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# FUNCTIONALITY OF THE MEASUREMENT AND VERIFICATION SPECIALIST

ONLINE PROFESSIONAL COURSES LED BY THE WORLD'S TOP SPECIALISTS

ONLINE TRAINING BY KRISHNAJI PAWAR

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MODULE

13

## Fieldwork: Formal Accreditation, Safety, OSHA, and NFPA

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# FUNCTIONALITY OF THE MEASUREMENT AND VERIFICATION SPECIALIST

Fieldwork in energy management and measurement and verification (M&V) is crucial for implementing and evaluating energy efficiency projects. Accreditation in this field signifies that professionals have met established standards of competence and ethical practice. Organizations like the Association of Energy Engineers (AEE) provide certifications, such as the Certified Energy Manager (CEM) and Certified Measurement and Verification Professional (CMVP) credentials.

# Learning Objectives

- Instrument metering and calibration
- Fieldwork: formal accreditation, safety, OSHA, and NFPA
- Data accessibility, communication, and valuation
- Reporting on Measurement and Verification (M&V) Projects
- Definitions of IPMVP Options
- The future of measurement and verification
- Sample M&V Plan
- Sample M&V Report
- ESCO's Guide to Measurement and Verification
- Summary and Resources



## INTRODUCTION

- Fieldwork in energy management and measurement and verification (M&V) is crucial for effective implementation and evaluation of energy efficiency projects.
- Formal accreditation in energy management signifies professionals' competence and ethical practice.
- Certifications such as the Certified Energy Manager (CEM) and Certified Measurement and Verification Professional (CMVP) are provided by organizations like the Association of Energy Engineers (AEE).

# FIELD WORK: SAFETY, OSHA, AND NFPA REGULATIONS

- Safety regulations and procedures are crucial when working with electrical equipment.
- The Occupational Safety and Health Administration (OSHA) and the National Electrical Code (NEC) provide specific requirements for the installation, use, and maintenance of electrical equipment.
- Field technicians must be trained in electrical safety and follow established safety procedures to minimize the risk of electric shock, arc flash, and other electrical hazards.
- Personal protective equipment such as gloves, safety glasses, and flash suits may be required.
- The specific safety regulations and procedures may vary depending on the location and jurisdiction.
- Qualifications for installing metering equipment may depend on the specific equipment, system complexity, and local regulations.
- Individuals installing metering equipment should have the necessary technical knowledge and experience to do so safely and effectively.
- Other requirements or regulations may need to be considered when installing metering equipment.



# INCIDENT REPORTING



- Various incident reporting forms are available, including Workplace Incident Report Forms, Vehicle Accident Report Form, Environmental Incident Report Form, and Product Safety Incident Report Form.
- It is important to use the appropriate incident reporting form for the specific type of incident and to include all required information to facilitate a thorough investigation and prevent future incidents.

# SAFETY STANDARDS: OSHA REGULATIONS

- Hazard Communication: Energy professionals must communicate information about chemical hazards to workers.
- Personal Protective Equipment (PPE): Fieldworkers must wear appropriate PPE to mitigate risks.
- Fall Protection: Measures are required for workers at heights above six feet.



# FIRE SAFETY: NFPA STANDARDS

- NFPA codes and standards enhance fire safety in various industries, including energy management.
- Key NFPA Codes: NFPA 70: National Electrical Code (NEC), NFPA 72: National Fire Alarm and Signaling Code, and NFPA 101: Life Safety Code.



# INTEGRATION OF SAFETY AND ACCREDITATION IN FIELDWORK

- Accredited professionals are better equipped to understand and apply safety regulations effectively.
- A CMVP OR CMVS -certified engineer conducting M&V for a large-scale HVAC system will not only analyze energy usage patterns but also assess the safety of the system's installation and operation in accordance with OSHA and NFPA standards.



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