

ENERGY RISK: TRADING, RISK MEASUREMENT AND RISK CONTROL

27 – 28 of April 2017, SINGAPORE

CASES AND EXAMPLES

- Risk management organisational examples
- Market and credit risk modelling introduction
- Fundamental model of a power market
- Hedge ratio estimation
- Master agreement walk-through
- Loss-given-default estimation
- Credit default scoring
- Margin calculation and payments

Expert Course Faculty Leader



DR. MATTHIAS OBERT

About This Training Course

If you are involved or interested in the energy industry at any level, you need to understand the various risks, their measurement, control and management in these volatile and often erratic markets.

This training provides you with a good overview of economic, modelling, organisational and procedural topics to successfully gauge and manage your energy exposure. Key learnings will be exemplified with concrete, practical examples of the concepts discussed.

By attending this 2 day programme you will be able to understand

- The markets for trading energy products in electricity, gas and oil, with other energy commodities being mentioned as appropriate
- The specific sources of risk in energy markets, and how to identify, measure and price those risks practically in the mid- and front-office
- Your options to mitigate, hedge and manage energy-specific risks
- Procedural and organizational best-practice considerations to control and profit from energy risk in your organization
- Hands-on practical examples for the topics discussed

- You will also be able to ask specific questions relating to your work and organization and discuss them with the trainer and other attendees

Who Should Attend & Course Prerequisites

- Energy industry managers
- Policy makers and regulators
- Risk managers
- Physical and financial exchange staff

There are no prerequisites to attend this course, but a basic understanding of the energy industry and derivative markets will help.

This training course has a limited attendance for up to 30 participants only.

Sessions commence at 8am on all days, with short intervals at 10.30am and 3.30pm respectively.

Refreshments will be provided in the short intervals.

Lunch will be provided at 12:30pm for 1 hour. Sessions will end at 4pm on all days.

2 Day Course Outline

DAY 1

How energy products are purchased and traded

- Spot, medium term and long-term contracting
- Physical versus financial
- OTC (standard or customized) and exchange-traded (standard) contracts
- Risk profiles of each type of contract

The causes and magnitude of risks in energy markets

- The risk universe: Identifying market, credit and other market-related risks in the organization
- Typical risks for a producer, a trader, an integrated utility and a consumer of energy
- Causes and triggers of energy risk in electricity, gas and oil markets

Designing a risk management program top-down

- Corporate strategy
- Corporate policies and organizational setup
- Operating unit/company level policies
- Functional separation
- Board involvement
- Desk level limits and procedures
- Trading risk management and capital allocation

Modelling and quantifying market and credit risk

- VaR Modelling for market risk in electricity, gas and oil
- Associated concepts for market risk: PaR, cVaR, stress testing
- CreditVaR modelling for credit risk
- Correlations between market and credit risks
- Treatment of operational risk

Putting a price on risk

- Putting a price on risk externally
- Putting a price on risk internally
- Various examples of charging for risks

Risk mitigation tools for market risk in energy

- Overview of the tools available to the risk manager
- Managing risk through physical purchasing
- Combining physical purchasing with financial risk management
- Exchange-traded derivatives

DAY 2

Devising a simple hedging program

- Choice of products
- Determining hedge ratios and hedge effectiveness
- Hedge timing and speed
- Tracking the performance of the hedge, reporting, and adjusting the hedge

Credit risk management

- Various tools to manage and contain credit risk
- Master agreement walk-through
- Estimating default probabilities and loss-given-default
- Relationship of credit and market risk, right-way risk

Use of options, particularly to manage physical optionality

- Introduction to options in energy markets
- Option pricing
- Use of options to model and manage physical upside and downside risks
- Managing assets with optionality in practice

Operational readiness for managing risk with exchange-traded instruments

- Deep dive into various exchange-traded instruments: Futures, Futurized swaps, cleared bilateral contracts and other contracts
- Margin calculations and payments
- Operations of an exchange
- Operations and structure of a clearing house
- Trade process for exchange-traded instruments
- Checklist for setting up to trade exchange-traded instruments

Hedge accounting

- Introduction to hedge accounting in the context of energy risk hedging
- IAS 39 and IRFS 9 requirements

Your Expert Faculty Leader

Matthias Obert was Head of Power & Gas at SGX until September 2015 and responsible for the development of the energy business within SGX, comprising derivatives in electricity, LNG, oil and petrochemicals, as well as physical energy business in electricity, gas and LNG.

Prior to SGX, he worked with RWE Supply & Trading as Senior Investment Manager Principal Investments as well as Chief Operating Officer Sales & Origination in London and Geneva. Before this, he was a Consultant with McKinsey & Company, working for European and international clients in the energy, materials and wholesale banking sectors.

Mr. Obert holds a diploma in industrial engineering as well as a doctorate degree from the University of Karlsruhe, Germany, and an MBA from the University of North Carolina, Greensboro, USA.

OTHER AVAILABLE COURSES

- [4 Pillars of Transformer Condition](#)
- [Advanced Project Finance for Power](#)
- [Advanced Technical Report Writing & Presentation Skills](#)
- [Advanced Turnaround Shutdown & Outage Management](#)
- [Ancillary Services in Competitive Electricity](#)
- [Asset Management for the Power Industry](#)
- [Best Practice Renewable Energy Capital & Project Management](#)
- [Biomass Power Generation](#)
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- [Clean Development Mechanism and Carbon Markets](#)
- [Coal Contracts](#)
- [Combined Cycle Power Plants Operation](#)
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- [Competency Management System for the Power Industry](#)
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- [Developing & Structuring Public-Private Partnership \(PPP\) for Infrastructure](#)
- [Effective Tender Process Management for Power & Utilities](#)
- [Electrical Hazop \(eHazop\) Studies for the Power Industry](#)
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- [Electricity Industry Design](#)
- [Electricity Network Planning](#)
- [Electricity Retail Contracts](#)
- [Electricity Theft](#)
- [Electricity Trading Essentials](#)
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- [Introduction to Clean Coal Technology](#)
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Frequently Asked Questions (FAQs)

1. Does PowerEdge have other programmes than those listed?

We have more than 200 programmes that we are capable of running. All we need is for you to contact us and request for the preferred programme and we will be able to develop it.

2. Where is PowerEdge based?

PowerEDGE is headquartered in Singapore but we run our training programmes in different venues around Asia.

3. What does PowerEdge do?

We are a Power & Utilities Training Specialist.

4. Can this course be done in our city?

It absolutely can. Get in touch with us to request for a training programme to be carried out in your city.

5. Can you reduce the price of our preferred course?

While our price has been reduced before it is even launched, we are always happy to help you with further discounts.

6. Can you change the dates of the course?

If you have a special requested date, let us know and we will arrange another session for you.

7. Who are the companies that will be participating?

This varies from a diversity of Power Operators, Regulators, Financiers, to Vendors in the Power & Utilities industry.

8. Where is the venue for the course?

We usually engage a 4 to 5 star hotel meeting room to ensure the comfort of our participants.

9. How many delegates should we expect for each course?

This varies from 15 to 20 participants. Class sizes are kept small to allow trainers to focus better on each participant.

10. What are the different payment modes?

We accept Visa/MasterCard, cheques, bank transfers and cash on site.

11. Is accommodation included when I sign up for a course?

Accommodation is not included in the course fee but we are always happy to advise on available accommodations.

12. Can I get a cheaper accommodation through PowerEdge?

We will be pleased to help you negotiate a better rate with hotels.

13. Is lunch provided during the course?

We provide lunch and 2 tea breaks every day during our training programmes.

14. Are the training materials included once I have signed up for a course?

Yes, training and course materials are included in the course fee.

15. Will there be a certificate for the course?

Yes, there will be a certificate of participation upon completion of a course.

16. Who are PowerEdge trainers?

They are expert consultants and practitioners with many years of experience in the subject matter that they deliver on.

17. Are PowerEdge trainers competent?

We have received numerous favourable feedbacks on our trainers from past participants.

18. Can PowerEdge assist with Visa travel applications?

We can assist in advising you on the relevant procedure(s) and embassies/consulates that provide Visa for travel purposes.

19. Can we purchase training materials without attending a course?

Unfortunately, this option is not available as training materials are specially developed for courses.

20. Can course content be tweaked to cater to our needs?

Of course! Just let us know your request and we will get the trainer to assist in carrying it out.

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	PER PARTICIPANT	2 PARTICIPANTS OR MORE	IN-HOUSE TRAINING
2 Day Programme	SGD 2, 800 Per Participant	SGD 2, 600 Per Participant	Guaranteed Minimum 40% Off Normal Price

4 ways to Register

- 📄 [Online Web Registration](#)
- ✉ info@poweredgeasia.com
- ☎ (65) 6741 9927
- ☎ (65) 67478737

ATTENDEE DETAILS

Name Job title

Tel Department Email

Name Job title

Tel Department Email

Name Job title

Tel Department Email

Name Job title

Tel Department Email

Name Job title

Tel Department Email

COMPANY DETAILS

Organisation name Industry.....

Address

Postcode..... Country.....

Tel Fax.....

PAYMENT METHODS

By Cheque/ Bank Draft: Make Payable to PowerEdge Pte Ltd.

By Telegraphic Transfer: Please quote AE1 with the remittance advise

Account Name: PowerEdge Pte. Ltd.

Bank Code: 7339 Branch code: 686 Account Number: 686-253386-001 Swift Code: OCBCSGSG

Bank Address: 65 Chulia Street OCBC Centre, Singapore 049513

All bank charges and payment in Singapore dollars (SGD) to be borne by payer. Please ensure that PowerEdge Pte Ltd receive the full invoiced amount.

PAYMENT POLICY

Payment is due in full at the time of registration. Full payment is mandatory for event attendance. I agree to PowerEdge Pte Ltd. payment terms

CANCELLATIONS & SUBSTITUTIONS

You may substitute delegates at any time. POWEREDGE PTE LTD does not provide refunds for cancellations. For cancellations received in writing more than seven (7) days prior to the training course you will receive a 100% credit to be used at another POWEREDGE PTE LTD training course for up to one year from the date of issuance. For cancellations received seven (7) days or less prior to an event (including day 7), no credits will be issued. In the event that POWEREDGE PTE LTD cancels an event, delegate payments at the date of cancellation will be credited to a future POWEREDGE PTE LTD event. This credit will be available for up to one year from the date of issuance. In the event that POWEREDGE PTE LTD postpones an event, delegate payments at the postponement date will be credited towards the rescheduled date. If the delegate is unable to attend the rescheduled event, the delegate will receive a 100% credit

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- ✓ [Introduction to Power Systems](#)
- ✓ [Renewable Energy Integration](#)
- ✓ [Fundamentals of Power Generation](#)

On Site Training

Can't make it for the Course? We'll make the course come to you!!

Simply let us know your preferred time and dates and we will meet you at your schedule and venue.

With a host of highly trained experts, we will be happy to customize your programme with your needs 100% fulfilled.

Contact us today at

✉ info@poweredgeasia.com
☎ (65) 6741 9927

