



UNDERSTANDING ELECTRICITY MARKET

SCEM 7 PDUs & PE-PDUs TO BE AWARDED . APPLICABLE FOR PRODUCTIVITY AND INNOVATION CREDIT (PIC)

Date : 15 November 2016

Time : 9:00am – 5:00pm

Venue : City Serviced Offices Pte Ltd
No. 9 Raffles Place
Republic Plaza II Level 18
Trademark Meeting Room
Singapore 048619

COURSE OVERVIEW

This training course allows course participants to get a basic understanding of electricity markets, with a particular focus on the NEMS and its unique features. This course draws upon experience gained from operating the NEMS since 2003. It covers perspectives of engineering economics and regulatory issues and explores the fundamentals of electricity market theory and practice.

COURSE OBJECTIVES

- Learn about the basics of electricity industry reform from a vertically integrated utility to a competitive market
- Get a brief overview of some of the key debates surrounding electricity market design
- Get a basic understanding of how the NEMS operates on a daily basis
- Understanding the some factors underpinning prices for electricity and ancillary services

TARGET AUDIENCE

- Anyone who is interested in taking brief look at how electricity markets work in both theory and practice
- Commercial executives and managers from all sectors

Organized by:



Programme Outline

Session 1

Understanding Electricity

- The physical aspects of generating electricity
- Key features of generation
- Key features of demand
- Key features of transmission
- Role of the system operator

Why Reform and Regulation is Essential in the Electrical Industry

- Basic economic concepts relevant to the electricity industry
- How did the industry structure change over time
- What were the goals of reform
- Why is regulation still required and how are different parts of the industry regulated

The NEMS and its Unique Features

- Brief introduction to the deregulation process leading to the NEMS
- Governance of the NEMS
- Types of participants and their roles
- Overview of transmission and distribution
- Trading in the NEMS
- Ancillary service procurement in the NEMS

Session 2

- Pricing Mechanism and Economic Dispatch
- Overview of the Market Clearing Engine
- Nodal pricing
- Energy, reserve and regulation markets
- Co-optimization
- Prices observed in the NEMS

Settlement

- Overview of the settlement process
- Default and suspension

How Consumers Can Influence Electricity Markets

- Retail competition
- Benefits of demand side response
- Retail pricing structures for demand response
- Demand bidding (dispatchable load)
- Interruptible load

About SEAS

The Sustainable Energy Association of Singapore (SEAS), an industry association launched in 2006, today has 160 members in the area of Energy Efficiency, Solar, Wind, Biomass, Carbon and Clean Energy Financing. SEAS aims to be the voice of sustainable energy industry and promote the business of its member companies.

SEAS also specialises in training, courses and conferences focussed on sustainable energy. SEAS aims to be the one-stop information and training provider in the area of sustainable energy. Our trainers and lecturers are not only highly qualified academic professionals but also industry specialists and professionals that are successful and sought after practitioners in the area of Sustainable Energy. The majority of Key Qualified Personnel (KQP) and Accredited Energy Services Companies are members of SEAS. They have, as a group successfully executed a multitude of energy projects with varying complexities both locally and regionally.

About the Trainer

Tan Liang Ching (Senior Vice President, Business Development, Energy Market Company) heads the Business Development Unit, which spearheads the identification, prospecting, management and maximization of various ventures, partnerships, programmes and products/services to support the business growth objectives of EMC.

Prior to this, he was in the Market Administration Unit, which advises the Rules Change Panel through economic analysis and proposals to enhance efficiency in the electricity market.

Before his EMC appointment in 2007, he worked in the Planning and Research Department of the Ministry of National Development, and the Housing Analysis Unit of the Housing and Development Board.

Liang Ching holds double degrees (high honours) in Electrical Engineering and Economics from the University of California, Berkeley and a Master of Social Sciences degree in Applied Economics (Lim Chong Yah Medal) from the National University of Singapore.

Registration Form – Understanding Electricity Market 15 November 2016

- Yes! I would like to register for this programme.
 I am unable to attend but please put me on your mailing list.

Please indicate if you are our SEAS Member	Early Bird (Registration with payment made on/before 15 Oct 2016)	Normal Fee	Group Fee	No. of Delegates	Fee Payable
<input type="checkbox"/> SEAS Member	S\$400.00	S\$500.00	-		
<input type="checkbox"/> Non Member	S\$500.00	S\$700.00	S\$380.00		

- * Fees are inclusive of GST.
- * Fees include refreshments, lunch and programme collateral.
- * Enjoy group discount for 4 or more delegates registered at the same time from the same organization and same billing source.
- * Only one type of discount scheme is applicable at any one time.
- * Please print and complete additional sheets where necessary.
- * Important: Walk-in delegates will only be admitted on the basis of space availability and with full payment made on site.

Participant's Details

1. Name (*Dr/Mr/Mrs/Ms): _____ NRIC: _____
Designation: _____ HP No: _____
Email: _____ SCEM No: _____ PE No: _____
2. Name (*Dr/Mr/Mrs/Ms): _____ NRIC: _____
Designation: _____ HP No: _____
Email: _____ SCEM No: _____ PE No: _____
3. Name (*Dr/Mr/Mrs/Ms): _____ NRIC: _____
Designation: _____ HP No: _____
Email: _____ SCEM No: _____ PE No: _____

Organization's Details (For Billing)

Company Name: _____
Company Address: _____
Postal: _____
Contact Person's Name (*Dr/Mr/Mrs/Ms): _____
Tel: _____ Fax: _____
Email: _____

Administrative Information

Registration and Payment

Please complete the enclosed registration form and forward it together with your cheque at least 7 days before the commencement of the programme to

Sustainable Energy Association of Singapore
No. 1 Cleantech Loop #02-16
Cleantech One, Singapore 637141

Crossed cheque should be made payable to
"Sustainable Energy Association of Singapore"

Cancellation

SEAS reserves the right to change programme venue, cancel or reschedule the programme if necessary or warranted by circumstances beyond our control.

There will be no refund of fees for withdrawal. However, if the registration participant is unable to attend, a representative may be allowed to attend at no extra cost. Please inform us of the changes by fax or via email 3 days before the commencement of the programme.

Confirmation of Registration

Confirmation of registration will be given 5 working days before the commencement date via email. Registration is confirmed only upon receipt of payment.

If you do not hear from us

Please contact Ms. Agnes Seah at:
Tel: 63379886 / 63388578

Email: training@seas.org.sg