

India M&V & IPMVP Familiarisation Workshop

21st April 2011 (Thursday), SKF College Campus, SKF India Ltd, Chinchwad, Pune-33

The Alliance for an Energy Efficient Economy (AEEE) in partnership with Efficiency Valuation Organization (EVO), the developer of the International Performance Measurement & Verifications Protocol (IPMVP), is pleased to announce a Workshop on Familiarisation of Measurement and Verification (M&V) and the implementation of IPMVP in the Indian context. AEEE launched M&V & IPMVP Training and CMVP Certification in India in 2008 in partnership with USAID ECO-III Project. The event is being hosted by SKF India Ltd, and conducted EVO-certified CMVP Trainers and Certified Measurement & Verification Professionals (CMVPs) on 21st April 2011 - 9.00 AM to 5.00 PM.

The Workshop has been designed to provide a conceptual understanding in Measurement & Verification (M&V) of energy and cost savings as a result of EE implementation for engineers and managers. It will also help non-technical persons to appreciate financial implications of successfully implemented EE projects.

The Workshop is relevant to Designated Consumers and Designated Energy Auditors under the Rs 30,000-crore PAT Scheme of Bureau of Energy Efficiency (BEE), Govt of India. For the details and context please refer to: http://bee-india.nic.in/NMEEE/PAT%20Consultation%20Document_10Jan2011.pdf. Further, BEE cites IPMVP as one of the essential tools for M&V of Demand Side Management programmes. See: http://www.bee-dsm.in/Tools_4.aspx.

The interactive training has been developed and is being presented by Certified EVO Trainers and CMVPs. The training based on proven practices and an established curriculum, introduces the basic concepts in M&V. These are reinforced through real-time project case studies and practical exercises based on Indian scenario.

OBJECTIVE

The objective of the Training is to develop the understanding of energy efficiency professionals about M&V, the range of methods, the existence of an international standard, introduction to the four IPMVP options and their application, and the need for specific M&V design for each project.

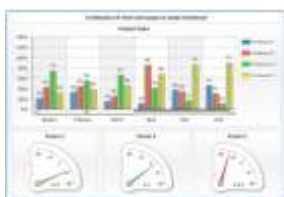
TRAINING OVERVIEW

The programme will introduce the basic concepts of M&V and the latest version of IPMVP. It would cover the application of ideas introduced previously using the four IPMVP options. The workshop will have interactive participation case studies, introspection by sharing real time projects examples and experiences.

Topics Covered

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| <ul style="list-style-type: none"> • Fundamentals of M&V, and the role of Energy Audits in setting baseline • Overview of International Performance Measurement & Verification Protocol (IPMVP) • IPMVP M&V options A, B, C, D (Partially Measured Retrofit Isolation; Retrofit Isolation; Whole Facility; and Calibrated Simulation) • Decision Making - How to select the right M&V option • Steps in Applying IPMVP's Options, especially Role of Stipulations in M&V • Baseline adjustments - Non-Routine and Routine adjustments | <ul style="list-style-type: none"> • Baseline Period, Measurement Boundary • Interactive effects between measures and how to avoid double counting for individual ECMs • Role of M&V in Performance Contracts • Sample M&V Plan and Annual Report outlines • Third-party M&V-Pros & Cons • Comparison of M&V results and actual bills • Examples-Variable Speed Drive, Boiler Efficiency, Pump Efficiency, Occupancy Sensors, Lighting M&V Plan • Operation and Maintenance - Impact on Savings and Performance Guarantee |
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The Workshop also includes references to Case Studies based on practical application in industry, buildings, municipal water supply systems, street lighting. An approach to preparation of M&V plans in Industrial and Buildings sector energy efficiency projects will be included. Discussions and Q&A session on preparation of M&V Plans.



**Fundamentals of
Measurements and Verification (M&V)**
*“M&V is the process of using measurements to
reliably determine actual saving created within an
individual facility by an energy management program”*
(IPMVP Vol I, 2007, Section 9)



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TARGET AUDIENCE

The programme will enhance the knowledge of the energy-efficient project developers, implementers and practitioners, Carbon-reduction projects and CDM validators, engineers and managers of Municipal and Urban Local Bodies, and Certified Energy Auditors & Managers and those that want an in-depth understanding of M&V concepts—such as Financing agencies, Utilities (Demand Side Program managers and implementers), and large energy users (e.g., facility owners/managers), government officials and regulatory agencies.

TRAINERS

The Trainers for the Workshop are certified by Efficiency Valuation Organization, and have experience in diverse sectors. They will share their invaluable experiences and best practices based on energy-efficiency projects in a wide-range of sectors including industry, buildings, municipalities among others.

Lead Trainer: Mr Ramesh Bhatia is Advisor to AEEE. He is in the field of energy efficiency for the last twelve years working in Conzerv Systems and subsequently with Schneider Electric where he continues as Consultant. He has conceptualised Energy Management Systems for thermal power plants, cement and other large industries. He is a CMVP and a level 1 trainer also a certified Energy Manager from BEE. He is engineering graduate from Naval College of Engineering, Lonavala and was Associate Member of Institute of Marine Engineers, London. Studied MBA from Jamnalal Bajaj Institute, Bombay University.

After getting commissioned in the Indian Navy in 1966, he has held various assignments in the Navy in ships, projects, maintenance / repair and manpower / training. After leaving the Navy in 1986 he has held senior positions in marketing, sales and production in industry and energy efficiency sectors.

ATTENDEE BENEFITS

The course is valuable because it provides the introduction and background for those seeking enhanced skills to implement M&V in their projects in a consistent and reliable manner. It will provide a basic introduction for those who want to take up the advanced Certified Performance Measurement and Verification Professional (CMVP) Certification Exam that would qualify them as an International M&V Professional. (See www.evo-world.org). For the non-technical, managerial and financial experts, it provides assurance that project implementers are providing authentic and legitimate service and helps them speak the language of energy efficiency.

In addition to the knowledge gained from the Training, attendees will receive the following benefits:

- Printed copies of the presentations
- Electronic copy of BEE-approved Manuals and Guides for implementing Energy Efficiency Projects
- Priority in Registration for CMVP Certification Training & Exam to be held during 3rd Quarter of 2011
- A Certificate of Participation on completion of the Familiarization Workshop (on request).

PARTICIPATION FEES

A training program is Rs 5,000 per participant (plus Service Tax 10.3%), payable to “Alliance for an Energy Efficient Economy”, at New Delhi. For AEEE Member a discounted fees of Rs 4,500 (plus Service Tax 10.3%) per participant will be charged.

VENUE: SKF College Campus, SKF India Limited, Chinchwad, Pune-411 033.



For registration, contact:
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