

### Training Title

## POWER CABLE SPLICING, TERMINATION AND TESTING

### Training Duration

5 days

### Training Date

Ref EE123	Power Cable Splicing, Termination And Testing	5	30 Sept – 4 Oct '18	\$4,250	Dubai, UAE
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In any of the 5 star hotels. The exact venue will be informed once finalized.

### Training Fees

- 4,250 US\$ per participant for Public Training includes Materials/Handouts, tea/coffee breaks, refreshments & Buffet Lunch

### Training Certificate

Define Management Consultancy & Training Certificate of course completion will be issued to all attendees.

Language: English

### TRAINING OVERVIEW

#### COURSE DESCRIPTION

Power distribution cables play an important part in distributing electric energy in areas where the use of overhead lines is impossible like populated areas and similar constraints. Mechanical failures can be due to breaks and defects of sheath material, mechanical punctures by people or machines. or cracks due to sharp bending or vibration. Whenever mechanical damage occurs in the cable sheath, the entrance of moisture will produce slow deterioration of insulation material, resulting in eventual failure of the cable. It is important therefore to take every precaution that either direct or indirect mechanical damage be eliminated or minimized by proper selection, installation, and maintenance of cable systems.

This course is designed to ensure that those responsible for, maintaining, terminating and troubleshooting power cables understand the technical issues involved and comply with relevant specifications and requirements.

The reason of the course:

- This course will aid you in recognize cable types and construction
- This course will aid you to maintain & testing the cable
- This course will aid you in jointing and termination of cable

### TRAINING OBJECTIVES:

Identify the Cable types .

- \* Recognize failure reasons.
- \* Recognize the testing.
- \* Recognize Joints &its types.
- \* Cable termination, testing &fault diagnosis.
- \* Study the Fault location techniques.
- \* Recognize of spiking tools.

### TRAINING METHODOLOGY

The course is designed to maximise delegate benefit from the outset. The goals of each participant are discussed to ensure their needs are fulfilled as far as possible. Questions are encouraged throughout particularly at the daily wrap up sessions. This provides opportunities for participants to discuss specific issues and if possible find appropriate solutions. Case studies are employed to highlight particular points and appropriate video material used to illustrate particular conditions.

- 30% Lectures
- 30% Workshops and work presentation
- 20% Group Work& Practical Exercises
- 20% Videos& General Discussions

### WHO SHOULD ATTEND?

- Electrical engineers
- Junior Electrical engineers.
- Electrical technicians and supervisors

### Course Outlines

- Cable constituents & materials
- Sheath and protective covering
- Cable Construction
- Cable Insulation
- Shielding and Semiconducting Tape
- Cable Construction according to applied voltage
- Electrical Equipment Protective Measures
- Sheath or Jacket Defects
- Insulation Defects
- Inherent Causes for failure
- Non inherent Causes for failure
- Mechanical Damage can be due to the following
- Power and Distribution Cable Checks

- Recommended Cable Tests
- Basic Test Equipment
- Safety Practices while cable testing
- jointing of underground cables and termination at electrical equipment
- Jointing material and accessories
- Jointing tools and preparation.
- Environmental consideration
- Operation, maintenance, and fault detection of power cables.

### TRAINING OUTCOME

When you have completed this course you will be able to determine the maintenance, testing & locate the fault of power and lighting circuit cables and you will be identify to:

- Cable Construction
- Cable Insulation
- Shielding and Semiconducting Tape
- Cable Construction according to applied voltage
- Electrical Equipment Protective Measures
- The cable failures
- Sheath or Jacket Defects
- Insulation Defects
- Inherent Causes for failure
- Noninherent Causes for failure
- Mechanical Damage can be due to the following
- Power and Distribution Cable Checks
- Recommended Cable Tests
- Basic Test Equipment
- Safety Practices while cable testing
- Cable Fault Locating Methods
- Tracing Techniques
- Application Guide for Cable Fault Locating
- Locate Faults in Primary Cable
- Test Equipment for Fault Location
- Street Lighting Cable Fault Location Using the Lexxi T810™ and the T272 High Resistance Cable Fault Locator
- Propagation Velocity Factor (Pvf)
- Methods of Establishing PVF
- Perform the Cable terminate and entrance to MCC
- Know Methods of locating faults and in installed cable and methods of repair.

NOTE:

Pre & Post Tests will be conducted, Group Exercises, Group Discussions, Last Day Review & Assessments will be carried out.

NOTE:

Case Studies, Last Day Review, Discussions & Pre & Post Assessments will be carried out.

