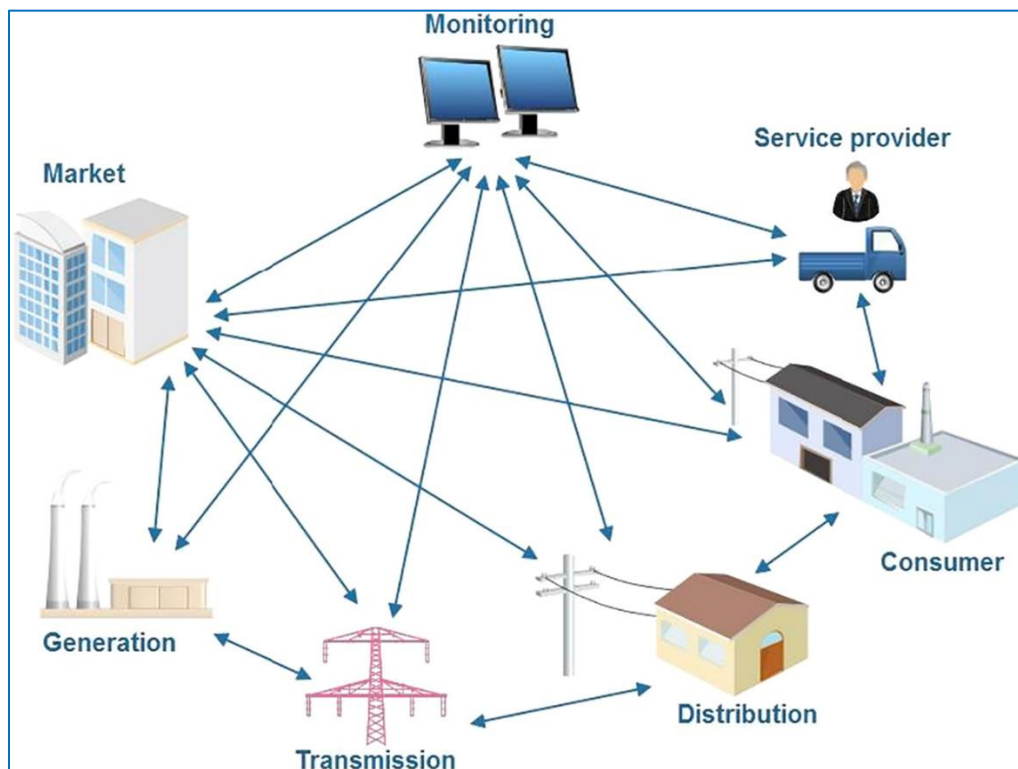




RE069: Electrical Demand Side Management (DSM)

Training Description:

The Electrical Demand Side Management (DSM) training course is designed to equip professionals with the knowledge and skills to optimize electricity consumption, reduce energy costs and improve system efficiency. The course focuses on strategies to manage energy demand, implement efficiency programs and integrate modern technologies for sustainable energy use.

This intensive training course combines theory, practical workshops and case studies to ensure participants understand load management, peak shaving, energy efficiency techniques and smart grid technologies. Participants will learn how to analyze energy usage, implement demand response programs and develop strategies that balance energy supply and demand effectively.

By the end of the training course, participants will be able to design, implement and monitor DSM strategies, optimize energy usage in commercial or industrial facilities and contribute to sustainable energy management practices. The course strengthens analytical skills, technical knowledge and operational efficiency in energy management.

Training Objectives:

By the end of the training, participants will be able to:

- ✓ Understand the principles of Demand Side Management (DSM) and its importance
- ✓ Analyze energy consumption patterns and identify efficiency opportunities
- ✓ Implement load management and peak demand reduction strategies
- ✓ Apply energy efficiency measures in industrial, commercial and residential settings
- ✓ Design and manage demand response programs
- ✓ Integrate renewable energy and smart grid solutions into DSM strategies
- ✓ Monitor, evaluate and optimize energy performance
- ✓ Reduce energy costs while maintaining operational reliability
- ✓ Promote sustainable energy practices within organizations
- ✓ Communicate DSM strategies effectively to stakeholders

Training Designed for:

This training course is intended for energy managers, electrical engineers, facility managers, operations managers and sustainability officers. It is also suitable for energy consultants, project managers and professionals involved in industrial, commercial or utility-scale energy operations. Organizations aiming to reduce energy costs, improve efficiency and adopt sustainable energy practices will benefit from enrolling staff in this course.

Training Requirement:

"Hands on practical sessions, equipment and software will be applied during the course if required and as per the client's request."

Contents can be adapted to your specific wishes. It is therefore possible to focus on specific modules of the training course as per client's learning needs and objectives. Further, it should be forwarded to us a month prior to the course dates.

Training Program:

DAY ONE:

INTRODUCTION TO DSM

❖ Fundamentals of Demand Side Management

- Overview of DSM and energy management principles
- Importance of DSM for cost reduction and sustainability
- Energy consumption patterns and load profiling
- Regulatory requirements and incentives for DSM programs
- Key components of DSM strategies
- Workshop: Analyzing facility energy consumption data
- Case Study: Successful DSM program examples

DAY TWO:

ENERGY EFFICIENCY AND LOAD MANAGEMENT

❖ Reducing Consumption Without Sacrificing Performance

- Identifying energy efficiency opportunities in systems and equipment
- Peak demand reduction and load shifting techniques
- HVAC, lighting and motor systems energy optimization
- Behavioral and operational changes for energy savings
- Demand response program fundamentals
- Workshop: Implementing load management strategies
- Case Study: Industrial energy efficiency improvement

DAY THREE:

SMART GRID AND TECHNOLOGY INTEGRATION

❖ Leveraging Technology for DSM

- Introduction to smart grids and advanced metering infrastructure (AMI)
- IoT and data analytics for energy management
- Automated demand response systems
- Integration of distributed energy resources and renewable energy
- Energy monitoring, reporting and performance tracking
- Workshop: Using software tools for energy analysis
- Case Study: Smart grid-enabled DSM implementation

DAY FOUR:

STRATEGY DESIGN AND PROGRAM IMPLEMENTATION

❖ Planning and Executing DSM Programs

- Designing DSM programs for commercial and industrial facilities
- Stakeholder engagement and communication strategies
- Cost-benefit analysis and ROI for DSM initiatives
- Implementing policies, incentives and operational controls
- Monitoring and verification of DSM performance
- Workshop: Developing a DSM strategy for a facility
- Case Study: Implementation of a large-scale DSM program

DAY FIVE:

MONITORING, OPTIMIZATION AND SUSTAINABILITY

- ❖ **Ensuring Long-Term Impact**
 - Continuous monitoring and evaluation of DSM programs
 - Identifying opportunities for continuous improvement
 - Sustainability and corporate social responsibility in energy management
 - Reporting energy savings and performance metrics to management
 - Scaling DSM strategies across multiple sites
 - Workshop: Creating an action plan for ongoing DSM optimization
 - Case Study: Long-term DSM program success stories
- ❖ Course Conclusion
- ❖ POST-ASSESSMENT and EVALUATION

Training Methodology:

This interactive training course includes the following training methodologies as a percentage of the total tuition hours:

- 30% Lectures, Concepts, Role Play
- 70% Workshops & Work Presentations, Techniques, Based on Case Studies & Practical Exercises, Gamification, Software & General Discussions
- Pre and Post Test

Training Certificate(s):

CMCT Internationally recognized certificate(s) will be issued to each participant who completed the course.

Training Fees:

TBA as per the course location - This rate includes participant's manual, hand-outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Note: The 5% VAT (Value Added Tax), will be effective starting 01st of January 2018 as per the new regulation from the UAE Government. The VAT applies for all quotation both for local and abroad.

Training Timings:

Daily Timings:

07:45 - 08:00	Morning Coffee / Tea
08:00 - 10:00	First Session
10:00 - 10:20	Recess (Coffee/Tea/Snacks)
10:20 - 12:20	Second Session
12:20 - 13:00	Recess (Prayer Break & Lunch)
13:00 - 14:00	Last Session

For training registrations or in-house enquiries, please contact:

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