#### Chairman,

Electrical Engineering Technical Division The Institution of Engineers Malaysia, Lots 60 & 62, Jalan 52/4, P.O. Box 223 (Jalan Sultan), 46720 Petaling Jaya, Selangor Darul Ehsan Tel: 03-7968 4001/2 Fax to 03-7957 7678 Email: valli@iem.org.my Website: www.myiem.org.my

#### **REGISTRATION FORM**

# ONE DAY COURSE ON "ENERGY MANAGEMENT BASED ON MS ISO 50001" (Closing Date: 23 JULY 2018)

No	Name	M'ship No.	Grade	Fee (RM)

Enclosed herewith a crossed cheque No: \_\_\_\_\_\_\_\_ for the sum of RM \_\_\_\_\_\_\_ issued in favour of "<u>The Institution of Engineers, Malaysia</u>" and crossed 'A/C payee only'. I/We understand that the fee is not refundable if I/We withdraw after my/our application is accepted by the Organising Committee as stated in the cancellation term. If I/We fail to attend the seminar, the paid registration fee will not be refunded.

Contact Person:	Designation:		
Name of Organization:			
Address:			
Telephone No.:	(O)	(Fax)	
	(H)	(HP)	
Email:			
Signature & Stamp	Photocopies are acceptable	Date	

#### CANCELLATION POLICY

IEM reserves the right to postpone, reschedule, allocate or cancel the course. Full refund if cancellation is received in writing more than 7 days before start date of the event. No cancellation will be accepted prior to the date of the event. However, replacement or substitute may be made at any time with prior notification and substitute will be charged according to membership status.

Claimable for 4 Suruhanjaya Tenaga CDP hours for REEMs (ST(IP/PPTKP/DSM)16/35/6 10)



### 25<sup>th</sup> JULY 2018 (rescheduled from 28<sup>th</sup> June 2018)

## ONE DAY COURSE ON "ENERGY MANAGEMENT BASED ON MS ISO 50001"

ORGANISED BY ELECTRICAL ENGINEERING TECHNICAL DIVISION, IEM

Venue: Malakoff Auditorium, Ground Floor, Wisma IEM, PJ

Time: 8.30am – 5.30pm

Speaker: Ir. Francis Xavier Jacob and Ir. Tejinder SIngh

BEM Approved CPD/ PDP hours: 7

Ref. No.: IEM18/HQ/215/C

REGISTRATION FEES		
	ONLINE	NORMAL
IEM Student Member	RM 50.00	RM 80.00
IEM Graduate Member	RM 150.00	RM 200.00
IEM Corporate Member	RM 250.00	RM 300.00
Non-IEM Member	RM 500.00	RM 600.00
Registered Electrical Energy Managers (REEMs)	-	RM150.00
GST shall be at 0% with effect from 1 June 2018		•

#### **IMPORTANT NOTES**

Closing Date: 25 JUNE 2018

For <u>ONLINE REGISTRATION</u>, payment <u>MUST BE MADE VIA ONLINE PAYMENT</u> [via RHB Now and Maybank2u
 -Personal Saving & Personal Current; Any Credit Card - Visa/Master]. If payment is not received within the stipulated time, the registration fee will automatically be reverted to the normal fee.

- Payment via <u>CASH/CHEQUE/BANK-IN TRANSMISSION/BANK DRAFT/MONEY ORDER/ POSTAL</u>
   <u>ORDER/LOU/LOG/WALK –IN</u> will be considered as <u>NORMAL REGISTRATION</u>
- <u>FULL PAYMENT</u> must be settled before commencement of the event, otherwise participants will not be allowed to enter the hall. If a place is reserved and the intended participant fails to attend the course, the fee is to be settled in full. If the participant failed to attend the course, the fee paid is non-refundable. IEM reserve the right to reject any LOU/LOG not in accordance with these instructions.

The Organising Committee reserves the right to alter or change the programme due to unforeseen circumstances.

#### **SYNOPSIS**

Most energy efficiency targets in industries are achieved through changes in how energy is managed in an industrial facility, rather than through installation of new technologies. An energy management standard provides a method for integrating energy efficiency into existing industrial management systems for continuous improvement. Companies which have voluntarily adopted an energy management plan (a central feature of an EM standard) have achieved major energy intensity improvements.

#### This course will show how to:

- Develop a baseline of energy use
- Actively manage energy use and costs
- Reduce emissions without negative effect on operations
- Continue to improve energy use/product output over time
- Document savings for internal and external use (e.g. emission credits)

#### It will also include on the methods to develop:

- A strategic plan that requires measurement, management, and documentation for continuous improvement of energy efficiency;
- A cross-divisional management team led by a representative who reports directly to the management and is responsible for overseeing the implementation of the strategic plan;
- Policies and procedures to address all aspects of energy purchase, use, and disposal;
- Projects to demonstrate continuous improvement in energy efficiency;
- The creation of an energy manual, a living document that evolves over time as additional energy saving
  projects and policies are undertaken and documented;
- Identification of key performance indicators, unique to the company, that are tracked to measure progress;
- Periodic reporting of progress to the management based on these measurements• Protection against radiated disturbances

#### SPEAKER'S BIOADATA

**Ir. FRANCIS XAVIER JACOB**, was until recently, a Senior Analyst with the Energy Commission, Malaysia. He was previously the Director of Energy Management and Industrial Development in the Energy Commission, Malaysia. He had been with the Commission and the then Department of Electricity and Gas Supply since 1991. The Commission, among others, regulates the electricity and piped gas industries in Malaysia. Prior to this, he was with the Public Works Department Malaysia, where he was involved with the design and project management of public electrical installations. He was also, for some time, involved with the maintenance aspects of these installations. He is the Chairman of the Technical Committee on the Standards for Energy Management and also sits in various standards working committees. Francis Xavier Jacob graduated in 1977 with a Bachelors of Engineering degree from the University of Malaya and also holds a Master's degree in Environment. He is a Professional Engineer and is a member of the Institute of Engineers Malaysia.

**Ir. TEJINDER SINGH** is a consultant to a supplier of services to a large energy company. He has worked in many industries, from steel manufacturing to semiconductor industry, from energy contracting to electrical consulting, from telecommunications to academia and ICT. He was involved in the design and installation of the electrical and ICT networks for many clients. He is also one of the few experts in both the electrical and cyber security domains. He is a certified National EnMS Expert by United Nations Industrial Development Organization (UNIDO), a Six Sigma Black Belt, a HRDF Certified Trainer, a GBI facilitator and a Certified Information Systems Security Professional (CISSP). Tejinder Singh graduated in 1994 with a Bachelor's of Science in Electrical and Computer Engineering from Tri-State University, Angola, Indiana, USA and also holds a Master's degree in Embedded Systems Design from University of Lugano, Switzerland. He is a Professional Engineer with Practicing Certificate and is a member of the Institution of Engineers Malaysia.

#### **TENTATIVE PROGRAMME**

TIME	ТОРІС	SPEAKER		
9.00 am	Program introduction	Ir. Francis Xavier Jacob		
9.15 am	Overview of MS ISO 50001	Ir. Francis Xavier Jacob		
	Background & Introduction			
	Scope & Definitions			
	Energy Management System Requirements			
	Implementation and Operation			
	Why isn't industry more energy efficient			
	Overall Goal			
	Barriers to Improve EE			
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10.15 am	Coffee break			
10.30 am	Top Management Responsibility	Ir. Francis Xavier Jacob		
	<ul> <li>Management Role – Foundation of the System</li> </ul>			
	Foundation of Management Commitment			
	How does Top Management Demonstration Commitment?			
	Energy Management Policy Basics and Document			
	Energy Management Planning – Legal and other Requirements			
	Scope and Boundaries			
	Reporting			
	Energy Management Team			
	Roles, Responsibilities and Authority			
	Common Barriers & Typical Pitfalls			
	Tips for Success			
11.45 am	Taking the first step to reduce energy costs:	Ir. Tejinder Singh		
	Introduction			
	Implementation and Operational Controls			
	Performance Checking			
	Management Review			
1.00 pm	Lunch			
2.00 pm	Energy Performance Indicators, Baselines and Regression Analysis	Ir. Francis Xavier Jacob		
	Energy Metrics			
	Examples of Energy Performance Indicators			
	Levels of Complexity			
	Other Indicator			
	Relation between Energy and Driving Factor			
	Performance Checking with EnPIs			
	What are Energy Baselines			
	Targets and Baselines			
	Documents and Records			
3.30 pm	Tea break			
3.45 pm	Industrial Energy Efficiency	Ir. Tejinder Singh		
	Concept, Methods and approaches			
	Industrial EE Polices and Program			
	Energy Audits			
	Energy Conservation Planning			
	Energy Efficiency Evaluation and Energy Balance Test			
	Measuring and monitoring equipment.			
	Energy intensity or consumptions benchmarking/baseline			
	Verification of results from energy saving measures			
5.15 pm	Wrap Up and Q&A session	Ir. Tejinder Singh		
5.30 pm	End of Program			

#### PERSONAL DATA PROTECTION ACT

I have read and understood the IEM's Personal Data Protection Notice published on IEM's website at http://www.myiem.org.my and I agree to IEM's use and processing of my personal data as set out in the said notice.