education@afma.com.au

Web: www.afma.com.au

Posted applications should be directed to:

AFMA Education & Training

GPO Box 3655

Sydney NSW 2001

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Non attendance

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- » AFMA is not liable for any costs incurred by the attendee if the program is cancelled or postponed.
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