

# COGPEM66

## Deal with variations and defects in instrument and control systems



---

### Overview

This unit is about your competence in identifying, assessing and dealing with variations and defects in instrument and control products or assets. The reporting of recommendations to the appropriate people will be required. You will be following your organisation's safe working practices at all times and working within the work permit procedures.

This unit deals with the following:

1. Deal with variations and defects in instrument and control systems

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 I3.2 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 5.07

# COGPEM66

## Deal with variations and defects in instrument and control systems

---

### 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 identify defects with regard to the product or asset specification
  - P3 assess the defects and determine action required to return the products and assets to specified condition
  - P4 report recommendations for action to the appropriate people promptly and in accordance with organisational procedures
  - P5 record details of defects in accordance with quality assurance and control systems and procedures

# COGPEM66

## Deal with variations and defects in instrument and control systems

---

### 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 and understanding of engineering drawings and their related specifications. This should include the specifications to which you will be expected to work, including technical drawings (component, assembly, general arrangements, isometrics, 1st and 3rd angle projections), method statements and product worksheets, tolerances
- K4 you must have a working knowledge and understanding of the identification of defects in products and assets. This could include: observation and using all senses, fault reports, maintenance logs, operations logs
- K5 you must have a working knowledge and understanding of the methods of dealing with defects as defined by your company procedures
- K6 you must have a working knowledge and understanding of the methods of dealing with defects and variations and what factors determine the actions to be taken, and why it is important to maintain records of the checks made and the assessments that result from those checks, what information should be entered on those records and where they should be kept
- K7 you must have a working knowledge and understanding of the quality control systems and documentation procedures that are specified by your company
- K8 you must have a working knowledge and understanding of your responsibilities with regard to the reporting lines and procedures in your working environment

# COGPEM66

## Deal with variations and defects in instrument and control systems

---

### Additional Information

#### Scope/range related to performance criteria

- 1 The level and extent of responsibility will involve you being responsible for ensuring the maintenance procedures 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 PTW system
- 2 The assets or equipment to be maintained could include:
  - 2.1 Measurement systems
  - 2.2 Analysers, protection and detection devices
  - 2.3 Control systems
- 3 The type and complexity of defects will vary from severe damage with the potential for immediate failure to minor damage.

#### 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 "working knowledge and understanding" indicates you are able to:

- 1 Identify and apply relevant information, procedures and practices to your usual role in your expected working environments needing only occasional recourse to reference materials
- 2 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
- 3 Interpret and apply the information obtained to your role, your working practice and in your expected working environment

# COGPEM66

Deal with variations and defects in instrument and control systems

---

**Developed by** Cogent

---

**Version number** 1

---

**Date approved** May 2010

---

**Indicative review date** May 2012

---

**Validity** Current

---

**Status** Tailored

---

**Originating organisation** Cogent

---

**Original URN** I3.2

---

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

---

**Suite** Process Engineering Maintenance

---

**Key words** variations, defects, recommendations, reporting, procedures, instrument, control, systems