
Overview

This unit is about locating and diagnosing faults on plant and apparatus in an electricity power utility environment. It involves the rigorous use and application of diagnostic tools and techniques to establish the route cause of a fault. It also involves making recommendations on what actions need to be taken to rectify the fault.

Performance criteria

You must be able to:

Plan to locate and diagnose faults

- 1 determine work location using company documentation and work instructions
- 2 determine the content and sequence of tasks needed to complete the work activity
- 3 conduct a site specific risk assessment in accordance with health and safety regulations

4 plan and carry out all work in line with company policy and work procedures

Prepare to locate and diagnose faults

5 select and prepare the tools and fault diagnostic equipment in accordance with work instructions and equipment specification

6 inform parties directly and indirectly responsible for completing work activity of the intended work plan in accordance with work instructions and health and safety regulations

7 inspect, prepare and carry out pre-use checks on tools and equipment required to complete work activity in accordance with work instructions and equipment specifications

Locate and diagnose faults

8 review and use all relevant information on the symptoms and problems associated with the fault

9 use diagnostic tools, techniques and procedures to locate the route cause of the fault in accordance with work instructions

10 locate the fault and recommend actions needed to effect a repair

11 determine the implications and impact the fault will have on other work and for safety considerations

12 follow and maintain safe working and environment practices in accordance with health and safety regulations and environmental legislation throughout the duration of the work

Restore and reinstate work location

13 store tools and equipment on completion of the work activity

14 leave the work area in a condition which is in line with good housekeeping practice

Use and communicate data and information

15 report unavailable or defective tools, equipment and resources

16 read and interpret company work instructions and supporting documentation

17 maintain documentation and report findings of the fault diagnosis work in accordance with organisational requirements

Resolve problems effectively and efficiently

18 deal with problems within the limits of own job role responsibility

19 report problems outside job role responsibility to designated personnel

Knowledge and understanding

You need to know and understand:

General

- 1 the main principles of health and safety and environmental legislation and regulations
- 2 the company reporting lines and authorisation roles and responsibilities
- 3 the company policies and procedures that directly impact on the work to be undertaken

Work area

- 4 the company procedures and processes for reporting problems with tools and equipment
- 5 the processes, procedures and information sources used to make sure that tools and equipment are fit for purpose and safe to use
- 6 processes and procedures to be followed for inspecting and preparing tools and equipment prior to use
- 7 read and interpret instructions on how to use and maintain fault diagnosis tools and equipment
- 8 what personal protective equipment needs to worn when undertaking work activities
- 9 what materials and substances are dangerous and hazardous to health
- 10 how to maintain safe working and environmental practices throughout the duration of the work
- 11 how to minimise risks to self and others when undertaking work activities
- 12 company work instruction, information and reporting systems and documentation
- 13 how to respond to the different types and categories of emergency situations that might occur
- 14 what fault finding and diagnostic tools, techniques and procedures should be used for a given purpose and situation
- 15 how to recognise and report inaccurate and incorrect work instructions and documentation

Behaviours

You work in a manner which:

1. recognises and acts when others need support
2. takes responsibility for resolving problems in your work area

EUSWT07

Fault location & diagnosis on plant apparatus in the electricity power utilities environment



Developed by Energy & Utility Skills

Version Number 2

Date Approved December 2017

Indicative Review Date December 2020

Validity Current

Status Original

Originating Organisation Energy & Utility Skills

Original URN WT07

Relevant Occupations Engineering; Science and Engineering Technicians

Suite Wind Turbines

Keywords fault, location, diagnosis, plant, apparatus, electrivity, power, utilities, utility, environment
