



PRACTICAL MEASUREMENT & VERIFICATION SERIES - INTRODUCTION TO CHILLER PLANTS M&V

COURSE OVERVIEW

There is a real need for engineers in design, operation and maintenance of high efficiency chiller plants to extract maximum value from their expensive BAS/BMS systems. It is also a pre-requisite for green mark and NEA certified projects to meet some minimum standards for monitoring intervals, accuracy and long term performance.

Using actual projects with real-time data, we will download data and perform actual analysis, to illustrate the need for accurate sensors, to trouble shoot chiller plant components, sensor issues and quantify chiller performance and costs.

COURSE OBJECTIVES

This one day workshop is the first of a planned 3-section series in providing a practical understanding of M&V. This session is targeted at audience who are new to central chilled water plants. Audience will be given an overview of the major components of the central chilled water plants and their purposes and how they work together as a system.

**SCEM & PEB PDUs
AWARDED**

**APPLICABLE FOR
PRODUCTIVITY AND
INNOVATION CREDIT (PIC)
VISIT IRAS.GOV.SG FOR
MORE INFORMATION.**

26 NOVEMBER 2015

9:00AM - 5:00PM

SEAS Training Centre
9 Penang Road, #08-02 Park Mall, Singapore 238459



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PROGRAMME OUTLINE

- Session 1: Concept of central chiller plant**
- Session 2: Airside and simple introduction to ahu & fcu**
- Session 3: Primary and secondary pumping**
- Session 4: Cooling towers and their function**
- Session 5: Aircooled and water cooled chillers**
- Session 6: Simple readings for chiller plants**
- Session 7: Basic controls for chiller plants**
- Session 8: Operating limits for motor, pumps, towers, chillers**
- Session 9: Basic analysis of operating data**
- Session 10: Common errors in operations**

RATES

EARLY BIRD (before 30 Oct)	NORMAL FEE	GROUP FEE
S\$610 (SEAS Member)	S\$750 (SEAS Member)	S\$500.00 (4+ delegates from 1 organization)
S\$750 (Non Member)	S\$850 (Non Member)	

Bundle registration
(3 sessions):

S\$1,600 (SEAS Member)
S\$1,900 (Non Member)

* Fees inclusive of GST

* Payment to SEAS & Address: Please send a crossed cheque to:
Sustainable Energy Association of Singapore
9 Penang Road, #08-02 Park Mall, Singapore 238459

ABOUT THE TRAINERS



Mr. Lee Eng Lock is Vice Chairman of Measurement & Verification Pte Ltd and he is known globally for his singular contribution to energy efficient cleanroom and building design. Mr. Lee has been designing and building electrical and mechanical systems for the past two decades. His expertise in the design of cleanrooms for multi-national high technology companies is well known. Mr. Lee's accomplishments includes the design of over 100 commercial and industrial projects. He has also developed several building energy software products and is an expert in super-high accuracy building monitoring. He has been a featured speaker at conferences throughout the world.



Mr. Steven Kang is the Business Development Director for Measurement & Verification Pte Ltd. A graduate of the National University of Singapore with an honors degree in mechanical engineering, Steven also holds a Graduate Diploma in Marketing from the Marketing Institute of Singapore. Steven has extensive work experience in the heating, ventilating and air-conditioning (HVAC-R) industry ranging from Sales Management, Six Sigma, Engineering Applications and Business Development of energy services in Asia. He also travels extensively throughout Asia to help design and implement high efficiency HVAC systems. He conducts in-depth trainings on HVAC design and optimization to ESCOs, consultants and building owners throughout Asia. He is also a designated Energy Model Assessor for Green Mark certification and a trainer for both the Singapore's Green Mark and Singapore Certified Energy Manager courses.

CALL US AT 6337 9886 TO ENQUIRE!

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

PARTICIPANT'S DETAILS		Number of Delegates	Fees Payable
1	Name (Dr/Mr/Mrs/Ms)		Designation
	HP No		Email
2	Name (Dr/Mr/Mrs/Ms)		Designation
	HP No		Email
ORGANIZATION'S DETAILS			
Company Name			
Company Address			
Contact Name			Tel
Email			Fax