



ELECTRICAL SAFETY MANAGEMENT

IET CODE OF PRACTICE

COURSE 360: 1 DAY: Max 8 Candidates

We know that there is a risk of injury when using electricity - but there are also issues such as disruption to business, financial penalties and prosecutions - which can impact on the positive aspects of day to day working. The IET have recognised this and have created a code of practice to give structure to managing electrical systems through safe principles of working.

PARTICIPANTS

This course is intended for Engineering and Maintenance Managers and other employees who have responsibilities for policies / procedures or the allocation of work or the condition of equipment. Prospective candidates should have recently attended the course on the EAW Regulations, see course 380.

COURSE PRESENTATION

During the presentation, candidates will explore the code of practice, reinforce their knowledge of management tools to assist in the electrical control issues and complete the self assessment evaluation for their business.

COURSE OBJECTIVES

On completion of the course, participants will understand:

- how to apply the IET Code of Practice
- how the code of practice impacts on policies, procedures and people
- how competence should be verified
- the control measures that may need to be employed against the hazards of electricity
- how to conduct a self-assessment of a company's electrical safety system
- how to interpret results and gather information to provide continuous improvement.

Successful completion of the course leads to the award of the Technical Training Solutions Certificate of Achievement 360: Electrical Safety Management (IET Code of Practice).

What do candidates on the Electrical Safety Management course actually do?

The Electrical Safety Management course is often 'tuned' to suit the audience and our instructors like to get feedback from the candidates as the course progresses but the following gives a general breakdown of the main parts of the course.

We begin by looking at the need for management of Electrical Safety.

Electricity can be lethal, but there are other risks associated with electricity that modern companies need to limit and manage. The IET have created a code of practice to help all sizes of business to create or improve on their electrical safety systems.

On the course we are able to accommodate both technical and non technical candidates, helping them to identify and drive forward new changes or shifts of focus without the need for an in depth knowledge of electrical engineering.

Introduction to the IET Code of Practice

What is Electrical Safety Management needed?

We believe that there is a significant risk of injury in using electricity, but there are also issues such as disruption to business, financial profiles and procedures which can impact the positive aspects of data use.

The IET have put together the code of practice to give the management of safety a code of practice for the use of safe principles of working.

As companies now look for continuous improvement in their processes, so the IET have created the same for Electrical Safety.

As a code of practice, it is not company-specific, but can be used to ensure that you have the tools to control electrical matters within your organisation.

1.1 AIM AND OBJECTIVES

As companies understand Hazard Analysis and Critical Control Points, so there is a need for the same understanding of Electrical Safety.

These objectives:

- A self-assessment questionnaire to provide guidance through the code
- For the code to be used by all (technical and non-technical)
- To provide the user with a tool that can be used to create or improve the management system within their company

1.2 TYPES OF ORGANISATION

The code applies to any size of organisation that has buildings, facilities, equipment and environments, which would include industrial, commercial and public sectors.

1.3 WHAT IS AN ELECTRICAL SYSTEM?

As defined by the IEC 62388: A system in which all electrical equipment is, or may be connected to a common source of electrical energy.

1.4 WHO SHOULD USE THE CODE OF PRACTICE?

The code has been designed for those people who:

- Ensure that electrical policies and procedures exist
- Ensure those procedures are implemented
- Manage electrical risks
- Are responsible for the safe condition of equipment.

As there are a lot of Mechanically-Based Engineering managers (or Operations Managers, Facility Managers and Building Managers) who have little or no knowledge of Electrical Systems and practices, this code is designed to help these positions do well.

Page 1 of 16 | Version 1 | Last updated: 01/01/2018 | © IET Ltd 2018

During the course we talk about how the code of practice looks at such things as the company's policies, or statements of intent, and how they can mould the view of electrical safety, leadership, design, standards and performance.

SECTION 1 – ELECTRICAL SAFETY PROCEDURES

INTRODUCTION – Responsibility at Work Regulations

This section of the code of practice is for the use of work and project managers to help them assess the risk of electric shock or potential injury from electrical equipment. The code provides a simple guide for those managers who have little or no knowledge of electrical systems, their consequences and the need for action to prevent or reduce risk.

The suggested plan involves the suitable design, connection, installation and testing of electrical systems, protection of workers or premises from damage and the provision of suitable and adequate information or instructions.

It has been developed from relevant safety assessments to define responsibilities and arrangements for ensuring a higher standard of safety for all electrical work in the workplace.

RESPONSIBILITIES / AUTHORISATION (Section 1.1)

Section 1.1 defines responsibilities and dimensions of key elements in step-by-step, using common UK legislation, industry best practice and international standards, to help managers and project managers to understand the requirements of the IET Code of Practice. Unauthorised bypassing by untrained persons can lead to serious electric shocks in practice.

1.1.1 WORKERS (Section 1.1.1)

Only workers shall be given sufficient guidance, direction and training that enable them to carry out their tasks in accordance with section 1.1.1. Work or electrical power is said to be used if it is received from another person or from a fixed source or the system to be worked on has been made electrically live and will remain so.

1.1.2 MANAGERS (Section 1.1.2)

All new electrical installations or modifications must comply with the Electricity at Work Regulations. BS7671:2018 wiring regulations, the relevant European standards for electrical design and local site specific regulations for particular requirements apply.

All electrical failures must be regularly monitored in accordance with the Electricity at Work Regulations and relevant local.

DOCUMENTATION (Section 1.1.2)

It is the responsibility of the facility/authority/organisation to maintain records and define the local arrangements for ensuring that the general requirements of the facility or Work Regulation are met.

Page 2 of 16 | Version 1 | Last updated: 01/01/2018 | © IET Ltd 2018

The course then looks at procedures for getting the job done safely and to the company's Standard. Risk assessments and method statements all form part of this.

3.5 Electrical System Standards

Once you have planned and designed the installation it is where you are using the correct equipment standards.

It is always preferable to have standards, but also fit the complete system as a package (IEC60364).

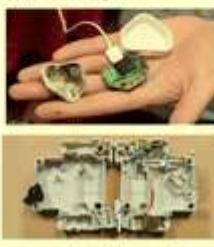
Over a long period of time, it may well be that some equipment may have been purchased purely on a financial basis without the correct standards required for performance, safety, reliability and assessing the need for there to be taken to simple or major products and requirements, as well as codes of practice.

Beware of equipment imported or out of date, which is untested, and may offer no increased safety requirements.

The following applies to such items:

- equipment which are part of the infrastructure
- equipment that is permanently attached to the infrastructure
- equipment that is supplied to the infrastructure on a temporary basis (supplies)

It must be that a contractor working on the site must consider the use of standardised parts and equipment before commencing to do their work.



4.4 Procedures

Procedures are just what they are called, that is to say they tell the task in a step-by-step, chronological and logical manner.

There are four different processes that should be developed when dealing with an organisation:

- Arrangement of electrical work
- Early liaison of electrical systems
- Operation and maintenance of the electrical system
- Emergency shutdowns
- Reporting of electrical system defects

Management of electrical work should take account design, specification, installation, commissioning, operation, maintenance and decommissioning.

Early liaison of the electrical system should identify how to safely disconnect the system, how to effectively approach risk assessment, and how to manage the transition between contractors.

Operation and maintenance of the electrical system identifies what parts of the system will be used, the components and parts that are required to be maintained, and which systems are required in an emergency.

Emergency shutdowns include selective system shutdowns, risk assessments, emergency information and contingency arrangements.

Reporting of electrical system defects identifies what parts of the system can selectively require to be reported via plant or electrical contractor, who is responsible for reporting, who needs to be notified, the nature of the damage and what action is required.



Candidates on the Electrical Safety Management training course look at how various common electrical components can fail and the safety impact that these failures might produce. This is one of the pages from the course notes.

Candidates on the Electrical Safety Management training course study why procedures are so important and look at various examples of, for example locking-off procedures.

This is one of the pages from the course notes.

Lastly, we talk about training, competency and authorisation.

Once we have discussed what the company has in place, we then work through the IET self assessment. Through a group of 3 pointed questions, we will find areas to improve or focus on.

Do you restrict access to switchroom areas?	Score
1 No specific measures are in place.	
2 Some staff receive restricted access and others unrestricted access.	
3 All staff receive unrestricted access.	
Do you use appropriate and approved tools and test instruments on your premises?	Score
1 Appropriate tools and test instruments are not used.	
2 Approved test and approved tools and test instruments are sometimes used.	
3 Approved test and approved tools and test instruments are always used.	
Do you use safe working practices that consider lone or temporary working?	Score
1 No specific procedures are in place.	
2 Some procedures are in place.	
3 All lone and temporary workers use appropriate working practices.	
Do you use safe working practices covering access requirements?	Score
1 No specific procedures are in place.	
2 Some procedures are in place.	
3 All access requirements take account of working practices.	
Do you use safe working principles for working adjacent to active and overhead power lines?	Score
1 No specific procedures are in place.	
2 Some procedures are in place.	
3 All work adjacent to live, high voltage and overhead power lines follows appropriate working procedures.	
4.3 Workplace procedures	
Do you have electrical safety workplace procedures?	Score
1 No specific workplace procedures have been identified.	
2 Some safety procedures have been identified or identified but not yet put into practice.	
3 All safety procedures have been identified, put into practice and effectively followed in the workplace.	
4.4 Procedures	
Do you have a procedure for managing electrical work?	Score
1 There is no procedure in place.	
2 A written agreed procedure is in place.	
3 A written agreed procedure has been produced.	
Do you have a procedure for safe isolation of electrical systems?	Score
1 There is no procedure in place.	
2 A written agreed procedure is in place.	
3 A written agreed procedure has been produced.	
Do you have a procedure for the operation and maintenance of electrical equipment?	Score
1 There is no procedure in place.	
2 A written agreed procedure is in place.	
3 A written agreed procedure has been produced.	
Do you have a procedure covering emergency situations?	Score
1 There is no procedure in place.	
2 A written agreed procedure is in place.	
3 A written agreed procedure has been produced.	
Do you have a procedure for reporting electrical system defects?	Score
1 There is no procedure in place.	
2 A written agreed procedure is in place.	
3 A written agreed procedure has been produced.	
4.5 Electrical system maintenance	
Do you have a programme for maintenance of the low voltage electrical installation?	Score
1 No planned maintenance. The electrical installation has only been inspected and tested after a serious incident.	
2 Some maintenance is carried out. The electrical installation is not formally inspected and tested at a contractor's request. Some documentation is kept.	
3 Regular maintenance is carried out. The electrical installation is regularly inspected and tested, all documentation is kept.	

This is Section 4 of the Self Assessment Questionnaire used at the end of the Electrical Safety Management course to highlight areas that may need attention.

This is part of the Self Assessment Questionnaire used at the end of the Electrical Safety Management course to help with site procedures.

Armed with this, any company will be able to understand where it is falling behind and where to concentrate labour, time and money.

If you would like to learn more about the Electrical Safety Management course then please call us.



CONTACT US

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