

COGPEM16 - SQA Unit Code FP4D 04

Prepare process plant and equipment in support of electrical engineering activities



Overview

This unit is about your competence in preparing electrical equipment in order to carry out the maintenance of plant and equipment. You will be required to obtain the equipment, ensure it is in a safe condition and advise the appropriate people. You will be following your organisation's safe working practices and working within the work permit procedures.

This unit deals with the following:

1. Prepare process plant and equipment in support of electrical engineering activities

During this work you must take account of the relevant worksite operational requirements, procedures and safe working practices AS THEY APPLY TO YOU.

Previous Version:

Adapted from Unit E2.3 of Process Engineering Maintenance NOS – version February 2004. This unit is a contextualised version of a unit produced by the OSC Eng Engineering Competence Standards which was originally designated ECS 2.13.

COGPEM16 - SQA Unit Code FP4D 04

Prepare process plant and equipment in support of electrical engineering activities

Performance criteria

You must be able to:

- P1 work safely at all times, complying with health and safety and other relevant regulations and guidelines
- P2 obtain all the required equipment and ensure that it is in safe and usable condition
- P3 carry out the necessary preparations to equipment in line with work requirements
- P4 make sure that required safety arrangements are in place to protect other workers from activities likely to disrupt normal working
- P5 report completion of preparations in line with organisational procedures
- P6 deal promptly and effectively with problems within your control and report those that cannot be solved

COGPEM16 - SQA Unit Code FP4D 04

Prepare process plant and equipment in support of electrical engineering activities

Knowledge and understanding

You need to know and understand:

- K1 you must have a working knowledge and understanding of what your responsibilities are in respect of Health, Safety and Environment. This should include the limits of your personal responsibility, your legal responsibility for your own health and safety and the health and safety of others
- K2 you must have a working knowledge of the relevant regulations and the safe working practices and procedures required within your work area
- K3 you must have a working knowledge of equipment preparation methods and procedures. This could be expected to include checking the working condition and operation of standard equipment, including safety checks and inspections
- K4 you must have an appreciation of the types of equipment which may be used. This could be expected to include fixed (machine) and or portable (hand or machine)
- K5 you must have an appreciation of what your responsibilities are for the equipment care and control procedures. This could be expected to include ingress protection ratings, explosion protection rating equipment, corrosion, portable appliance testing, heating and ventilation and permit systems
- K6 you must have an appreciation of your responsibilities with regard to the reporting lines and procedures in your working environment

Prepare process plant and equipment in support of electrical engineering activities

Additional Information

Scope/range

1. The level and extent of responsibility will involve you being responsible for ensuring the preparations are carried out safely by following company defined procedures. You will be accountable for the integrity of the work and ensuring the work is recorded in a formal manner. Authorisation for proceeding with the work will be given by authorised signatories within the Permit to Work system
2. The Equipment safety checks and inspections will be carried out to ensure that there are no obvious faults present, in accordance with company procedures
3. The types of equipment to be prepared could include:
 - 3.1. Protective clothing/equipment
 - 3.2. Lifting & handling equipment
 - 3.3. Access structures (typically ladders, steps, trestles, youngman boards, temporary staging, access hoists... “cherry pickers”)
 - 3.4. Process equipment
 - 3.5. Tools
 - 3.6. Safety equipment/harnesses
 - 3.7. Temporary electrical supplies
4. The types of equipment preparation could involve selection, inspection, changing settings or the calibrating as well as routine checks on its condition, operation, suitability and safety, in compliance with company procedures

Scope/range related to knowledge and understanding

The Knowledge and Understanding levels expressed indicate the minimum level of knowledge and understanding sufficient to perform your role in a manner that would normally be associated with the minimum acceptable performance of a competent person undertaking your role.

The expression “an appreciation” is intended to indicate a level of knowledge and understanding equating to:

- 1 An awareness of the existence, the scope and the background to the content covered by the knowledge and understanding statement
- 2 How and where to find further detail and information that you will need
- 3 Having obtained the information, you will be expected to check your interpretation and then to be able to apply it to your situation

The expression “working knowledge and understanding” indicates you are

COGPEM16 - SQA Unit Code FP4D 04

Prepare process plant and equipment in support of electrical engineering activities

able to:

- 4 Identify and apply relevant information, procedures and practices to your usual role in your expected working environments needing only occasional recourse to reference materials
- 5 Describe, in your own words, the principles underlying your working methods. This does not mean the ability to quote "Chapter and verse". Rather you must know what supporting information is available, how and where to find it and from whom to seek further guidance and information confirm any additional required detail
- 6 Interpret and apply the information obtained to your role, your working practice and in your expected working environment

COGPEM16 - SQA Unit Code FP4D 04

Prepare process plant and equipment in support of electrical engineering activities

Developed by Cogent

Version number 1

Date approved May 2010

Indicative review date May 2012

Validity Current

Status Tailored

Originating organisation Cogent

Original URN E2.3

Relevant occupations Engineering Professionals; Engineering and manufacturing technologies; Manufacturing technologies

Suite Process Engineering Maintenance

Key words electrical, equipment, maintenance, plant, preparation, safe working