

Access, Movement and Egress (AME) of a Power Utility Substation Environment

Power System Competence Specification - PSCS001

Area of competence

This specification has been developed from the National Occupational Standard EPUS012 and the derived City and Guilds 2339 Level 2 QCF Units 006 and 204. The specification details the performance criteria and knowledge requirements to establish competence for the safe access, movement and egress in **BOTH** of the following Power Utility Environments

- Transmission Substations
- Distribution Substations

Skills and competencies which demonstrate effective performance

You must show you are competent to:

- Safely access, move around and egress a substation work area
- Comply with Company procedures, health and safety regulations and environmental practices
- Identify the risks associated with substation apparatus, substation damage and excavation
- Use and communicate data and information
- Resolve problems effectively and efficiently

Performance Criteria

In relation to the access, movement and egress of a power utility substation environment

1. Identify the substation and the work area to be accessed using available information
2. Select, inspect and wear required personal protective equipment in line with Company procedures
3. Conduct a pre-entry inspection of the substation to be accessed to ensure it is safe to enter
4. Inform all relevant parties of their presence and intended activity in the substation work area in line with Company procedures
5. Conduct a site specific risk assessment identifying the required control measures to maintain a safe working environment
6. Access, egress and move around the designated substation in a safe and controlled manner
7. Maintain and comply with site safety demarcation arrangements and control measures
8. Carry out given activities safely in accordance Company procedures, health and safety regulations and environmental practices
9. Identify precautions to minimise risks to self and others when working in the vicinity of substation apparatus
10. Identify the risks associated with damaged substation apparatus
11. Confirm completion of the given activity with relevant parties in line with Company procedures
12. Leave the substation in a safe and secure condition in accordance with Company procedures

Restore and reinstate work location

13. Ensure all tools and equipment are accounted for and stored safely and appropriately on completion of the work activity
14. Ensure hazardous and non-hazardous waste materials are dealt with in accordance with Company and statutory procedures

Use and communicate information and data

15. Report unavailable or defective tools, equipment and resources
16. Read and interpret Company work instructions and supporting documentation

Resolve problems effectively and efficiently

17. Deal with problems within the limits of own role responsibility
18. Report problems outside role responsibility to designated personnel in line with Company procedures

Behaviour which underpins effective performance

You work in a manner which:

Recognises and acts when others need support

Takes responsibility for resolving problems in work areas

Knowledge and understanding

In relation to the access, movement and egress of a power utility substation, you know and understand:

General

- a. The main principles of health and safety and environmental legislation and regulations
- b. The organisation's reporting lines and relevant authorisation roles and responsibilities
- c. The organisation's policies and procedures that affect the activity to be undertaken

Work area

- d. The information required and the precautions to be taken before entering a substation
- e. Where to find relevant information about the substation to be accessed and its requirements
- f. The use of Company work instructions, method statements, reporting systems and safety documentation
- g. The methods and procedures used to control the activities of persons in a substation environment
- h. The personal protective equipment requirements for a substation environment

- i. The purpose and procedures for conducting a site specific risk assessment in a substation work area
- j. How to recognise and deal with the hazards in a substation environment that might cause harm or injury to self and others
- k. How to maintain safe working and environmental practices throughout the duration of the work
- l. The difference between Primary and Distribution substations and how to identify the differing operating voltages
- m. The hazard identification of substation plant and apparatus including a circuit breaker, transformer, isolator, busbar and insulator
- n. The basic function of substation earthing and the effect of interference or disconnection
- o. The precautions required to avoid contact with live apparatus when moving or carrying long objects in a substation environment
- p. The procedure to follow if a vehicle is required to enter a substation
- q. The Company procedures and processes for reporting problems with tools and equipment
- r. How to safely store and dispose of hazardous waste materials and substances in relation to access, movement and egress in substations
- s. How to respond in the event of emergency situations that might occur in a substation environment